A Complete Bibliography of Publications in *Journal of Computational Physics*: 2020–2024

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Title word cross-reference

Ano22w, Ano22x, Ano23m, Ano23n, Ano23o, Ano23p, Ano23s, Ano23r, Ano23t, Ano23u, Ano23v, Ano23w, Ano23x, Ano24m, Ano24n, Ano24o, Ano24p, Ano24q, Ano24s, Ano24r, Ano24t, Ano24u, Ano24v, Ano24w, Ano24x]. **1d** [KSHJ20, BGS22a]. **1d-3d** [KSHJ20].

2 [Abg20, FALS24, KSST21, SLOZ21b, WYZY24]. **2020** [Ano20a, Ano20m, Ano20b, Ano20n, Ano20c, Ano20o, Ano20d, Ano20p, Ano20e, Ano20q, Ano20g, Ano20s, Ano20f, Ano20r, Ano20h, Ano20t, Ano20i, Ano20u, Ano20j, Ano20v, Ano20k, Ano20w, Ano20l]. **2021** [Ano21a, Ano21m, Ano21b, Ano21n, Ano21c, Ano21o, Ano21d, Ano21p, Ano21e, Ano21q, Ano21g, Ano21s, Ano21f, Ano21r, Ano21h, Ano21t, Ano21i, Ano21u, Ano21j, Ano21v, Ano21k, Ano21w, Ano21l, Ano21x]. **2022** [Ano22a, Ano22m, Ano22b, Ano22n, Ano22c, Ano22o, Ano22d, Ano22p, Ano22e, Ano22q, Ano22g, Ano22s, Ano22f, Ano22r, Ano22h, Ano22t, Ano22i, Ano22u, Ano22j, Ano22v, Ano22k, Ano22w, Ano22l, Ano22x]. **2023** [Ano23a, Ano23m, Ano23b, Ano23n, Ano23c, Ano23o, Ano23d, Ano23p, Ano23e, Ano23s, Ano23f, Ano23r, Ano23h, Ano23t, Ano23i, Ano23u, Ano23j, Ano23v, Ano23k, Ano23w, Ano23l, Ano23x]. **2024** [Ano24a, Ano24m, Ano24b, Ano24n, Ano24c, Ano24o, Ano24d, Ano24p, Ano24e, Ano24q, Ano24g, Ano24s, Ano24f, Ano24r, Ano24t, Ano24i, Ano24u, Ano24j, Ano24v, Ano24k, Ano24w, Ano24x]. **265** [HPA22]. **2P** [CDT22a]. **2V** [ATCS20].

343 [STEK22]. **372** [GRT21]. **376** [BLL20]. **381** [SZN20]. **388** [EFO20]. **390** [SYOS21]. **395** [Pan20b]. **3d** [DFG$^+$23, KSHJ20, MND$^+$20]. **3d-3v** [DFG$^+$23]. **3v** [DFG$^+$23].

4 [BMBM24]. **407** [ACML20a]. **426** [MM22]. **434** [YGJ21a]. **455** [LMFV22a, SS22b]. **461** [ZC22b]. **464** [BJR24]. **488** [SHM25]. **489** [ZZW24b]. **4th** [BBO$^+$22, Kar22].

519 [TZSQ25].

a-FSI [BCPV21]. **A-PINN** [YNDH22]. **a-posteriori** [JO22, MLPR24, RHSK21]. **A-priori** [GZ21]. **A-WENO** [CKN22b]. **ab-initio** [PBO20]. **ablation** [FCBM22]. **Abramowitz** [GJL20]. **Absolutely** [LZZ21a, LZZ24]. **absorbing** [LCF$^+$23, MGA20, PJA22, PM22a, PFF$^+$24, VBA22, BRT22]. **Absorption** [KAC22, MF24, WJD24]. **absorptive** [CCER20]. **accelerate** [GAL24, JKK20, SPdS$^+$21, WPBS22, WZ23a, XF21c]. **Accelerated** [JTT23, KBH$^+$22, VN21, WCA$^+$20, WLPK20, BB21, CORJ$^+$23, CTG23, GKD23, HA21, HM21b, LMZ23, LCP21b, MHWY21, OSZ21, PM24, RKA$^+$23, RFZ22, RZ23, VGK21, WCP23]. **Accelerating** [BZ23, CDK$^+$23, Ein24, NPL$^+$24, SK24b, WLZ$^+$24b, dLF23, AP23, HZB$^+$21,

MCVF22, MEMM24, MST23, MRBC22, MRBS22, MR23b, MPMD20, NS22, NS24, NT20, NMR^{+}21, OP20, OGVM20, PSL20, PBM23, Pan20b, PZ20, PM23, Pen24, PAM23, PFF^{+}24, Poë23, PEL23, QWZW23, QZZ^{+}24, RS20c, RBPRST20, RA21, RWY21, RMWS21, SH23a, SH23b, Sar21b, STEK17, STEK22, SM24, SL20b, SL22b, SSPV20, Sew24, SL22c, SL23, SHM24, SMAY22, SCdHJ20, SMRW22, SQSS20, SACT21, SZQS23, SH24, TZ21, TLKK23, TY24a, TZNHD20, TBST20, TBG20, TKR22, TS20, TL21, TEA^{+}23, TOB^{+}24, TPYX22, VRK21a, VMBS20, VVRWT21, WWG20, WZC21, WNB21, Wan22, WWZZ24a]. **equation** [WJKW20, WKK23, WK23, WK24a, WZBV20, WC23, Xia21, XF21c, XG22, YV24, YLK20, YCH21, YX22, YSC23, YW22, YK20a, Yin21, YFLL21, ZWY21, ZOWW20, ZZ20, Zha22, ZXY22, ZC23, ZLQS24, ZGCW24, ZG24, ZYY23, ZLW23, ZWYZ24, aKAK20, vGAtTBI23, vGAtTBI24, vdWvBAA24, PRKS23]. **Equation/Variable** [PRKS23]. **Equation/Variable-free** [PRKS23]. **Equations** [CCPS21, ADK^{+}21, AdS22, AG21, AG24, AMB22a, AAMPR24, ARGK22, AST21, AZ22, AHWZ20, AR20, AK21, AF23, ARR21, BDT21, BFP21, BL20, BT21, Bal20, Bal21, BBH^{+}20, BGNZ22, BDS23, Bar21b, BFM21, BBB23, BB23b, BM21, Bel24, BCM24, BCIT22, BGGM21, BL21a, BKC23, BP22, BKY21, BWG^{+}20, BDP23a, BDL^{+}20, BP21, BGS^{+}22b, BLK^{+}23, BSZ^{+}23, BJL21, BPVE24, BSK^{+}23, BM24, CZZX24, CCE^{+}22, CC24, CMR21, CKLZ23, CKLZ24, CP22a, CB24, CZ24, CZ22a, CLW22, CSW^{+}24, CXZ24, CHT20, CHSS20, CZ20a, CCY^{+}20, CCWX22b, CJW22, CDX22, CN22, CWX23, CS24a, CCS24, CSS20, CLS20b, CTCS22, CCE^{+}21, CJK24b, CJK24a, CBRY21a, CBRY21b, CK21, CPK22, CBY23, CSY20, CS23, CCXX23, CLPP24, CGM^{+}23, CA24b, CX22a, Coc20, CCHS20b, CBB24, CA22a, CCdS20, CdS22, CEM20, CH24, DGH24, DEN22]. **equations** [DHXZ24, DLAD24, DY22a, DM21, DC23, DS22a, DLP21, DCGQ20, DZ24, DH20, DLYZ23, Don23, DQ24, DYMC20, DOQ23, DGW20, DZ22, DZ23, DYZ24, DFGR20, DTB20, DVB20, DFP^{+}21b, ELL^{+}23, EBC^{+}22, EL24, EOP20, EDEV23, EdLCCCO24, EJ23b, EFY23, FPT20, FZB^{+}23, FZQ21, FZQ22a, FHWK21, FJH20, FN22, FWNT21, FM22, FX22, FHW24, GGCvR22, GMB^{+}22, GHY22a, GLSZ22, GW23, GC24, GCDT22, GGB20, GTWJ24, GBLT20, GNF22, GQR23, GS22, GMSLC24, GP23, GASS24, GHNS21, DCC^{+}24, GYZ21, GHS22, GKPT22, GDB24, GLWY22, GHTC21, GWZ22, GLY22, GYWG23, HMV22, HSM20, HNS20, HLM^{+}20, HDML23, HYQ20, HKL^{+}23, HJ22, HRRHG21, HKS20, Hig22, HKMR20, HMO^{+}20, HHS22, HHLS22, HMXC23, HHSZ24, HCdM23, HR20, HL20a, HL20b, HLXZ21, HLH21, HSW22, HRWP22, HXX22, HZRW24, HYH24, IKH^{+}24, IK23b, JHY21, JGvR23, JTW22, JS24, JCLK21]. **equations** [JLY22, JL23, JLY23, JLLY24, JKJ20, JK20, JLQY21, JH23, KCS21, KV23a, KB24a, KTBP20, KMR23, KBB21, Kem23, KKA24, KLS^{+}20, KSI^{+}23, KKPB20, Kiv21, KS21b, KS24a, KNT22, KKJ24, KR23, KV23b, KZC23, KHM24, KCK21, KCD^{+}23, KKMT24, KLZ20, KMF20, KK20b, LHF23, LPM^{+}20, LT22a, LWR^{+}24, LJW^{+}22, LN21a, LN22, LP20a, LCS24, LG20,

CCWX22a, CC24, CDK+23, Cam21, CPX21, CPX22, CFS+22, CMP+21, CZZ21, CF21, CBF22, Cha23, Cha20, CSW+24, CF24a, CZ20a, CWHZ21, CKT21, CY22b, CL23a, CWX23, CD23, CDLX23, CLD+24, CF24b, CCS24, CSS20, CLJ+20, CLS24a, CS24b, CCCH23, CPGD21, CBA+20, CBA+21, CBY23, CKN22b, CP20, CND22, CDN+22, CN24, CLP21, CLPP24, CGM+23, CA24b, CX22a, CCB22, CCdS20, CMRR21, CS22, CNCM21]. **order** [CA22b, CLS24b, CCLM22, CITT24, DHM21a, DCA+22, DN24, DVS22, DS22a, Den23, DC21, DA24, DD22b, DLG+24, DD21, DZ24, DHR20, DJ22, DJ23, DVCBJT24, DY22b, DYGC22, DY22c, DY22d, DL24, DYZ24, DT20, DT21b, DT22c, DH24, DFGR20, DZGP24, DK21, DFP+21b, DGW22, DWM23, Dza24b, EDEV23, EAK20, EPL21, FPT20, FZQ21, FZQ22a, FW24a, FMWK20, FHWK21, FZ20a, FZ20b, FGKY22, FGTY23, FHM24, FML21, FX22, FLOL23, FOL23, FL23b, FOPL24, GvR24, GBC+20, GM23a, GLSZ22, GDLL22, Gao22, GLF23, GHW24, GCDT22, GS23, GA20, GU20, GQR21, GQR23, Gla21, GDB23, GZW20b, GFY20, GLCS23, GGH+23, GPS20, GLY20, GCL+22, Hac21, HMV22, HRG+23, HR23, HEG23, HRRHG21, HSMR20, HGB20, HKRS23, HHRA19, HL20a, HCL20, HPPZ20, HLY20, HSW22, HRWP22, HXX22, HLA22b, HZ22b, HNZ23b, HJQ+23, HD23, HZRW24]. **order** [HYH24, HTRC23, dMKJ+22, IMJ20, IW23, ISM+23, JADS21, JYY22, JZSX20, JS24, JSZ24, JRD22, KSTT22, KCS21, KV23a, KS22c, KS22b, KS23, Kar22, KBB21, KCWZ22, KYK24, KLN20, KL22, KS24a, KLF22, KdMJ+22, KJdM+22, KF23, KCCJ21, KKSY21, KLB23, KB23, KD20, KK21, KdL20, KV23d, LCL22a, LJW+22, LBN21, LVK+22, LMS23, LL21a, LL23a, LCS22, LCS23, LCS24, LD20a, LCJ20a, Li20, LCSZ21, LLQC21, LG21, LYZW21, LZ22a, LCR22, LJ23, LSZ23b, LLZ23a, LLQ+23, LWL+23, LXSF22, LH20, lLTZ20, LRAQ22, LWZ23, LC24, LZ24b, LRW21b, LM20a, LS23, LSZY20, LD20b, LFZ21, LYS+22b, LWYY22, LSY+23, LJS+23, LZ23, LCWH23, LLOL24, eLGQ24, LsCxL+20, LT20c, LN24c, LY22c, LZCC22, MZ22, MLL+24, MMY+24, MLPR24, MST24, MCGN24, Mar23, MB24b, MCVF22, MHW21, MHW22, MQ20, MKM23, MM24, Mis23, MGA20, Mon21, MP24b, MMW+24, MCI23]. **order** [NS22, NFL+21a, NFL+21b, NZ24, NKT21, NPD20, NT20, NBR22, NP23, Nic22, NGK+21, NKW22, Nis20c, Nis22b, NW23, Oru21, OA21, OGG20, PZX20, Pan20a, PCF21, PP22b, PX24, PWbCJ24, PWL+23, Pan20b, PPP21, PBN+21, PB20b, PM21b, Pen24, PS22b, PH22, PTT22, PTT24, PSCK23, PD21, PGH24, PMH24, PGCC+22, PGMTP23, PGTS21, PPB23, PGC24, QG21, QZHD23, QLY21, RMA20, RUG20, RSWD21, RFZ22, RZ23, RWQX23, Ren21, RLH22, ROM24, RRBR+23, RBF+21, RIC+22, RCSS24, RA23, RMWS21, SZN19, SZN20, SMSAGG22, San20, Say22, SL20b, SL22b, SVS24, SEG21b, SEG22, SRV21, SWF21, SBL22, SAP22, SY21, SKCM22, SS22c, SDA24, SZ21, TFWX22, TCS22, TZ24a, TJC21, TB24, TMM24, TJM23, TPK20, Toh23, TI24, TEA+23, TSM24, Uil20, Unf21, UY22, VVL21, VZ24, VVRWT21]. **order** [VPDD22, VOL23, VBA22, VK22, WW20a, WMTQ20, WGY20, WW20b, WRH20, WCL+20, WTX+21, WLH21, WCF22, WTZZ23, WCP23,

PR20, RS20c, TYBW23, WLKR23, XYL22, ZHR20, ZH20]. **treatments** [DSZ20, MGA20]. **tree** [RIC^{+}22, ZPW^{+}23]. **tree-topological** [ZPW^{+}23]. **Treecode** [VGK21]. **Treecode-accelerated** [VGK21]. **trees** [Mar24a, WWJ24]. **Trend** [HJJL20]. **triangles** [MZ24]. **Triangular** [DM23b, AE20, CK20, CCB22, DNO23, DK21, HYQ20, HLQZ23, LWR20, LZZ24, LZ24b, Liu21, MK21, NW20, Nis20a, Nis21, VPDD22, WTZZ23, WZL21, ZCQ19, ZCQ20a, ZL21b, ZLW^{+}22a]. **triangulated** [TCW24]. **TriGlobal** [OY21]. **trimming** [TLKK23]. **triple** [EGN23, NAZ22]. **triple-deck** [EGN23]. **triple-porosity-Stokes** [NAZ22]. **triply** [LZLZ21]. **Trotter** [ZOG21b]. **troubled** [CF24b, ZZ24d]. **troubled-cell** [CF24b]. **Trubnikov** [SAH^{+}22]. **Truly** [Bar21b]. **truncated** [FA22, RHG22]. **Truncation** [BSR20, LRVF22, PR24]. **trust** [AMG23b]. **trust-region** [AMG23b]. **tsunami** [FFGRLS^{+}20]. **TTI** [XH24]. **tube** [HHVM20, HJH^{+}21, MCBA20, SOBP22]. **tubes** [CCPS21, CCPS23]. **tubular** [KWS22]. **tumor** [LHL^{+}22, NE23]. **tuned** [Das24, DHR20]. **tuning** [PK23]. **turbomachinery** [AFP22]. **turbopumps** [CPD^{+}24]. **Turbulence** [CSA24, WJO24, ASSZ21, BBF20, BABD21, BJC23, BGS^{+}22b, CDBS21, CPX21, CLW^{+}24, DGW22, FJG^{+}20, GRC^{+}22, GT23, GCSH22, KL20, KFP^{+}22, KMF23, KKSY21, LMFV22a, LMFV22b, MND^{+}20, MH22b, MY24, MMYT23, NFB23, PPHO22, SSG21, SFNMF^{+}21, TSS^{+}20, WGY20, WCP23, WZSK22, YcD20, YcD23, YGJ21a, YGJ21b, ZXLH23, ZJQ^{+}24, ZAW^{+}20, ZLHY24, dZBDMC24, vGES24]. **turbulence-induced** [PPHO22]. **Turbulent** [SI22, BJR22, BJR24, BDB21, BPJ22, CPX22, CMH20, CM20, Che20, CFJF23, CF22, CPBB21, CPBB24, DJID20, DTB20, DOL23, GFY20, HXX24, HSMR20, HM21b, JGM^{+}22, KM22a, KSBG20, KKY^{+}21, KD20, KS21d, LNC^{+}21, LJK^{+}24, LAS22, MCJS24, PJW21, RWDG22, SGM^{+}24, TGS^{+}22, TNF23, ZB24, ZO21, vNGB22]. **Turn** [DCS23]. **Tusas** [GNF22]. **TVD** [SBVM20]. **twisted** [YB22]. **Two** [CS20, HJH^{+}21, Hua21, JZSX24, LXD^{+}20, LC23, QERT20, RHD^{+}24, SZKY24, WWG20, YRC^{+}21, vdEW23, AdDMT21, ADJ23, BJ21, BCG23, BL22a, BBV23, BKC23, BDTU24, BDMP22, BSV22, BSZ^{+}23, Bre20, BMQ20, BE20, BR22b, Cal21, CKLZ23, CKLZ24, CSCL20, CLC24b, CY22b, CZ22b, Che23b, CCS24, CDV24, CZL20, CLJ^{+}20, CBBI20, CNC21, CK21, CLP22, CMRR21, DEN22, DZJ22, DY22a, DSBFN^{+}20, DC21, DHMT21, DS21, DLYZ23, DZ23, DL24, DLY22, EDEV23, FQSW23, FTZ22, FZ23, FCBM22, Fu20, FLS23, FM24, GNZ23, GDBFN^{+}20, GdFP^{+}24, GQS20, GCV22, GCL^{+}22, HdB21, HCD24, HKS20, HCL22, HC24, HLA20b, HLA20c, HJQ^{+}23, HJ24b, IKP22, JMM20, Jai22a, JM22, JM23, Jai24, JHT23, JWZ20, JGR22, KBCH20, KLS^{+}20, KR23, KWDS22, KCSS24, KKY^{+}21, LL20, LKM22, LHC22, LL21b, LCS24, LOL20, LLW20a, LWR20, LYS22a, LZS22b, LLPL22, LLS24a, LJZK21]. **two** [lLNZ21, LC22, LY20b, Liu21, LSZ21, LRT^{+}22b, LTBM23, eLGQ24, LMPT24, LLCK20, MXL^{+}24, MJJ21, MTO21, MA21, MDG20, MCBA20, MIM20, MM21c, MM22, MKM23, MYY^{+}23, MP21, MD22, NKA^{+}20, PB20a, PEA20, PA21, PWbCJ24, PJA22, PAGJ23, PMF20, PLV20, PRL22, PGH24,

References

Abgrall:2021:P

[AACX21] Rémi Abgrall, Nikolaus Adams, Luis Chacon, and Feng Xiao. Preface. *Journal of Computational Physics*, 430 (??):Article 110137, April 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999121000292`.

Adams:2020:POP

[AAH+20] Michael P. Adams, Marvin L. Adams, W. Daryl Hawkins, Timmie Smith, Lawrence Rauchwerger, Nancy M. Amato, Teresa S. Bailey, Robert D. Falgout, Adam Kunen, and Peter Brown. Provably optimal parallel transport sweeps on semi-structured grids. *Journal of Computational Physics*, 407(??):Article 109234, April 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999120300085`.

Asante-Asamani:2020:SOE

[AAKW20] E. O. Asante-Asamani, A. Kleefeld, and B. A. Wade. A second-order exponential time differencing scheme for non-linear reaction-diffusion systems with dimensional splitting. *Journal of Computational Physics*, 415(??):Article 109490, August 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print),

1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120302643.

Aalund:2021:TPQ

[ÅAL+21] Oskar Ålund, Yukinao Akamatsu, Fredrik Laurén, Takahiro Miura, Jan Nordström, and Alexander Rothkopf. Trace preserving quantum dynamics using a novel reparametrization-neutral summation-by-parts difference operator. *Journal of Computational Physics*, 425(??):Article 109917, January 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120306914. See corrigendum [ÅAL+24].

Aalund:2024:CTP

[ÅAL+24] Oskar Ålund, Yukinao Akamatsu, Fredrik Laurén, Takahiro Miura, Jan Nordström, and Alexander Rothkopf. Corrigendum to “Trace preserving quantum dynamics using a novel reparametrization-neutral summation-by-parts difference operator” [J.Comput.Phys. 425 (2021) 109917]. *Journal of Computational Physics*, 519(??):??, December 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124007654. See [ÅAL+21].

Alame:2020:VLS

[AAM20] Karim Alamé, Sreevatsa Anantharamu, and Krishnan Mahesh. A variational level set methodology without reinitialization for the prediction of equilibrium interfaces over arbitrary solid surfaces. *Journal of Computational Physics*, 406(??):Article 109184, April 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119308897.

Ali:2024:MSI

[AAMPR24] Alsadig Ali, Abdullah Al-Mamun, Felipe Pereira, and Arunasalam Rahunanthan. Multiscale sampling for the inverse modeling of partial differential equations. *Journal of Computational Physics*, 497(??):??, January 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123007040.

Archibald:2022:KLB

[AB22] Richard Archibald and Feng Bao. Kernel learning backward SDE filter for data assimilation. *Journal of Computational Physics*, 455(??):??, April 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122000717.

Alberts:2023:PII

[AB23] Alex Alberts and Ilias Bilionis. Physics-informed information field theory for modeling physical systems with uncertainty quantification. *Journal of Computational Physics*, 486(??):??, August 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912300195X.

Agarwal:2024:NSE

[AB24a] Dhwanit Agarwal and George Biros. Numerical simulation of an extensible capsule using regularized Stokes kernels and overset finite differences. *Journal of Computational Physics*, 509(??):??, July 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124002912.

Agarwal:2024:SSE

[AB24b] Shivang Agarwal and Amartya S. Banerjee. Solution of the Schrödinger equation for quasi-one-dimensional materials using helical waves. *Journal of Computational Physics*, 496(??):??, January 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123006460.

Agocs:2024:TAW

[AB24c] Fruzsina J. Agocs and Alex H. Barnett. Trapped acoustic waves and raindrops: High-order accurate integral equation method for localized excitation of a periodic staircase. *Journal of Computational Physics*, 519(??):??, December 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124006314.

Alsalti-Baldellou:2023:ESS

[ABÁFTO23] Àdel Alsalti-Baldellou, Xavier Álvarez-Farré, F. Xavier Trias, and Assensi Oliva. Exploiting spatial symmetries for solving Poisson's equation. *Journal of Computational Physics*, 486(??):??, August 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123002280.

Arrighi:2024:NAE

[ABB+24] W. J. Arrighi, J. W. Banks, R. L. Berger, T. Chapman, A. Gianesini Odu, and J. Gorman. A new approach to the evaluation and solution of the relativistic kinetic dispersion relation and verification with continuum kinetic simulation. *Journal of Computational Physics*, 508(??):??, July 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912400250X.

Allaire:2023:ACS

[ABBG23] Grégoire Allaire, Martin Bihr, Beniamin Bogosel, and Matias Godoy. Accessibility constraints in structural optimization via distance functions. *Journal of Computational Physics*, 484(??):??, July 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912300178X.

Azpiroz:2020:ENS

[ABDD20] Izar Azpiroz, Hélène Barucq, Julien Diaz, and Rabia Djellouli. An effective numerical strategy for retrieving all characteristic parameters of an elastic scatterer from its FFP measurements. *Journal of Computational Physics*, 419(??):Article 109683, October 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120304575.

Anderson:2024:FHO

[ABFPA24] Thomas G. Anderson, Marc Bonnet, Luiz M. Faria, and Carlos Pérez-Arancibia. Fast, high-order numerical evaluation of volume potentials via polynomial density interpolation.

Journal of Computational Physics, 511(??):??, August 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124003401.

Abgrall:2020:LEA

[Abg20] R. Abgrall. Letter from the Editor: About "A linear, second-order, energy stable, fully adaptive finite-element method for phase-field modelling of wetting phenomena" by B. Aymard, U. Vaes, M. Pradras and S. Kalliadasis [J. Comput. Phys.: X **2** (2019) 100010]. *Journal of Computational Physics*, 410(??):Article 109494, June 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120302680.

Abgrall:2021:E

[Abg21] Rémi Abgrall. Editorial. *Journal of Computational Physics*, 445(??):Article 110625, November 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121005209.

Ackermann:2021:MST

[ABH21] Sina Ackermann, Carina Bringedal, and Rainer Helmig. Multi-scale three-domain approach for coupling free flow and flow in porous media including droplet-related interface processes. *Journal of Computational Physics*, 429(??):Article 109993, March 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120307671.

Akian:2022:LBK

[ABOS22] J.-L. Akian, L. Bonnet, H. Owhadi, and É. Savin. Learning "best" kernels from data in Gaussian process regression. with application to aerodynamics. *Journal of Computational Physics*, 470(??):??, December 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912200657X.

Albarakati:2024:PDA

[ABV24] Aishah Albarakati, Marko Budisić, and Erik S. Van Vleck. Projected data assimilation using sliding window proper orthogonal decomposition. *Journal of Computational Physics*, 514(??):??, October 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124004844.

Archibald:2023:SMP

[ABY23] Richard Archibald, Feng Bao, and Jiongmin Yong. A stochastic maximum principle approach for reinforcement learning with parameterized environment. *Journal of Computational Physics*, 488(??):??, September 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123003339.

Almuslimani:2023:CSR

[AC23] Ibrahim Almuslimani and Nicolas Crouseilles. Conservative stabilized Runge–Kutta methods for the Vlasov–Fokker–Planck equation. *Journal of Computational Physics*, 488(??):??, September 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123003364.

Acar:2024:TCP

[Aca24] Rüyam Acar. A topology constrained phase field model. *Journal of Computational Physics*, 498(??):??, February 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123007593.

Alberti:2024:ECS

[ACCC24] Luca Alberti, Emanuele Carnevali, Alessandro Colombo, and Andrea Crivellini. An entropy conserving/stable discontinuous Galerkin solver in entropy variables based on the direct enforcement of entropy balance. *Journal of Computational Physics*, 508(??):??, July 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124002560.

Arzani:2023:TGP

[ACD23] Amirhossein Arzani, Kevin W. Cassel, and Roshan M. D'Souza. Theory-guided physics-informed neural networks for boundary layer problems with singular perturbation. *Journal of Computational Physics*, 473(??):??, January 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122008312.

Aretz:2024:GSS

[ACDV24] Nicole Aretz, Peng Chen, Denise Degen, and Karen Veroy. A greedy sensor selection algorithm for hyperparameterized linear Bayesian inverse problems with correlated noise models. *Journal of Computational Physics*, 498(??):??, February 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123006940.

Anguill:2022:APM

[ACÉ+22] Pierre Anguill, Patricia Cargo, Cedric Énaux, Philippe Hoch, Emmanuel Labourasse, and Gerald Samba. An asymptotic preserving method for the linear transport equation on general meshes. *Journal of Computational Physics*, 450(??):Article 110859, February 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121007543.

An:2021:CSE

[ACHG+21] Dong An, Sara Y. Cheng, Teresa Head-Gordon, Lin Lin, and Jianfeng Lu. Convergence of stochastic-extended Lagrangian molecular dynamics method for polarizable force field simulation. *Journal of Computational Physics*, 438 (??):Article 110338, August 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121002333.

Anderson:2020:CCO

[ACML20a] Tom H. Anderson, Benjamin J. Civiletti, Peter B. Monk, and Akhlesh Lakhtakia. Corrigendum to "Coupled optoelectronic simulation and optimization of thin-film photovoltaic solar cells" [J. Comput. Phys. **407** (2020) 109242]. *Journal of Computational Physics*, 418(??): Article 109561, October 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120303351. See [ACML20b].

Anderson:2020:COS

[ACML20b] Tom H. Anderson, Benjamin J. Civiletti, Peter B. Monk, and Akhlesh Lakhtakia. Coupled optoelectronic simulation and optimization of thin-film photovoltaic solar cells. *Journal of Computational Physics*, 407(??):Article 109242, April 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120300164. See corrigendum [ACML20a].

Astuto:2023:FDG

[ACR23] Clarissa Astuto, Armando Coco, and Giovanni Russo. A finite-difference ghost-point multigrid method for multi-scale modelling of sorption kinetics of a surfactant past an oscillating bubble. *Journal of Computational Physics*, 476(??):??, March 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122009433.

Almquist:2020:NSB

[AD20] Martin Almquist and Eric M. Dunham. Non-stiff boundary and interface penalties for narrow-stencil finite difference approximations of the Laplacian on curvilinear multiblock grids. *Journal of Computational Physics*, 408 (??):Article 109294, May 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120300681.

Almquist:2021:EWP

[AD21] Martin Almquist and Eric M. Dunham. Elastic wave propagation in anisotropic solids using energy-stable finite differences with weakly enforced boundary and interface conditions. *Journal of Computational Physics*, 424 (??):Article 109842, January 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

URL http://www.sciencedirect.com/science/article/pii/S0021999120306161.

Aghili:2021:HDC

[AdDMT21] Joubine Aghili, Jean-Raynald de Dreuzy, Roland Masson, and Laurent Trenty. A hybrid-dimensional compositional two-phase flow model in fractured porous media with phase transitions and Fickian diffusion. *Journal of Computational Physics*, 441(??):Article 110452, September 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121003478.

Abrahamsen:2024:CVM

[ADGL24] Nilin Abrahamsen, Zhiyan Ding, Gil Goldshlager, and Lin Lin. Convergence of variational Monte Carlo simulation and scale-invariant pre-training. *Journal of Computational Physics*, 513(??):??, September 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124003899.

Ancellin:2023:EGT

[ADJ23] Matthieu Ancellin, Bruno Després, and Stéphane Jaouen. Extension of generic two-component VOF interface advection schemes to an arbitrary number of components. *Journal of Computational Physics*, 473(??):??, January 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122007847.

Abbaszadeh:2021:ROV

[ADK+21] Mostafa Abbaszadeh, Mehdi Dehghan, Amirreza Khodadadian, Nima Noii, Clemens Heitzinger, and Thomas Wick. A reduced-order variational multiscale interpolating element free Galerkin technique based on proper orthogonal decomposition for solving Navier–Stokes equations coupled with a heat transfer equation: Nonstationary incompressible Boussinesq equations. *Journal of Computational Physics*, 426(??):Article 109875, February 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120306495.

Aubry:2021:ASS

[ADM+21] R. Aubry, S. Dey, E. L. Mestreau, M. Williamschen, and W. Szymczak. Anisotropic sources for surface and volume boundary layer mesh generation. *Journal of Computational Physics*, 424(??):Article 109855, January 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912030629X.

Antonietti:2022:MLB

[ADM22] P. F. Antonietti, F. Dassi, and E. Manuzzi. Machine learning based refinement strategies for polyhedral grids with applications to virtual element and polyhedral discontinuous Galerkin methods. *Journal of Computational Physics*, 469(??):??, November 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122005939.

AlJahdali:2022:PRA

[ADP22] Rasha Al Jahdali, Lisandro Dalcin, and Matteo Parsani. On the performance of relaxation and adaptive explicit Runge–Kutta schemes for high-order compressible flow simulations. *Journal of Computational Physics*, 464(??):??, September 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122003953.

Abdulle:2022:LAD

[AdS22] Assyr Abdulle and Giacomo Rosilho de Souza. A local adaptive discontinuous Galerkin method for convection-diffusion-reaction equations. *Journal of Computational Physics*, 451(??):Article 110894, February 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121007890.

Athkuri:2020:NAV

[AE20] Sai Saketha Chandra Athkuri and Vinayak Eswaran. A new auxiliary volume-based gradient algorithm for triangular and tetrahedral meshes. *Journal of Computational Physics*, 422(??):Article 109780, December 1, 2020. CODEN

JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120305544.

Ammosov:2022:GMM

[AEGV22] Dmitry Ammosov, Yalchin Efendiev, Elena Grekova, and Maria Vasilyeva. Generalized macroscale model for Cosserat elasticity using Generalized Multiscale Finite Element Method. *Journal of Computational Physics*, 461(??):??, July 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122000730.

Aithal:2020:FPC

[AF20] Abhiram B. Aithal and Antonino Ferrante. A fast pressure-correction method for incompressible flows over curved walls. *Journal of Computational Physics*, 421 (??):Article 109693, November 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120304678.

Alauzet:2021:FBG

[AF21] F. Alauzet and L. Frazza. Feature-based and goal-oriented anisotropic mesh adaptation for RANS applications in aeronautics and aerospace. *Journal of Computational Physics*, 439(??):Article 110340, August 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121002357.

Assous:2023:NAP

[AF23] F. Assous and Y. Furman. Numerical approximation of 3D particle beams by multi-scale paraxial Vlasov–Maxwell equations. *Journal of Computational Physics*, 488(??):??, September 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123002814.

Anderson:2024:FSC

[AF24] William Anderson and Mohammad Farazmand. Fast and scalable computation of shape-morphing nonlinear solutions with application to evolutional neural networks. *Journal of Computational Physics*, 498(??):??, February 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123007441.

Alvarez:2024:ISH

[AFB24] L. A. Mansilla Alvarez, R. A. Feijóo, and P. J. Blanco. Inflow stabilization for hemodynamic simulations using Stokesian regions. *Journal of Computational Physics*, 510(??):??, August 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124003450.

Angus:2023:IPC

[AFF+23] Justin Ray Angus, William Farmer, Alex Friedman, Debojyoti Ghosh, Dave Grote, David Larson, and Anthony Link. An implicit particle code with *exact* energy and charge conservation for electromagnetic studies of dense plasmas. *Journal of Computational Physics*, 491(??):??, October 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123004783.

Angus:2024:IPC

[AFF+24] Justin Ray Angus, William Farmer, Alex Friedman, Vasily Geyko, Debojyoti Ghosh, Dave Grote, David Larson, and Anthony Link. An implicit particle code with *exact* energy and charge conservation for studies of dense plasmas in axisymmetric geometries. *Journal of Computational Physics*, 519(??):??, December 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124006752.

Antoine:2020:PCM

[AFGLM20] Xavier Antoine, François Fillion-Gourdeau, Emmanuel Lorin, and Steve MacLean. Pseudospectral computational methods for the time-dependent Dirac equation in static curved spaces. *Journal of Computational Physics*, 411(??):Article 109412, June 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL

http://www.sciencedirect.com/science/article/pii/S0021999120301868.

Alvarez:2023:DTN

[AFK+23] Hector Vargas Alvarez, Gianluca Fabiani, Nikolaos Kazantzis, Constantinos Siettos, and Ioannis G. Kevrekidis. Discrete-time nonlinear feedback linearization via physics-informed machine learning. *Journal of Computational Physics*, 492 (??):??, November 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912300503X.

An:2022:PTD

[AFL22] Dong An, Di Fang, and Lin Lin. Parallel transport dynamics for mixed quantum states with applications to time-dependent density functional theory. *Journal of Computational Physics*, 451(??):Article 110850, February 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121007452.

AlReda:2024:FSE

[AFMP24] F. Al Reda, S. Faure, B. Maury, and E. Pinsard. Faster is Slower effect for evacuation processes: a granular standpoint. *Journal of Computational Physics*, 504(??):??, May 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124001104.

Alauzet:2022:PAA

[AFP22] F. Alauzet, L. Frazza, and D. Papadogiannis. Periodic adjoints and anisotropic mesh adaptation in rotating frame for high-fidelity RANS turbomachinery applications. *Journal of Computational Physics*, 450(??):Article 110814, February 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121007099.

Abgrall:2024:FWA

[AFP24] Rémi Abgrall, Charbel Farhat, and Olivier Pironneau. A few words about Roland Glowinski. *Journal of Computational Physics*, 505(??):??, May 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

URL http://www.sciencedirect.com/science/article/pii/S0021999124001682.

Abreu:2023:RFP

[AFS+23] E. Abreu, P. Ferraz, A. M. Espírito Santo, F. Pereira, L. G. C. Santos, and F. S. Sousa. Recursive formulation and parallel implementation of multiscale mixed methods. *Journal of Computational Physics*, 473(??):??, January 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122007446.

Abreu:2020:NRP

[AFV20] Eduardo Abreu, Paola Ferraz, and Jardel Vieira. Numerical resolution of a pseudo-parabolic Buckley–Leverett model with gravity and dynamic capillary pressure in heterogeneous porous media. *Journal of Computational Physics*, 411(??):Article 109395, June 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120301698.

Afanasiev:2021:LIT

[AG21] Nikita Afanasiev and Vasily Goloviznin. A locally implicit time-reversible sonic point processing algorithm for one-dimensional shallow-water equations. *Journal of Computational Physics*, 434(??):Article 110220, June 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121001157.

Ahmad:2024:EHD

[AG24] Haroon Ahmad and Ceren Gürkan. eXtended Hybridizable Discontinuous Galerkin (X-HDG) method for linear convection–diffusion equations on unfitted domains. *Journal of Computational Physics*, 498(??):??, February 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123007611.

Aggarwal:2024:WBS

[AGK24] Aekta Aggarwal, G. D. Veerappa Gowda, and K. Sudarshan Kumar. A well-balanced second-order finite volume approximation for a coupled system of granular flow. *Journal of Computational Physics*, 510(??):??, August 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124003176.

Abdulle:2023:OES

[AGR23] Assyr Abdulle, Lia Gander, and Giacomo Rosilho de Souza. Optimal explicit stabilized postprocessed τ-leap method for the simulation of chemical kinetics. *Journal of Computational Physics*, 493(??):??, November 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123005776.

Ammari:2021:TDH

[AH21] Habib Ammari and Erik Orvehed Hiltunen. Time-dependent high-contrast subwavelength resonators. *Journal of Computational Physics*, 445(??):Article 110594, November 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121004897.

Adriaens:2021:ASM

[AHG21] Xavier Adriaens, François Henrotte, and Christophe Geuzaine. Adjoint state method for time-harmonic scattering problems with boundary perturbations. *Journal of Computational Physics*, 428(??):Article 109981, March 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120307555.

Actor:2024:DDW

[AHH+24] Jonas A. Actor, Xiaozhe Hu, Andy Huang, Scott A. Roberts, and Nathaniel Trask. Data-driven Whitney forms for structure-preserving control volume analysis. *Journal of Computational Physics*, 496(??):??, January 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123006150.

Amini:2023:IMN

[AHJ23] Danial Amini, Ehsan Haghighat, and Ruben Juanes. Inverse modeling of nonisothermal multiphase poromechanics using physics-informed neural networks. *Journal of Computational Physics*, 490(??):??, October 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999123004187`.

Akram:2020:PAR

[AHR20] Maryam Akram, Malik Hassanaly, and Venkat Raman. *A priori* analysis of reduced description of dynamical systems using approximate inertial manifolds. *Journal of Computational Physics*, 409(??):Article 109344, May 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999120301182`.

Appelo:2020:EBD

[AHWZ20] Daniel Appelö, Thomas Hagstrom, Qi Wang, and Lu Zhang. An energy-based discontinuous Galerkin method for semilinear wave equations. *Journal of Computational Physics*, 418(??):Article 109608, October 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S002199912030382X`.

Ammari:2020:OSN

[AIN20] Habib Ammari, Kthim Imeri, and Nilima Nigam. Optimization of Steklov-Neumann eigenvalues. *Journal of Computational Physics*, 406(??):Article 109211, April 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999119309167`.

AAlund:2021:LD

[ÅIN21] Oskar Ålund, Gianluca Iaccarino, and Jan Nordström. Learning to differentiate. *Journal of Computational Physics*, 424(??):Article 109873, January 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999120306471`.

Arthurs:2021:ATP

[AK21] Christopher J. Arthurs and Andrew P. King. Active training of physics-informed neural networks to aggregate and interpolate parametric solutions to the Navier–Stokes equations. *Journal of Computational Physics*, 438(??):Article 110364, August 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912100259X.

Aono:2022:AND

[AK22] Junya Aono and Keiichi Kitamura. An appropriate numerical dissipation for SLAU2 towards shock-stable compressible multiphase flow simulations. *Journal of Computational Physics*, 462(??):??, August 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122003187.

Agrawal:2024:PDD

[AK24] Atul Agrawal and Phaedon-Stelios Koutsourelakis. A probabilistic, data-driven closure model for RANS simulations with aleatoric, model uncertainty. *Journal of Computational Physics*, 508(??):??, July 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124002316.

afKlinteberg:2020:FIE

[aKAK20] Ludvig af Klinteberg, Travis Askham, and Mary Catherine Kropinski. A fast integral equation method for the two-dimensional Navier–Stokes equations. *Journal of Computational Physics*, 409(??):Article 109353, May 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120301273.

Albert:2020:SIN

[AKK20] Christopher G. Albert, Sergei V. Kasilov, and Winfried Kernbichler. Symplectic integration with non-canonical quadrature for guiding-center orbits in magnetic confinement devices. *Journal of Computational Physics*, 403 (??):Article 109065, February 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

URL http://www.sciencedirect.com/science/article/pii/S0021999119307703.

Athanassoulis:2023:NSP

[AKKM23] Agissilaos Athanassoulis, Theodoros Katsaounis, Irene Kyza, and Stephen Metcalfe. A novel, structure-preserving, second-order-in-time relaxation scheme for Schrödinger–Poisson systems. *Journal of Computational Physics*, 490(??):??, October 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123004023.

Ambartsumyan:2020:SMF

[AKWY20] Ilona Ambartsumyan, Eldar Khattatov, ChangQing Wang, and Ivan Yotov. Stochastic multiscale flux basis for Stokes–Darcy flows. *Journal of Computational Physics*, 401(??):Article 109011, January 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199911930717X.

Assous:2020:TRE

[AL20] F. Assous and M. Lin. Time reversal for elastic scatterer location from acoustic recording. *Journal of Computational Physics*, 423(??):Article 109786, December 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912030560X.

Assous:2021:SIA

[AL21] F. Assous and M. Lin. Solving an inverse acousto-elastic scattering problems by combining full-waveform redatuming and time reversal. *Journal of Computational Physics*, 445(??):Article 110603, November 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121004988.

Abdolazizi:2024:VCA

[ALC24] Kian P. Abdolazizi, Kevin Linka, and Christian J. Cyron. Viscoelastic constitutive artificial neural networks (vCANNs) — a framework for data-driven anisotropic nonlinear finite viscoelasticity. *Journal of Computational*

Physics, 499(??):??, February 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123007994.

Amiri:2020:AII

[ALCZ20] Farhad A. Amiri, Guigao Le, Qing Chen, and Junfeng Zhang. Accuracy improvement for immersed boundary method using Lagrangian velocity interpolation. *Journal of Computational Physics*, 423(??):Article 109800, December 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912030574X.

Alexiadis:2023:MAP

[Ale23] Alessio Alexiadis. A minimalistic approach to physics-informed machine learning using neighbour lists as physics-optimized convolutions for inverse problems involving particle systems. *Journal of Computational Physics*, 473(??):??, January 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122008130.

Angus:2022:NEC

[ALF+22] Justin Ray Angus, Anthony Link, Alex Friedman, Debojyoti Ghosh, and Jamal David Johnson. On numerical energy conservation for an implicit particle-in-cell method coupled with a binary Monte-Carlo algorithm for Coulomb collisions. *Journal of Computational Physics*, 456(??):??, May 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122000924.

Agrawal:2022:RFH

[ALFN22] Sudhanshu Agrawal, Wonjun Lee, Samy Wu Fung, and Levon Nurbekyan. Random features for high-dimensional nonlocal mean-field games. *Journal of Computational Physics*, 459(??):??, June 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912200198X.

An:2022:TSE

[ALL22] Dong An, Lin Lin, and Michael Lindsey. Towards sharp error analysis of extended Lagrangian molecular dynamics. *Journal of Computational Physics*, 466(??):??, October 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912200465X.

Adjerid:2023:IDG

[ALM23] Slimane Adjerid, Tao Lin, and Haroun Meghaichi. An immersed discontinuous Galerkin method for wave propagation in acoustic elastic media. *Journal of Computational Physics*, 472(??):??, January 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122007148.

Abu-Labdeh:2023:MMI

[ALMF23] Razan Abu-Labdeh, Scott MacLachlan, and Patrick E. Farrell. Monolithic multigrid for implicit Runge–Kutta discretizations of incompressible fluid flow. *Journal of Computational Physics*, 478(??):??, April 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123000566.

Antonietti:2022:RPG

[AM22] P. F. Antonietti and E. Manuzzi. Refinement of polygonal grids using Convolutional Neural Networks with applications to polygonal Discontinuous Galerkin and Virtual Element methods. *Journal of Computational Physics*, 452(??):Article 110900, March 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121007956.

Aleksyuk:2022:ERS

[AMB22a] Andrey I. Aleksyuk, Maxim A. Malakhov, and Vitaly V. Belikov. The exact Riemann solver for the shallow water equations with a discontinuous bottom. *Journal of Computational Physics*, 450(??):Article 110801, February 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

URL http://www.sciencedirect.com/science/article/pii/S0021999121006963.

Ashtiani:2022:SSC

[AMB22b] Shaghayegh Zamani Ashtiani, Mujeeb R. Malik, and Hessam Babaee. Scalable *in situ* compression of transient simulation data using time-dependent bases. *Journal of Computational Physics*, 468(??):??, November 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122005198.

Abergo:2023:ASO

[AMG23a] Luca Abergo, Myles Morelli, and Alberto Guardone. Aerodynamic shape optimization based on discrete adjoint and RBF. *Journal of Computational Physics*, 477(??):??, March 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123000463.

Adriaens:2023:IPP

[AMG23b] Xavier Adriaens, Ludovic Métivier, and Christophe Geuzaine. Inner product preconditioned trust-region methods for frequency-domain full waveform inversion. *Journal of Computational Physics*, 493(??):??, November 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123005648.

Ammosov:2024:GMF

[AMG24] Dmitry Ammosov, Tina Mai, and Juan Galvis. Generalized multiscale finite element method for a nonlinear elastic strain-limiting Cosserat model. *Journal of Computational Physics*, 519(??):??, December 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124006764.

Amor-Martin:2021:SAN

[AMGCL21] Adrian Amor-Martin, Luis E. Garcia-Castillo, and Jin-Fa Lee. Study of accuracy of a non-conformal finite element domain decomposition method. *Journal of Computational Physics*, 429(??):Article 109989, March 15, 2021. CODEN

JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120307634.

Ahmmed:2021:CSM

[AMK+21] B. Ahmmed, M. K. Mudunuru, S. Karra, S. C. James, and V. V. Vesselinov. A comparative study of machine learning models for predicting the state of reactive mixing. *Journal of Computational Physics*, 432(??):Article 110147, May 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121000395.

Antonietti:2020:STD

[AMM20a] Paola F. Antonietti, Ilario Mazzieri, and Francesco Migliorini. A space-time discontinuous Galerkin method for the elastic wave equation. *Journal of Computational Physics*, 419(??):Article 109685, October 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120304599.

Antonietti:2020:HOD

[AMM+20b] Paola F. Antonietti, Ilario Mazzieri, Markus Muhr, Vanja Nikolić, and Barbara Wohlmuth. A high-order discontinuous Galerkin method for nonlinear sound waves. *Journal of Computational Physics*, 415(??):Article 109484, August 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120302588.

Aristotelous:2023:AEA

[AMM23] Andreas C. Aristotelous, Edward C. Mitchell, and Vasileios Maroulas. ADLGM: an efficient adaptive sampling deep learning Galerkin method. *Journal of Computational Physics*, 477(??):??, March 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123000396.

Alekseenko:2022:FEB

[AMW22] Alexander Alekseenko, Robert Martin, and Aihua Wood. Fast evaluation of the Boltzmann collision operator using data driven reduced order models. *Journal of Computational Physics*, 470(??):??, December 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122005885.

An:2021:TSD

[An21a] Yajun An. Time-space domain dispersion reduction schemes in the uniform norm for the 2D acoustic wave equation. *Journal of Computational Physics*, 445(??): Article 110589, November 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121004848.

Assous:2021:FWR

[AN21b] Franck Assous and Frédéric Nataf. Full-waveform redatuming via a TRAC approach: a first step towards target oriented inverse problem. *Journal of Computational Physics*, 440(??):Article 110377, September 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121002722.

Arrutselvi:2024:CMA

[AN24] M. Arrutselvi and Sundararajan Natarajan. A Cartesian mesh approach to embedded interface problems using the virtual element method. *Journal of Computational Physics*, 508(??):??, July 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124002468.

Anistratov:2021:NIP

[Ani21] Dmitriy Y. Anistratov. Nonlinear iterative projection methods with multigrid in photon frequency for thermal radiative transfer. *Journal of Computational Physics*, 444(??):Article 110568, November 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121004630.

Anonymous:2020:Aa

[Ano20a] Anonymous. 1 April 2020. *Journal of Computational Physics*, 406(??):??, April 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

Anonymous:2020:Ac

[Ano20b] Anonymous. 1 August 2020. *Journal of Computational Physics*, 414(??):??, August 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

Anonymous:2020:Da

[Ano20c] Anonymous. 1 December 2020. *Journal of Computational Physics*, 422(??):??, December 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

Anonymous:2020:Fa

[Ano20d] Anonymous. 1 February 2020. *Journal of Computational Physics*, 402(??):??, February 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

Anonymous:2020:Ja

[Ano20e] Anonymous. 1 January 2020. *Journal of Computational Physics*, 400(??):??, January 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

Anonymous:2020:Je

[Ano20f] Anonymous. 1 July 2020. *Journal of Computational Physics*, 412(??):??, July 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

Anonymous:2020:Jc

[Ano20g] Anonymous. 1 June 2020. *Journal of Computational Physics*, 410(??):??, June 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

Anonymous:2020:Ma

[Ano20h] Anonymous. 1 March 2020. *Journal of Computational Physics*, 404(??):??, March 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

Anonymous:2020:Mc

[Ano20i] Anonymous. 1 May 2020. *Journal of Computational Physics*, 408(??):??, May 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

Anonymous:2020:Na

[Ano20j] Anonymous. 1 November 2020. *Journal of Computational Physics*, 420(??):??, November 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

Anonymous:2020:Oa

[Ano20k] Anonymous. 1 October 2020. *Journal of Computational Physics*, 418(??):??, October 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

Anonymous:2020:Sa

[Ano20l] Anonymous. 1 September 2020. *Journal of Computational Physics*, 416(??):??, September 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

Anonymous:2020:Ab

[Ano20m] Anonymous. 15 April 2020. *Journal of Computational Physics*, 407(??):??, April 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

Anonymous:2020:Ad

[Ano20n] Anonymous. 15 August 2020. *Journal of Computational Physics*, 415(??):??, August 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

Anonymous:2020:Db

[Ano20o] Anonymous. 15 December 2020. *Journal of Computational Physics*, 423(??):??, December 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

Anonymous:2020:Fb

[Ano20p] Anonymous. 15 February 2020. *Journal of Computational Physics*, 403(??):??, February 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

Anonymous:2020:Jb

[Ano20q] Anonymous. 15 January 2020. *Journal of Computational Physics*, 401(??):??, January 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

Anonymous:2020:Jf

[Ano20r] Anonymous. 15 July 2020. *Journal of Computational Physics*, 413(??):??, July 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

Anonymous:2020:Jd

[Ano20s] Anonymous. 15 June 2020. *Journal of Computational Physics*, 411(??):??, June 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

Anonymous:2020:Mb

[Ano20t] Anonymous. 15 March 2020. *Journal of Computational Physics*, 405(??):??, March 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

Anonymous:2020:Md

[Ano20u] Anonymous. 15 May 2020. *Journal of Computational Physics*, 409(??):??, May 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

Anonymous:2020:Nb

[Ano20v] Anonymous. 15 November 2020. *Journal of Computational Physics*, 421(??):??, November 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

Anonymous:2020:Ob

[Ano20w] Anonymous. 15 October 2020. *Journal of Computational Physics*, 419(??):??, October 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

Anonymous:2020:Sb

[Ano20x] Anonymous. 15 September 2020. *Journal of Computational Physics*, 417(??):??, September 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

Anonymous:2020:EBa

[Ano20y] Anonymous. Editorial Board. *Journal of Computational Physics*, 400(??):Article 109084, January 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119307892.

Anonymous:2020:EBb

[Ano20z] Anonymous. Editorial Board. *Journal of Computational Physics*, 401(??):Article 109151, January 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119308563.

Anonymous:2020:EBc

[Ano20-27] Anonymous. Editorial Board. *Journal of Computational Physics*, 402(??):Article 109200, February 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119309052.

Anonymous:2020:EBd

[Ano20-28] Anonymous. Editorial Board. *Journal of Computational Physics*, 403(??):Article 109206, February 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119309118.

Anonymous:2020:EBe

[Ano20-29] Anonymous. Editorial Board. *Journal of Computational Physics*, 404(??):Article 109263, March 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120300371.

Anonymous:2020:EBf

[Ano20-30] Anonymous. Editorial Board. *Journal of Computational Physics*, 405(??):Article 109290, March 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120300644.

Anonymous:2020:EBg

[Ano20-31] Anonymous. Editorial Board. *Journal of Computational Physics*, 406(??):Article 109332, April 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120301066.

Anonymous:2020:EBh

[Ano20-32] Anonymous. Editorial Board. *Journal of Computational Physics*, 407(??):Article 109374, April 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120301480.

Anonymous:2020:EBi

[Ano20-33] Anonymous. Editorial Board. *Journal of Computational Physics*, 408(??):Article 109418, May 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120301923.

Anonymous:2020:EBj

[Ano20-34] Anonymous. Editorial Board. *Journal of Computational Physics*, 409(??):Article 109435, May 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120302096.

Anonymous:2020:EBk

[Ano20-35] Anonymous. Editorial Board. *Journal of Computational Physics*, 410(??):Article 109470, June 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120302448.

Anonymous:2020:EBl

[Ano20-36] Anonymous. Editorial Board. *Journal of Computational Physics*, 411(??):Article 109505, June 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120302795.

Anonymous:2020:EBm

[Ano20-37] Anonymous. Editorial Board. *Journal of Computational Physics*, 412(??):Article 109531, July 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120303053.

Anonymous:2020:EBn

[Ano20-38] Anonymous. Editorial Board. *Journal of Computational Physics*, 413(??):Article 109555, July 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120303296.

Anonymous:2020:EBo

[Ano20-39] Anonymous. Editorial Board. *Journal of Computational Physics*, 414(??):Article 109589, August 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120303636.

Anonymous:2020:EBp

[Ano20-40] Anonymous. Editorial Board. *Journal of Computational Physics*, 415(??):Article 109615, August 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120303892.

Anonymous:2020:EBq

[Ano20-41] Anonymous. Editorial Board. *Journal of Computational Physics*, 416(??):Article 109650, September 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120304241.

Anonymous:2020:EBr

[Ano20-42] Anonymous. Editorial Board. *Journal of Computational Physics*, 417(??):Article 109656, September 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120304307.

Anonymous:2020:EBs

[Ano20-43] Anonymous. Editorial Board. *Journal of Computational Physics*, 418(??):Article 109777, October 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120305519.

Anonymous:2020:EBt

[Ano20-44] Anonymous. Editorial Board. *Journal of Computational Physics*, 419(??):Article 109817, October 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912030591X.

Anonymous:2020:EBu

[Ano20-45] Anonymous. Editorial Board. *Journal of Computational Physics*, 420(??):Article 109832, November 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120306069.

Anonymous:2020:EBv

[Ano20-46] Anonymous. Editorial Board. *Journal of Computational Physics*, 421(??):Article 109884, November 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120306586.

Anonymous:2020:EBw

[Ano20-47] Anonymous. Editorial Board. *Journal of Computational Physics*, 422(??):Article 109929, December 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120307038.

Anonymous:2020:EBx

[Ano20-48] Anonymous. Editorial Board. *Journal of Computational Physics*, 423(??):Article 109970, December 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120307440.

Anonymous:2021:Aa

[Ano21a] Anonymous. 1 April 2021. *Journal of Computational Physics*, 430(??):??, April 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

Anonymous:2021:Ac

[Ano21b] Anonymous. 1 August 2021. *Journal of Computational Physics*, 438(??):??, August 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

Anonymous:2021:Da

[Ano21c] Anonymous. 1 December 2021. *Journal of Computational Physics*, 446(??):??, December 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

Anonymous:2021:Fa

[Ano21d] Anonymous. 1 February 2021. *Journal of Computational Physics*, 426(??):??, February 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

Anonymous:2021:Ja

[Ano21e] Anonymous. 1 January 2021. *Journal of Computational Physics*, 424(??):??, January 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

Anonymous:2021:Je

[Ano21f] Anonymous. 1 July 2021. *Journal of Computational Physics*, 436(??):??, July 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

Anonymous:2021:Jc

[Ano21g] Anonymous. 1 June 2021. *Journal of Computational Physics*, 434(??):??, June 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

Anonymous:2021:Ma

[Ano21h] Anonymous. 1 March 2021. *Journal of Computational Physics*, 428(??):??, March 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

Anonymous:2021:Mc

[Ano21i] Anonymous. 1 May 2021. *Journal of Computational Physics*, 432(??):??, May 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

Anonymous:2021:Na

[Ano21j] Anonymous. 1 November 2021. *Journal of Computational Physics*, 444(??):??, November 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

Anonymous:2021:Oa

[Ano21k] Anonymous. 1 October 2021. *Journal of Computational Physics*, 442(??):??, October 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

Anonymous:2021:Sa

[Ano21l] Anonymous. 1 September 2021. *Journal of Computational Physics*, 440(??):??, September 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

Anonymous:2021:Ab

[Ano21m] Anonymous. 15 April 2021. *Journal of Computational Physics*, 431(??):??, April 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

Anonymous:2021:Ad

[Ano21n] Anonymous. 15 August 2021. *Journal of Computational Physics*, 439(??):??, August 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

Anonymous:2021:Db

[Ano21o] Anonymous. 15 December 2021. *Journal of Computational Physics*, 447(??):??, December 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

Anonymous:2021:Fb

[Ano21p] Anonymous. 15 February 2021. *Journal of Computational Physics*, 427(??):??, February 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

Anonymous:2021:Jb

[Ano21q] Anonymous. 15 January 2021. *Journal of Computational Physics*, 425(??):??, January 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

Anonymous:2021:Jf

[Ano21r] Anonymous. 15 July 2021. *Journal of Computational Physics*, 437(??):??, July 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

Anonymous:2021:Jd

[Ano21s] Anonymous. 15 June 2021. *Journal of Computational Physics*, 435(??):??, June 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

Anonymous:2021:Mb

[Ano21t] Anonymous. 15 March 2021. *Journal of Computational Physics*, 429(??):??, March 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

Anonymous:2021:Md

[Ano21u] Anonymous. 15 May 2021. *Journal of Computational Physics*, 433(??):??, May 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

Anonymous:2021:Nb

[Ano21v] Anonymous. 15 November 2021. *Journal of Computational Physics*, 445(??):??, November 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

Anonymous:2021:Ob

[Ano21w] Anonymous. 15 October 2021. *Journal of Computational Physics*, 443(??):??, October 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

Anonymous:2021:Sb

[Ano21x] Anonymous. 15 September 2021. *Journal of Computational Physics*, 441(??):??, September 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

Anonymous:2021:EBa

[Ano21y] Anonymous. Editorial Board. *Journal of Computational Physics*, 424(??):Article 109976, January 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120307506.

Anonymous:2021:EBb

[Ano21z] Anonymous. Editorial Board. *Journal of Computational Physics*, 425(??):Article 110048, January 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120308226.

Anonymous:2021:EBc

[Ano21-27] Anonymous. Editorial Board. *Journal of Computational Physics*, 426(??):Article 110106, February 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120308810.

Anonymous:2021:EBd

[Ano21-28] Anonymous. Editorial Board. *Journal of Computational Physics*, 427(??):Article 110123, February 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121000152.

Anonymous:2021:EBe

[Ano21-29] Anonymous. Editorial Board. *Journal of Computational Physics*, 428(??):Article 110130, March 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912100022X.

Anonymous:2021:EBf

[Ano21-30] Anonymous. Editorial Board. *Journal of Computational Physics*, 429(??):Article 110172, March 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121000656.

Anonymous:2021:EBg

[Ano21-31] Anonymous. Editorial Board. *Journal of Computational Physics*, 430(??):Article 110211, April 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121001066.

Anonymous:2021:EBh

[Ano21-32] Anonymous. Editorial Board. *Journal of Computational Physics*, 431(??):Article 110226, April 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121001212.

Anonymous:2021:EBi

[Ano21-33] Anonymous. Editorial Board. *Journal of Computational Physics*, 432(??):Article 110250, May 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121001455.

Anonymous:2021:EBj

[Ano21-34] Anonymous. Editorial Board. *Journal of Computational Physics*, 433(??):Article 110272, May 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121001674.

Anonymous:2021:EBk

[Ano21-35] Anonymous. Editorial Board. *Journal of Computational Physics*, 434(??):Article 110306, June 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121002011.

Anonymous:2021:EBl

[Ano21-36] Anonymous. Editorial Board. *Journal of Computational Physics*, 435(??):Article 110347, June 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121002424.

Anonymous:2021:EBm

[Ano21-37] Anonymous. Editorial Board. *Journal of Computational Physics*, 436(??):Article 110399, July 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121002941.

Anonymous:2021:EBn

[Ano21-38] Anonymous. Editorial Board. *Journal of Computational Physics*, 437(??):Article 110418, July 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121003132.

Anonymous:2021:EBo

[Ano21-39] Anonymous. Editorial Board. *Journal of Computational Physics*, 438(??):Article 110456, August 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912100351X.

Anonymous:2021:EBp

[Ano21-40] Anonymous. Editorial Board. *Journal of Computational Physics*, 439(??):Article 110463, August 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121003582.

Anonymous:2021:EBq

[Ano21-41] Anonymous. Editorial Board. *Journal of Computational Physics*, 440(??):Article 110488, September 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121003831.

Anonymous:2021:EBr

[Ano21-42] Anonymous. Editorial Board. *Journal of Computational Physics*, 441(??):Article 110505, September 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121004009.

Anonymous:2021:EBs

[Ano21-43] Anonymous. Editorial Board. *Journal of Computational Physics*, 442(??):Article 110555, October 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121004502.

Anonymous:2021:EBt

[Ano21-44] Anonymous. Editorial Board. *Journal of Computational Physics*, 443(??):Article 110613, October 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121005088.

Anonymous:2021:EBu

[Ano21-45] Anonymous. Editorial Board. *Journal of Computational Physics*, 444(??):Article 110644, November 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121005398.

Anonymous:2021:EBv

[Ano21-46] Anonymous. Editorial Board. *Journal of Computational Physics*, 445(??):Article 110680, November 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121005751.

Anonymous:2021:EBw

[Ano21-47] Anonymous. Editorial Board. *Journal of Computational Physics*, 446(??):Article 110711, December 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121006069.

Anonymous:2021:EBx

[Ano21-48] Anonymous. Editorial Board. *Journal of Computational Physics*, 447(??):Article 110748, December 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121006434.

Anonymous:2022:Aa

[Ano22a] Anonymous. 1 April 2022. *Journal of Computational Physics*, 454(??):??, April 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

Anonymous:2022:Ac

[Ano22b] Anonymous. 1 August 2022. *Journal of Computational Physics*, 462(??):??, August 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

Anonymous:2022:Da

[Ano22c] Anonymous. 1 December 2022. *Journal of Computational Physics*, 470(??):??, December 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

Anonymous:2022:Fa

[Ano22d] Anonymous. 1 February 2022. *Journal of Computational Physics*, 450(??):??, February 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

Anonymous:2022:Ja

[Ano22e] Anonymous. 1 January 2022. *Journal of Computational Physics*, 448(??):??, January 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

Anonymous:2022:Je

[Ano22f] Anonymous. 1 July 2022. *Journal of Computational Physics*, 460(??):??, July 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

Anonymous:2022:Jc

[Ano22g] Anonymous. 1 June 2022. *Journal of Computational Physics*, 458(??):??, June 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

Anonymous:2022:Ma

[Ano22h] Anonymous. 1 March 2022. *Journal of Computational Physics*, 452(??):??, March 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

Anonymous:2022:Mc

[Ano22i] Anonymous. 1 May 2022. *Journal of Computational Physics*, 456(??):??, May 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

Anonymous:2022:Na

[Ano22j] Anonymous. 1 November 2022. *Journal of Computational Physics*, 468(??):??, November 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

Anonymous:2022:Oa

[Ano22k] Anonymous. 1 October 2022. *Journal of Computational Physics*, 466(??):??, October 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

Anonymous:2022:Sa

[Ano22l] Anonymous. 1 September 2022. *Journal of Computational Physics*, 464(??):??, September 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

Anonymous:2022:Ab

[Ano22m] Anonymous. 15 April 2022. *Journal of Computational Physics*, 455(??):??, April 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

Anonymous:2022:Ad

[Ano22n] Anonymous. 15 August 2022. *Journal of Computational Physics*, 463(??):??, August 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

Anonymous:2022:Db

[Ano22o] Anonymous. 15 December 2022. *Journal of Computational Physics*, 471(??):??, December 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

Anonymous:2022:Fb

[Ano22p] Anonymous. 15 February 2022. *Journal of Computational Physics*, 451(??):??, February 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

Anonymous:2022:Jb

[Ano22q] Anonymous. 15 January 2022. *Journal of Computational Physics*, 449(??):??, January 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

Anonymous:2022:Jf

[Ano22r] Anonymous. 15 July 2022. *Journal of Computational Physics*, 461(??):??, July 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

Anonymous:2022:Jd

[Ano22s] Anonymous. 15 June 2022. *Journal of Computational Physics*, 459(??):??, June 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

Anonymous:2022:Mb

[Ano22t] Anonymous. 15 March 2022. *Journal of Computational Physics*, 453(??):??, March 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

Anonymous:2022:Md

[Ano22u] Anonymous. 15 May 2022. *Journal of Computational Physics*, 457(??):??, May 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

Anonymous:2022:Nb

[Ano22v] Anonymous. 15 November 2022. *Journal of Computational Physics*, 469(??):??, November 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

Anonymous:2022:Ob

[Ano22w] Anonymous. 15 October 2022. *Journal of Computational Physics*, 467(??):??, October 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

Anonymous:2022:Sb

[Ano22x] Anonymous. 15 September 2022. *Journal of Computational Physics*, 465(??):??, September 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

Anonymous:2022:EBa

[Ano22y] Anonymous. Editorial Board. *Journal of Computational Physics*, 448(??):Article 110835, January 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121007300.

Anonymous:2022:EBb

[Ano22z] Anonymous. Editorial Board. *Journal of Computational Physics*, 449(??):Article 110872, January 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121007671.

Anonymous:2022:EBc

[Ano22-27] Anonymous. Editorial Board. *Journal of Computational Physics*, 450(??):Article 110951, February 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122000134.

Anonymous:2022:EBd

[Ano22-28] Anonymous. Editorial Board. *Journal of Computational Physics*, 451(??):Article 110977, February 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122000390.

Anonymous:2022:EBe

[Ano22-29] Anonymous. Editorial Board. *Journal of Computational Physics*, 452(??):Article 111015, March 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122000778.

Anonymous:2022:EBf

[Ano22-30] Anonymous. Editorial Board. *Journal of Computational Physics*, 453(??):Article 111057, March 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912200119X.

Anonymous:2022:EBg

[Ano22-31] Anonymous. Editorial Board. *Journal of Computational Physics*, 454(??):Article 111064, April 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999122001267`.

Anonymous:2022:EBh

[Ano22-32] Anonymous. Editorial Board. *Journal of Computational Physics*, 455(??):??, April 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999122001759`.

Anonymous:2022:EBi

[Ano22-33] Anonymous. Editorial Board. *Journal of Computational Physics*, 456(??):??, May 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999122001954`.

Anonymous:2022:EBj

[Ano22-34] Anonymous. Editorial Board. *Journal of Computational Physics*, 457(??):??, May 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999122002297`.

Anonymous:2022:EBk

[Ano22-35] Anonymous. Editorial Board. *Journal of Computational Physics*, 458(??):??, June 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999122002467`.

Anonymous:2022:EBl

[Ano22-36] Anonymous. Editorial Board. *Journal of Computational Physics*, 459(??):??, June 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999122002728`.

Anonymous:2022:EBm

[Ano22-37] Anonymous. Editorial Board. *Journal of Computational Physics*, 460(??):??, July 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122003072.

Anonymous:2022:EBn

[Ano22-38] Anonymous. Editorial Board. *Journal of Computational Physics*, 461(??):??, July 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122003448.

Anonymous:2022:EBo

[Ano22-39] Anonymous. Editorial Board. *Journal of Computational Physics*, 462(??):??, August 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122003813.

Anonymous:2022:EBp

[Ano22-40] Anonymous. Editorial Board. *Journal of Computational Physics*, 463(??):??, August 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122004077.

Anonymous:2022:EBq

[Ano22-41] Anonymous. Editorial Board. *Journal of Computational Physics*, 464(??):??, September 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122004491.

Anonymous:2022:EBr

[Ano22-42] Anonymous. Editorial Board. *Journal of Computational Physics*, 465(??):??, September 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122004922.

Anonymous:2022:EBs

[Ano22-43] Anonymous. Editorial Board. *Journal of Computational Physics*, 466(??):??, October 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122005472.

Anonymous:2022:EBt

[Ano22-44] Anonymous. Editorial Board. *Journal of Computational Physics*, 467(??):??, October 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122005800.

Anonymous:2022:EBu

[Ano22-45] Anonymous. Editorial Board. *Journal of Computational Physics*, 468(??):??, November 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122006283.

Anonymous:2022:EBv

[Ano22-46] Anonymous. Editorial Board. *Journal of Computational Physics*, 469(??):??, November 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122007008.

Anonymous:2022:EBw

[Ano22-47] Anonymous. Editorial Board. *Journal of Computational Physics*, 470(??):??, December 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122007240.

Anonymous:2022:EBx

[Ano22-48] Anonymous. Editorial Board. *Journal of Computational Physics*, 471(??):??, December 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122007677.

Anonymous:2023:Aa

[Ano23a] Anonymous. 1 April 2023. *Journal of Computational Physics*, 478(??):??, April 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

Anonymous:2023:Ac

[Ano23b] Anonymous. 1 August 2023. *Journal of Computational Physics*, 486(??):??, August 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

Anonymous:2023:Da

[Ano23c] Anonymous. 1 December 2023. *Journal of Computational Physics*, 494(??):??, December 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

Anonymous:2023:Fa

[Ano23d] Anonymous. 1 February 2023. *Journal of Computational Physics*, 474(??):??, February 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

Anonymous:2023:Ja

[Ano23e] Anonymous. 1 January 2023. *Journal of Computational Physics*, 472(??):??, January 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

Anonymous:2023:Je

[Ano23f] Anonymous. 1 July 2023. *Journal of Computational Physics*, 484(??):??, July 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

Anonymous:2023:Jc

[Ano23g] Anonymous. 1 June 2023. *Journal of Computational Physics*, 482(??):??, June 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

Anonymous:2023:Ma

[Ano23h] Anonymous. 1 March 2023. *Journal of Computational Physics*, 476(??):??, March 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

Anonymous:2023:Mc

[Ano23i] Anonymous. 1 May 2023. *Journal of Computational Physics*, 480(??):??, May 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

Anonymous:2023:Na

[Ano23j] Anonymous. 1 November 2023. *Journal of Computational Physics*, 492(??):??, November 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

Anonymous:2023:Oa

[Ano23k] Anonymous. 1 October 2023. *Journal of Computational Physics*, 490(??):??, October 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

Anonymous:2023:Sa

[Ano23l] Anonymous. 1 September 2023. *Journal of Computational Physics*, 488(??):??, September 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

Anonymous:2023:Ab

[Ano23m] Anonymous. 15 April 2023. *Journal of Computational Physics*, 479(??):??, April 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

Anonymous:2023:Ad

[Ano23n] Anonymous. 15 August 2023. *Journal of Computational Physics*, 487(??):??, August 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

Anonymous:2023:Db

[Ano23o] Anonymous. 15 December 2023. *Journal of Computational Physics*, 495(??):??, December 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

Anonymous:2023:Fb

[Ano23p] Anonymous. 15 February 2023. *Journal of Computational Physics*, 475(??):??, February 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

Anonymous:2023:Jb

[Ano23q] Anonymous. 15 January 2023. *Journal of Computational Physics*, 473(??):??, January 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

Anonymous:2023:Jf

[Ano23r] Anonymous. 15 July 2023. *Journal of Computational Physics*, 485(??):??, July 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

Anonymous:2023:Jd

[Ano23s] Anonymous. 15 June 2023. *Journal of Computational Physics*, 483(??):??, June 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

Anonymous:2023:Mb

[Ano23t] Anonymous. 15 March 2023. *Journal of Computational Physics*, 477(??):??, March 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

Anonymous:2023:Md

[Ano23u] Anonymous. 15 May 2023. *Journal of Computational Physics*, 481(??):??, May 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

Anonymous:2023:Nb

[Ano23v] Anonymous. 15 November 2023. *Journal of Computational Physics*, 493(??):??, November 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

Anonymous:2023:Ob

[Ano23w] Anonymous. 15 October 2023. *Journal of Computational Physics*, 491(??):??, October 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

Anonymous:2023:Sb

[Ano23x] Anonymous. 15 September 2023. *Journal of Computational Physics*, 489(??):??, September 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

Anonymous:2023:EBa

[Ano23y] Anonymous. Editorial Board. *Journal of Computational Physics*, 472(??):??, January 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999122008427`.

Anonymous:2023:EBb

[Ano23z] Anonymous. Editorial Board. *Journal of Computational Physics*, 473(??):??, January 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999122008774`.

Anonymous:2023:EBc

[Ano23-27] Anonymous. Editorial Board. *Journal of Computational Physics*, 474(??):??, February 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999122009494`.

Anonymous:2023:EBd

[Ano23-28] Anonymous. Editorial Board. *Journal of Computational Physics*, 475(??):??, February 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999123000281`.

Anonymous:2023:EBe

[Ano23-29] Anonymous. Editorial Board. *Journal of Computational Physics*, 476(??):??, March 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S002199912300061X`.

Anonymous:2023:EBf

[Ano23-30] Anonymous. Editorial Board. *Journal of Computational Physics*, 477(??):??, March 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999123000864`.

Anonymous:2023:EBg

[Ano23-31] Anonymous. Editorial Board. *Journal of Computational Physics*, 478(??):??, April 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123001213.

Anonymous:2023:EBh

[Ano23-32] Anonymous. Editorial Board. *Journal of Computational Physics*, 479(??):??, April 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123001432.

Anonymous:2023:EBi

[Ano23-33] Anonymous. Editorial Board. *Journal of Computational Physics*, 480(??):??, May 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123001602.

Anonymous:2023:EBj

[Ano23-34] Anonymous. Editorial Board. *Journal of Computational Physics*, 481(??):??, May 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123001742.

Anonymous:2023:EBk

[Ano23-35] Anonymous. Editorial Board. *Journal of Computational Physics*, 482(??):??, June 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123001882.

Anonymous:2023:EBl

[Ano23-36] Anonymous. Editorial Board. *Journal of Computational Physics*, 483(??):??, June 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912300219X.

Anonymous:2023:EBm

[Ano23-37] Anonymous. Editorial Board. *Journal of Computational Physics*, 484(??):??, July 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123002371.

Anonymous:2023:EBn

[Ano23-38] Anonymous. Editorial Board. *Journal of Computational Physics*, 485(??):??, July 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123002619.

Anonymous:2023:EBo

[Ano23-39] Anonymous. Editorial Board. *Journal of Computational Physics*, 486(??):??, August 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123002966.

Anonymous:2023:EBp

[Ano23-40] Anonymous. Editorial Board. *Journal of Computational Physics*, 487(??):??, August 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123003200.

Anonymous:2023:EBq

[Ano23-41] Anonymous. Editorial Board. *Journal of Computational Physics*, 488(??):??, September 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123003807.

Anonymous:2023:EBr

[Ano23-42] Anonymous. Editorial Board. *Journal of Computational Physics*, 489(??):??, September 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912300428X.

Anonymous:2023:EBs

[Ano23-43] Anonymous. Editorial Board. *Journal of Computational Physics*, 490(??):??, October 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123004886.

Anonymous:2023:EBt

[Ano23-44] Anonymous. Editorial Board. *Journal of Computational Physics*, 491(??):??, October 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123005417.

Anonymous:2023:EBu

[Ano23-45] Anonymous. Editorial Board. *Journal of Computational Physics*, 492(??):??, November 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123005831.

Anonymous:2023:EBv

[Ano23-46] Anonymous. Editorial Board. *Journal of Computational Physics*, 493(??):??, November 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123006368.

Anonymous:2023:EBw

[Ano23-47] Anonymous. Editorial Board. *Journal of Computational Physics*, 494(??):??, December 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123006617.

Anonymous:2023:EBx

[Ano23-48] Anonymous. Editorial Board. *Journal of Computational Physics*, 495(??):??, December 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912300709X.

Anonymous:2024:Aa

[Ano24a] Anonymous. 1 April 2024. *Journal of Computational Physics*, 502(??):??, April 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

Anonymous:2024:Ac

[Ano24b] Anonymous. 1 August 2024. *Journal of Computational Physics*, 510(??):??, August 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

Anonymous:2024:Da

[Ano24c] Anonymous. 1 December 2024. *Journal of Computational Physics*, 518(??):??, December 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

Anonymous:2024:Fa

[Ano24d] Anonymous. 1 February 2024. *Journal of Computational Physics*, 498(??):??, February 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

Anonymous:2024:Ja

[Ano24e] Anonymous. 1 January 2024. *Journal of Computational Physics*, 496(??):??, January 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

Anonymous:2024:Je

[Ano24f] Anonymous. 1 July 2024. *Journal of Computational Physics*, 508(??):??, July 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

Anonymous:2024:Jc

[Ano24g] Anonymous. 1 June 2024. *Journal of Computational Physics*, 506(??):??, June 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

Anonymous:2024:Ma

[Ano24h] Anonymous. 1 March 2024. *Journal of Computational Physics*, 500(??):??, March 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

Anonymous:2024:Mc

[Ano24i] Anonymous. 1 May 2024. *Journal of Computational Physics*, 504(??):??, May 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

Anonymous:2024:Na

[Ano24j] Anonymous. 1 November 2024. *Journal of Computational Physics*, 516(??):??, November 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

Anonymous:2024:Oa

[Ano24k] Anonymous. 1 October 2024. *Journal of Computational Physics*, 514(??):??, October 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

Anonymous:2024:Sa

[Ano24l] Anonymous. 1 September 2024. *Journal of Computational Physics*, 512(??):??, September 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

Anonymous:2024:Ab

[Ano24m] Anonymous. 15 April 2024. *Journal of Computational Physics*, 503(??):??, April 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

Anonymous:2024:Ad

[Ano24n] Anonymous. 15 August 2024. *Journal of Computational Physics*, 511(??):??, August 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

Anonymous:2024:Db

[Ano24o] Anonymous. 15 December 2024. *Journal of Computational Physics*, 519(??):??, December 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

Anonymous:2024:Fb

[Ano24p] Anonymous. 15 February 2024. *Journal of Computational Physics*, 499(??):??, February 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

Anonymous:2024:Jb

[Ano24q] Anonymous. 15 January 2024. *Journal of Computational Physics*, 497(??):??, January 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

Anonymous:2024:Jf

[Ano24r] Anonymous. 15 July 2024. *Journal of Computational Physics*, 509(??):??, July 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

Anonymous:2024:Jd

[Ano24s] Anonymous. 15 June 2024. *Journal of Computational Physics*, 507(??):??, June 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

Anonymous:2024:Mb

[Ano24t] Anonymous. 15 March 2024. *Journal of Computational Physics*, 501(??):??, March 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

Anonymous:2024:Md

[Ano24u] Anonymous. 15 May 2024. *Journal of Computational Physics*, 505(??):??, May 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

Anonymous:2024:Nb

[Ano24v] Anonymous. 15 November 2024. *Journal of Computational Physics*, 517(??):??, November 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

Anonymous:2024:Ob

[Ano24w] Anonymous. 15 October 2024. *Journal of Computational Physics*, 515(??):??, October 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

Anonymous:2024:Sb

[Ano24x] Anonymous. 15 September 2024. *Journal of Computational Physics*, 513(??):??, September 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

Anonymous:2024:EBa

[Ano24y] Anonymous. Editorial Board. *Journal of Computational Physics*, 496(??):??, January 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123007398.

Anonymous:2024:EBb

[Ano24z] Anonymous. Editorial Board. *Journal of Computational Physics*, 497(??):??, January 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123007854.

Anonymous:2024:EBc

[Ano24-27] Anonymous. Editorial Board. *Journal of Computational Physics*, 498(??):??, February 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123008288.

Anonymous:2024:EBd

[Ano24-28] Anonymous. Editorial Board. *Journal of Computational Physics*, 499(??):??, February 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124000196.

Anonymous:2024:EBe

[Ano24-29] Anonymous. Editorial Board. *Journal of Computational Physics*, 500(??):??, March 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124000573.

Anonymous:2024:EBf

[Ano24-30] Anonymous. Editorial Board. *Journal of Computational Physics*, 501(??):??, March 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124000846.

Anonymous:2024:EBg

[Ano24-31] Anonymous. Editorial Board. *Journal of Computational Physics*, 502(??):??, April 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124000998.

Anonymous:2024:EBi

[Ano24-32] Anonymous. Editorial Board. *Journal of Computational Physics*, 503(??):??, April 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912400144X.

Anonymous:2024:EBj

[Ano24-33] Anonymous. Editorial Board. *Journal of Computational Physics*, 504(??):??, May 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124001852.

Anonymous:2024:EBk

[Ano24-34] Anonymous. Editorial Board. *Journal of Computational Physics*, 505(??):??, May 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124002134.

Anonymous:2024:EBl

[Ano24-35] Anonymous. Editorial Board. *Journal of Computational Physics*, 506(??):??, June 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124002390.

Anonymous:2024:EBm

[Ano24-36] Anonymous. Editorial Board. *Journal of Computational Physics*, 507(??):??, June 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124002705.

Anonymous:2024:EBn

[Ano24-37] Anonymous. Editorial Board. *Journal of Computational Physics*, 508(??):??, July 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124003267.

Anonymous:2024:EBo

[Ano24-38] Anonymous. Editorial Board. *Journal of Computational Physics*, 509(??):??, July 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124003553.

Anonymous:2024:EBp

[Ano24-39] Anonymous. Editorial Board. *Journal of Computational Physics*, 510(??):??, August 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124004029.

Anonymous:2024:EBq

[Ano24-40] Anonymous. Editorial Board. *Journal of Computational Physics*, 511(??):??, August 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124004236.

Anonymous:2024:EBr

[Ano24-41] Anonymous. Editorial Board. *Journal of Computational Physics*, 512(??):??, September 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124004297.

Anonymous:2024:EBs

[Ano24-42] Anonymous. Editorial Board. *Journal of Computational Physics*, 513(??):??, September 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124004959.

Anonymous:2024:EBt

[Ano24-43] Anonymous. Editorial Board. *Journal of Computational Physics*, 514(??):??, October 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124005643.

Anonymous:2024:EBu

[Ano24-44] Anonymous. Editorial Board. *Journal of Computational Physics*, 515(??):??, October 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124006053.

Anonymous:2024:EBv

[Ano24-45] Anonymous. Editorial Board. *Journal of Computational Physics*, 516(??):??, November 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124006491.

Anonymous:2024:EBw

[Ano24-46] Anonymous. Editorial Board. *Journal of Computational Physics*, 517(??):??, November 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124006557.

Anonymous:2024:EBx

[Ano24-47] Anonymous. Editorial Board. *Journal of Computational Physics*, 518(??):??, December 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124006624.

Anonymous:2024:EBy

[Ano24-48] Anonymous. Editorial Board. *Journal of Computational Physics*, 519(??):??, December 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124007150.

Abgrall:2022:REE

[AÖR22] Rémi Abgrall, Philipp Öffner, and Hendrik Ranocha. Reinterpretation and extension of entropy correction terms for residual distribution and discontinuous Galerkin schemes: Application to structure preserving discretization. *Journal of Computational Physics*, 453(??):Article 110955, March 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999122000171`.

Amlani:2020:SHO

[AP20] Faisal Amlani and Niema M. Pahlevan. A stable high-order FC-based methodology for hemodynamic wave propagation. *Journal of Computational Physics*, 405(??):Article 109130, March 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999119308356`.

Abdulla:2021:IPL

[AP21] Ugur G. Abdulla and Roby Poteau. Identification of parameters for large-scale kinetic models. *Journal of Computational Physics*, 429(??):Article 110026, March 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999120308007`.

Armstrong:2022:NSC

[AP22] Charles Armstrong and Yan Peng. Numerical simulations of capsule deformation in a combined shear flow and DC electric field. *Journal of Computational Physics*, 462(??):??, August 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999122002856`.

Abouhussein:2023:CFE

[AP23] Ahmed Abouhussein and Yulia T. Peet. Computational framework for efficient high-fidelity optimization of bio-inspired propulsion and its application to accelerating swimmers. *Journal of Computational Physics*, 482(??):??, June 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S002199912300133X`.

Almeida:2022:APS

[APR22] Luis Almeida, Benoît Perthame, and Xinran Ruan. An asymptotic preserving scheme for capturing concentrations in age-structured models arising in adaptive dynamics. *Journal of Computational Physics*, 464(??):??, September 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122003977.

Arpaia:2020:WBR

[AR20] Luca Arpaia and Mario Ricchiuto. Well balanced residual distribution for the ALE spherical shallow water equations on moving adaptive meshes. *Journal of Computational Physics*, 405(??):Article 109173, March 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119308782.

Artemov:2021:SAM

[AR21] Anton G. Artemov and Emanuel H. Rubensson. Sparse approximate matrix–matrix multiplication for density matrix purification with error control. *Journal of Computational Physics*, 438(??):Article 110354, August 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121002497.

Andrejevic:2022:SCS

[AR22] Jovana Andrejevic and Chris H. Rycroft. Simulation of crumpled sheets via alternating quasistatic and dynamic representations. *Journal of Computational Physics*, 471(??):??, December 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122006702.

Araki:2020:RVF

[Ara20] Samuel J. Araki. Radiosity view factor model for sources with general distribution. *Journal of Computational Physics*, 406(??):Article 109146, April 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119308514.

Amiranashvili:2021:ASM

[ARB+21] Shalva Amiranashvili, Mindaugas Radziunas, Uwe Bandelow, Kurt Busch, and Raimondas Ciegis. Additive splitting methods for parallel solutions of evolution problems. *Journal of Computational Physics*, 436(??):Article 110320, July 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121002151.

A:2022:ADL

[ARC22] Sreejith N. A., Eleonore Riber, and Bénédicte Cuenot. Analysis and design of a local time stepping scheme for LES acceleration in reactive and non-reactive flow simulations. *Journal of Computational Physics*, 470(??):??, December 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122006428.

Allmann-Rahn:2022:PLR

[ARGK22] F. Allmann-Rahn, R. Grauer, and K. Kormann. A parallel low-rank solver for the six-dimensional Vlasov–Maxwell equations. *Journal of Computational Physics*, 469(??):??, November 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122006246.

Azaiez:2024:LSP

[AROM24] M. Azaïez, T. Chacón Rebollo, M. Oulghelou, and I. Sánchez Muñoz. Least-squares pressure recovery in reduced order methods for incompressible flows. *Journal of Computational Physics*, 519(??):??, December 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124006454.

Azaiez:2021:CID

[ARR21] Mejdi Azaïez, Tomás Chacón Rebollo, and Samuele Rubino. A cure for instabilities due to advection-dominance in POD solution to advection-diffusion-reaction equations. *Journal of Computational Physics*, 425(??):Article 109916, January 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-

2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120306902.

Abgrall:2023:DGS

[ARR23] Rémi Abgrall, Pratik Rai, and Florent Renac. A discontinuous Galerkin spectral element method for a nonconservative compressible multicomponent flow model. *Journal of Computational Physics*, 472(??):??, January 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122007562.

Abba:2020:DAC

[ARTB20] Antonella Abbà, Alessandro Recanati, Matteo Tugnoli, and Luca Bonaventura. Dynamical p-adaptivity for LES of compressible flows in a high order DG framework. *Journal of Computational Physics*, 420(??):Article 109720, November 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120304940.

Aurentz:2020:SUS

[AS20] Jared Lee Aurentz and Richard Mikaël Slevinsky. On symmetrizing the ultraspherical spectral method for self-adjoint problems. *Journal of Computational Physics*, 410(??):Article 109383, June 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120301571.

Abrantes:2020:CRU

[ASBM20] R. J. E. Abrantes, É. Sousa, D. Bilyeu, and R. Martin. Complexity-reduction using automatic level grouping for atomic collisional-radiative models. *Journal of Computational Physics*, 407(??):Article 109213, April 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119309180.

Africa:2023:MFH

[ASG$^+$23] P. C. Africa, M. Salvador, P. Gervasio, L. Dede', and A. Quarteroni. A matrix-free high-order solver for the numerical solution of cardiac electrophysiology. *Journal of*

Computational Physics, 478(??):??, April 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123000797.

AlKubaisy:2023:HPA

[ASJ23] Jumanah Al Kubaisy, Pablo Salinas, and Matthew D. Jackson. A hybrid pressure approximation in the control volume finite element method for multiphase flow and transport in heterogeneous porous media. *Journal of Computational Physics*, 475(??):??, February 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122009020.

AlKubaisy:2024:SMA

[ASJ24] Jumanah Al Kubaisy, Pablo Salinas, and Matthew D. Jackson. A single mesh approximation for modeling multiphase flow in heterogeneous porous media. *Journal of Computational Physics*, 513(??):??, September 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124004352.

Al-Salami:2021:HOF

[ASKH21] Jabir Al-Salami, Mohamed M. Kamra, and Changhong Hu. A high order flux reconstruction interface capturing method with a phase field preconditioning procedure. *Journal of Computational Physics*, 438(??):Article 110376, August 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121002710.

Asztalos:2024:ROM

[ASM24] Katherine Asztalos, René Steijl, and Romit Maulik. Reduced-order modeling on a near-term quantum computer. *Journal of Computational Physics*, 510(??):??, August 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912400319X.

Akbay:2021:BPP

[ASS21] Muzaffer Akbay, Craig Schroeder, and Tamar Shinar. Boundary pressure projection for partitioned solution of fluid-structure interaction with incompressible Dirichlet fluid domains. *Journal of Computational Physics*, 425 (??):Article 109894, January 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120306689.

Akhavan-Safaei:2021:DDF

[ASSZ21] Ali Akhavan-Safaei, Mehdi Samiee, and Mohsen Zayernouri. Data-driven fractional subgrid-scale modeling for scalar turbulence: a nonlocal LES approach. *Journal of Computational Physics*, 446(??):Article 110571, December 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121004666.

Antoine:2021:SAV

[AST21] Xavier Antoine, Jie Shen, and Qinglin Tang. Scalar Auxiliary Variable/Lagrange multiplier based pseudospectral schemes for the dynamics of nonlinear Schrödinger/Gross–Pitaevskii equations. *Journal of Computational Physics*, 437(??):Article 110328, July 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121002230.

Amor:2023:HOD

[ASVL23] Christian Amor, Philipp Schlatter, Ricardo Vinuesa, and Soledad Le Clainche. Higher-order dynamic mode decomposition on-the-fly: a low-order algorithm for complex fluid flows. *Journal of Computational Physics*, 475(??):??, February 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122009123.

Ager:2021:CCA

[ASW21] C. Ager, A. Seitz, and W. A. Wall. A consistent computational approach for general fluid-poroelasticity-structure-contact interaction problems. *Journal of Computational*

Physics, 441(??):Article 110450, September 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121003454.

Abushaikha:2020:FIM

[AT20] Ahmad S. Abushaikha and Kirill M. Terekhov. A fully implicit mimetic finite difference scheme for general purpose subsurface reservoir simulation with full tensor permeability. *Journal of Computational Physics*, 406(??):Article 109194, April 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199911930899X.

Anderson:2020:ECT

[ATCS20] S. E. Anderson, W. T. Taitano, L. Chacón, and A. N. Simakov. An efficient, conservative, time-implicit solver for the fully kinetic arbitrary-species 1D-2V Vlasov–Ampère system. *Journal of Computational Physics*, 419 (??):Article 109686, October 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120304605.

Aithal:2023:TAF

[ATF23] Abhiram B. Aithal, Mira Tipirneni, and Antonino Ferrante. Temporal accuracy of FastRK3. *Journal of Computational Physics*, 475(??):??, February 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122009160.

Atallah:2024:WBC

[ATS24] Nabil M. Atallah, Vladimir Z. Tomov, and Guglielmo Scovazzi. Weak boundary conditions for Lagrangian shock hydrodynamics: a high-order finite element implementation on curved boundaries. *Journal of Computational Physics*, 507(??):??, June 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124002080.

Ahmad:2020:LMM

[AuIL20] Masood Ahmad, Siraj ul Islam, and Elisabeth Larsson. Local meshless methods for second order elliptic interface problems with sharp corners. *Journal of Computational Physics*, 416(??):Article 109500, September 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120302746.

Astoul:2020:ARS

[AWB+20] Thomas Astoul, Gauthier Wissocq, Jean-François Boussuge, Alois Sengissen, and Pierre Sagaut. Analysis and reduction of spurious noise generated at grid refinement interfaces with the lattice Boltzmann method. *Journal of Computational Physics*, 418(??):Article 109645, October 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120304198.

Astoul:2021:LBM

[AWB+21] Thomas Astoul, Gauthier Wissocq, Jean-François Boussuge, Alois Sengissen, and Pierre Sagaut. Lattice Boltzmann method for computational aeroacoustics on non-uniform meshes: a direct grid coupling approach. *Journal of Computational Physics*, 447(??):Article 110667, December 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121005623.

Amlani:2023:FBM

[AWP23] Faisal Amlani, Heng Wei, and Niema M. Pahlevan. A Fourier-based methodology without numerical diffusion for conducting dye simulations and particle residence time calculations. *Journal of Computational Physics*, 493(??):??, November 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123005673.

Adil:2023:AMM

[AXWF23] Nazakat Adil, Xufeng Xiao, Kun Wang, and Xinlong Feng. An ALE meshfree method for surface PDEs coupling with forced mean curvature flow. *Journal of Computational Physics*, 493(??):??, November 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123005624.

Adia:2021:CLB

[AYH+21] J.-L. Adia, J. Yvonnet, Q.-C. He, N. C. Tran, and J. Sanahuja. A combined Lattice-Boltzmann-finite element approach to modeling unsaturated poroelastic behavior of heterogeneous media. *Journal of Computational Physics*, 437(??):Article 110334, July 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121002291.

Antoine:2022:PMP

[AZ22] Xavier Antoine and Xiaofei Zhao. Pseudospectral methods with PML for nonlinear Klein–Gordon equations in classical and non-relativistic regimes. *Journal of Computational Physics*, 448(??):Article 110728, January 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121006239.

Anderson:2023:FHO

[AZV23] Thomas G. Anderson, Hai Zhu, and Shravan Veerapaneni. A fast, high-order scheme for evaluating volume potentials on complex 2D geometries via area-to-line integral conversion and domain mappings. *Journal of Computational Physics*, 472(??):??, January 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122007513.

Zou:2023:EIP

[aZWY23] Guang an Zou, Bo Wang, and Xiaofeng Yang. Efficient interior penalty discontinuous Galerkin projection method with unconditional energy stability and second-order temporal accuracy for the incompressible magneto-hydrodynamic system. *Journal of Computational Physics*, 495(??):??, December 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print),

1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123006575.

Ben-Artzi:2024:GDG

[BA24] Matania Ben-Artzi. GRP — a direct Godunov extension. *Journal of Computational Physics*, 519(??):??, December 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124006363.

Bennis:2021:LTM

[BABD21] A.-C. Bennis, F. Adong, M. Boutet, and F. Dumas. LANS-α turbulence modeling for coastal sea: an application to Alderney Race. *Journal of Computational Physics*, 432(??):Article 110155, May 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121000474.

Bajars:2023:LSN

[Baj23] Janis Bajars. Locally-symplectic neural networks for learning volume-preserving dynamics. *Journal of Computational Physics*, 476(??):??, March 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123000062.

Beilina:2022:AFE

[BAK22] Larisa Beilina, Morteza Ghaderi Aram, and Evgenii M. Karchevskii. An adaptive finite element method for solving 3D electromagnetic volume integral equation with applications in microwave thermometry. *Journal of Computational Physics*, 459(??):??, June 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912200184X.

Bakosi:2024:PDL

[Bak24] J. Bakosi. Partition deactivation with load balancing for parallel flow simulations. *Journal of Computational Physics*, 519(??):??, December 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

URL http://www.sciencedirect.com/science/article/pii/S0021999124006351.

Baldauf:2020:DGS

[Bal20] Michael Baldauf. Discontinuous Galerkin solver for the shallow-water equations in covariant form on the sphere and the ellipsoid. *Journal of Computational Physics*, 410(??):Article 109384, June 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120301583.

Baldauf:2021:HEV

[Bal21] Michael Baldauf. A horizontally explicit, vertically implicit (HEVI) discontinuous Galerkin scheme for the 2-dimensional Euler and Navier–Stokes equations using terrain-following coordinates. *Journal of Computational Physics*, 446(??): Article 110635, December 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121005301.

Barnes:2021:ISF

[Bar21a] D. C. Barnes. Improved C^1 shape functions for simplex meshes. *Journal of Computational Physics*, 424 (??):Article 109852, January 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120306264.

Barsukow:2021:TMD

[Bar21b] Wasilij Barsukow. Truly multi-dimensional all-speed schemes for the Euler equations on Cartesian grids. *Journal of Computational Physics*, 435(??):Article 110216, June 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912100111X.

Barnes:2022:TED

[Bar22] D. C. Barnes. Time-explicit Darwin PIC algorithm. *Journal of Computational Physics*, 462(??):??, August 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (elec-

tronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122002133.

Batista:2020:MIS

[Bat20a] David Batista. Mesh-independent streamline tracing. *Journal of Computational Physics*, 401(??):Article 108967, January 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119306722.

Batista:2020:PMM

[Bat20b] David Batista. A preconditioned, multilevel Mimetic Finite Difference method for solving the pressure–velocity system. *Journal of Computational Physics*, 408(??):Article 109272, May 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120300462.

Bacigaluppi:2023:PLH

[BAT23] Paola Bacigaluppi, Rémi Abgrall, and Svetlana Tokareva. "*A posteriori*" limited high order and robust schemes for transient simulations of fluid flows in gas dynamics. *Journal of Computational Physics*, 476(??):??, March 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122009615.

Beardsell:2020:CES

[BB20a] Guillaume Beardsell and Guillaume Blanquart. A cost-effective semi-implicit method for the time integration of fully compressible reacting flows with stiff chemistry. *Journal of Computational Physics*, 414(??):Article 109479, August 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120302539.

Berezovski:2020:DDM

[BB20b] Mihhail Berezovski and Arkadi Berezovski. Discontinuity-driven mesh alignment for evolving discontinuities in elastic solids. *Journal of Computational Physics*, 416(??):Article 109542, September 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL

http://www.sciencedirect.com/science/article/pii/S0021999120303168.

Bonilla:2020:MPF

[BB20c] Jesús Bonilla and Santiago Badia. Monotonicity-preserving finite element schemes with adaptive mesh refinement for hyperbolic problems. *Journal of Computational Physics*, 416(??):Article 109522, September 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120302965.

Bauinger:2021:IFG

[BB21] Christoph Bauinger and Oscar P. Bruno. "Interpolated Factored Green Function" method for accelerated solution of scattering problems. *Journal of Computational Physics*, 430(??):Article 110095, April 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912030869X.

Bauinger:2023:MPI

[BB23a] Christoph Bauinger and Oscar P. Bruno. Massively parallelized interpolated factored green function method. *Journal of Computational Physics*, 475(??):??, February 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122009007.

Baumgart:2023:NES

[BB23b] Alexandra Baumgart and Guillaume Blanquart. A numerical extension of the spatially-filtered Euler equations for contact discontinuities. *Journal of Computational Physics*, 491(??):??, October 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123004485.

Baumgart:2024:ETS

[BB24] Alexandra Baumgart and Guillaume Blanquart. Ensuring $\Sigma_s Y_s = 1$ in transport of species mass fractions. *Journal of Computational Physics*, 513(??):??, September 15, 2024.

CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124004480.

Buhendwa:2022:CSP

[BBA22] Aaron B. Buhendwa, Deniz A. Bezgin, and Nikolaus A. Adams. Consistent and symmetry preserving data-driven interface reconstruction for the level-set method. *Journal of Computational Physics*, 457(??):??, May 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122001115.

Baumgart:2023:ACS

[BBB23] Alexandra Baumgart, Guillaume Beardsell, and Guillaume Blanquart. Analytical closure to the spatially-filtered Euler equations for shock-dominated flows. *Journal of Computational Physics*, 477(??):??, March 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123000414.

Boittin:2024:NSS

[BBB+24] L. Boittin, F. Bouchut, M.-O. Bristeau, A. Mangeney, J. Sainte-Marie, and F. Souillé. The Navier–Stokes system with temperature and salinity for free surface flows. numerical scheme and validation. *Journal of Computational Physics*, 510(??):??, August 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124003140.

Badsi:2021:SFP

[BBC21] Mehdi Badsi, Christophe Berthon, and Anaïs Crestetto. A stable fixed point method for the numerical simulation of a kinetic collisional sheath. *Journal of Computational Physics*, 429(??):Article 109990, March 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120307646.

Bremer:2022:ATV

[BBCD22] Maximilian Bremer, John Bachan, Cy Chan, and Clint Dawson. Adaptive total variation stable local timestepping for conservation laws. *Journal of Computational Physics*, 463(??):??, August 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122002388.

Bermudez:2020:SSI

[BBD+20] A. Bermúdez, S. Busto, M. Dumbser, J. L. Ferrín, L. Saavedra, and M. E. Vázquez-Cendón. A staggered semi-implicit hybrid FV/FE projection method for weakly compressible flows. *Journal of Computational Physics*, 421 (??):Article 109743, November 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120305179.

Barucq:2021:LSI

[BBDT21] Hélène Barucq, Abderrahmane Bendali, Julien Diaz, and Sébastien Tordeux. Local strategies for improving the conditioning of the plane-wave ultra-weak variational formulation. *Journal of Computational Physics*, 441(??): Article 110449, September 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121003442.

Bay:2020:BCB

[BBF20] Yong Yi Bay, Daniel J. Bodony, and Jonathan B. Freund. Boundary-consistent B-spline filtering schemes and application to high-fidelity simulations of turbulence. *Journal of Computational Physics*, 419(??):Article 109680, October 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912030454X.

Bale:2021:OSD

[BBGT21] Rahul Bale, Amneet Pal Singh Bhalla, Boyce E. Griffith, and Makoto Tsubokura. A one-sided direct forcing immersed boundary method using moving least squares. *Journal of*

Computational Physics, 440(??):Article 110359, September 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121002540.

Banks:2020:HOA

[BBH+20] Jeffrey W. Banks, Benjamin B. Buckner, William D. Henshaw, Michael J. Jenkinson, Alexander V. Kildishev, Gregor Kovačič, Ludmila J. Prokopeva, and Donald W. Schwendeman. A high-order accurate scheme for Maxwell's equations with a Generalized Dispersive Material (GDM) model and material interfaces. *Journal of Computational Physics*, 412(??):Article 109424, July 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120301984.

Bertrand:2023:DDR

[BBH23] Fleurianne Bertrand, Daniele Boffi, and Abdul Halim. Data-driven reduced order modeling for parametric PDE eigenvalue problems using Gaussian process regression. *Journal of Computational Physics*, 495(??):??, December 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123005983.

Barta:2024:PPB

[BBH+24] Robin Barta, Christian Bauer, Sebastian Herzog, Daniel Schiepel, and Claus Wagner. proPTV: a probability-based particle tracking velocimetry framework. *Journal of Computational Physics*, 514(??):??, October 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124004613.

Boustani:2021:IBF

[BBKB21] Jonathan Boustani, Michael F. Barad, Cetin C. Kiris, and Christoph Brehm. An immersed boundary fluid-structure interaction method for thin, highly compliant shell structures. *Journal of Computational Physics*, 438(??):Article 110369, August 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121002643.

Bresch:2023:MJC

[BBL23] Didier Bresch, Cosmin Burtea, and Frédéric Lagoutière. Mathematical justification of a compressible bi-fluid system with different pressure laws: a semi-discrete approach and numerical illustrations. *Journal of Computational Physics*, 490(??):??, October 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123003546.

Bonetti:2023:NMW

[BBMA23] Stefano Bonetti, Michele Botti, Ilario Mazzieri, and Paola F. Antonietti. Numerical modeling of wave propagation phenomena in thermo-poroelastic media via discontinuous Galerkin methods. *Journal of Computational Physics*, 489(??):??, September 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123003704.

Bajgiran:2022:UQK

[BBO+22] Hamed Hamze Bajgiran, Pau Batlle, Houman Owhadi, Mostafa Samir, Clint Scovel, Mahdy Shirdel, Michael Stanley, and Peyman Tavallali. Uncertainty quantification of the 4th kind; optimal posterior accuracy-uncertainty tradeoff with the minimum enclosing ball. *Journal of Computational Physics*, 471(??):??, December 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122006714.

Bonnafont:2024:FVM

[BBP24] Thomas Bonnafont, Delphine Bessieres, and Jean Paillol. A finite volume method to solve the Poisson equation with jump conditions and surface charges: Application to electroporation. *Journal of Computational Physics*, 504(??):??, May 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124001116.

Bastidas:2021:NHN

[BBPR21] Manuela Bastidas, Carina Bringedal, Iuliu Sorin Pop, and Florin Adrian Radu. Numerical homogenization of non-linear parabolic problems on adaptive meshes. *Journal of Computational Physics*, 425(??):Article 109903, January 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912030677X.

BenBader:2021:STM

[BBQ+21] S. Ben Bader, P. Benedusi, A. Quaglino, P. Zulian, and R. Krause. Space-time multilevel Monte Carlo methods and their application to cardiac electrophysiology. *Journal of Computational Physics*, 433(??):Article 110164, May 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121000565.

Basset:2024:PSL

[BBT24] Sihem Basset, Zohra Benkamra, and Mounir Tlemcani. Penalty Sponge Layers (PSL) for hyperbolic systems. general formulation, well-posedness and stability. *Journal of Computational Physics*, 510(??):??, August 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912400336X.

Berrone:2023:VES

[BBV23] Stefano Berrone, Martina Busetto, and Fabio Vicini. Virtual Element simulation of two-phase flow of immiscible fluids in Discrete Fracture Networks. *Journal of Computational Physics*, 473(??):??, January 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122007987.

Brown:2021:HOP

[BBW+21] Dominic A. S. Brown, Matthew T. Bettencourt, Steven A. Wright, Satheesh Maheswaran, John P. Jones, and Stephen A. Jarvis. Higher-order particle representation for particle-in-cell simulations. *Journal of Computational Physics*, 435(??):Article 110255, June 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121001509.

Bresch:2020:ASS

[BCC+20] D. Bresch, N. Cellier, F. Couderc, M. Gisclon, P. Noble, G.-L. Richard, C. Ruyer-Quil, and J.-P. Vila. Augmented skew-symmetric system for shallow-water system with surface tension allowing large gradient of density. *Journal of Computational Physics*, 419(??):Article 109670, October 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120304447.

Baptista:2024:BMC

[BCC+24] Ricardo Baptista, Lianghao Cao, Joshua Chen, Omar Ghattas, Fengyi Li, Youssef M. Marzouk, and J. Tinsley Oden. Bayesian model calibration for block copolymer self-assembly: Likelihood-free inference and expected information gain computation via measure transport. *Journal of Computational Physics*, 503(??):??, April 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124000937.

deRBorges:2023:ADC

[BCdS+23] Rafael B.deR. Borges, Flávio C. Colman, Nicholas D. P. da Silva, Gabriela W. O. Dicati, José E. Gubaua, and Chi-Wang Shu. Approximated decompositions for computational continuum mechanics. *Journal of Computational Physics*, 495(??):??, December 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912300671X.

Bessemoulin-Chatard:2022:SCD

[BCF22] Marianne Bessemoulin-Chatard and Francis Filbet. On the stability of conservative discontinuous Galerkin/Hermite spectral methods for the Vlasov–Poisson system. *Journal of Computational Physics*, 451(??):Article 110881, February 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121007762.

Barone:2020:EEC

[BCG+20] Alessandro Barone, Michele Giuliano Carlino, Alessio Gizzi, Simona Perotto, and Alessandro Veneziani. Efficient estimation of cardiac conductivities: a proper generalized decomposition approach. *Journal of Computational Physics*, 423(??):Article 109810, December 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120305842.

Badreddine:2023:FSL

[BCG23] Siwar Badreddine, Igor Chollet, and Laura Grigori. Factorized structure of the long-range two-electron integrals tensor and its application in quantum chemistry. *Journal of Computational Physics*, 493(??):??, November 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123005557.

Benamou:2022:PSR

[BCIR22] Jean-David Benamou, Guillaume Chazareix, Wilbert IJzerman, and Giorgi Rukhaia. Point source regularization of the finite source reflector problem. *Journal of Computational Physics*, 456(??):??, May 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122000948.

Bergmann:2022:ASI

[BCIT22] Michel Bergmann, Michele Giuliano Carlino, Angelo Iollo, and Haysam Telib. ADER scheme for incompressible Navier–Stokes equations on overset grids with a compact transmission condition. *Journal of Computational Physics*, 467(??):??, October 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122004764.

Berlyand:2024:NMS

[BCJ24] Leonid Berlyand, Robert Creese, and Pierre-Emmanuel Jabin. A novel multi-scale loss function for classification problems in machine learning. *Journal of Computational Physics*, 498(??):??, February 1, 2024. CODEN

JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912300774X.

Bao:2020:JSM

[BCJM20] Weizhu Bao, Lizhen Chen, Xiaoyun Jiang, and Ying Ma. A Jacobi spectral method for computing eigenvalue gaps and their distribution statistics of the fractional Schrödinger operator. *Journal of Computational Physics*, 421(??):Article 109733, November 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120305076.

Barua:2023:SIP

[BCL+23] Amlan K. Barua, Ray Chew, Shuwang Li, John Lowengrub, Andreas Münch, and Barbara Wagner. Sharp-interface problem of the Ohta–Kawasaki model for symmetric diblock copolymers. *Journal of Computational Physics*, 481(??):??, May 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123001274.

Benamou:2024:EOT

[BCM24] J.-D. Benamou, C. J. Cotter, and H. Malamut. Entropic optimal transport solutions of the semigeostrophic equations. *Journal of Computational Physics*, 500(??):??, March 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123008410.

Boscheri:2022:CCI

[BCP22] Walter Boscheri, Simone Chiocchetti, and Ilya Peshkov. A cell-centered implicit-explicit Lagrangian scheme for a unified model of nonlinear continuum mechanics on unstructured meshes. *Journal of Computational Physics*, 451 (??):Article 110852, February 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121007476.

Bertaglia:2021:UQV

[BCPV21] Giulia Bertaglia, Valerio Caleffi, Lorenzo Pareschi, and Alessandro Valiani. Uncertainty quantification of viscoelastic parameters in arterial hemodynamics with the a-FSI blood flow model. *Journal of Computational Physics*, 430(??):Article 110102, April 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120308767.

Boscarino:2022:LVG

[BCR22] Sebastiano Boscarino, Seung Yeon Cho, and Giovanni Russo. A local velocity grid conservative semi-Lagrangian schemes for BGK model. *Journal of Computational Physics*, 460(??): ??, July 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122002406.

Boscarino:2024:CSL

[BCR24] Sebastiano Boscarino, Seung Yeon Cho, and Giovanni Russo. A conservative semi-Lagrangian method for inhomogeneous Boltzmann equation. *Journal of Computational Physics*, 498(??):??, February 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123007283.

Both:2021:DDL

[BCSK21] Gert-Jan Both, Subham Choudhury, Pierre Sens, and Remy Kusters. DeepMoD: Deep learning for model discovery in noisy data. *Journal of Computational Physics*, 428(??):Article 109985, March 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120307592.

Baars:2021:AAM

[BCWD21] S. Baars, D. Castellana, F. W. Wubs, and H. A. Dijkstra. Application of adaptive multilevel splitting to high-dimensional dynamical systems. *Journal of Computational Physics*, 424(??):Article 109876, January 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

URL http://www.sciencedirect.com/science/article/pii/S0021999120306501.

Boscheri:2020:HOC

[BD20a] Walter Boscheri and Giacomo Dimarco. High order central WENO-Implicit-Explicit Runge Kutta schemes for the BGK model on general polygonal meshes. *Journal of Computational Physics*, 422(??):Article 109766, December 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120305404.

Bourgeois:2020:NMA

[BD20b] Pierre-Louis Bourgeois and Xavier Davoine. New mitigation approach to numerical Cherenkov radiation in PIC simulations of wakefield accelerators. *Journal of Computational Physics*, 413(??):Article 109426, July 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912030200X.

Bozonnet:2021:TOB

[BDB21] Cyril Bozonnet, Olivier Desjardins, and Guillaume Balarac. Traction open boundary condition for incompressible, turbulent, single- or multi-phase flows, and surface wave simulations. *Journal of Computational Physics*, 443(??): Article 110528, October 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912100423X.

Basic:2022:LDD

[BDBB22] Josip Basić, Nastia Degiuli, Branko Blagojević, and Dario Ban. Lagrangian differencing dynamics for incompressible flows. *Journal of Computational Physics*, 462(??):??, August 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122002601.

Bode:2023:HSC

[BDF+23] Mathis Bode, Abhishek Y. Deshmukh, Tobias Falkenstein, Seongwon Kang, and Heinz Pitsch. Hybrid scheme for complex flows on staggered grids and application to multiphase flows. *Journal of Computational Physics*, 474(??):??, February 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119300907.

Becache:2023:HSM

[BDFT23] Éliane Bécache, Anne-Sophie Bonnet-Ben Dhia, Sonia Fliss, and Antoine Tonnoir. The Half-Space Matching method for elastodynamic scattering problems in unbounded domains. *Journal of Computational Physics*, 490(??):??, October 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123004151.

Batlle:2024:KMC

[BDHO24] Pau Batlle, Matthieu Darcy, Bamdad Hosseini, and Houman Owhadi. Kernel methods are competitive for operator learning. *Journal of Computational Physics*, 496(??):??, January 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123006447.

Boscheri:2021:SPS

[BDI+21] W. Boscheri, M. Dumbser, M. Ioriatti, I. Peshkov, and E. Romenski. A structure-preserving staggered semi-implicit finite volume scheme for continuum mechanics. *Journal of Computational Physics*, 424(??):Article 109866, January 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120306409.

Boscheri:2020:SOA

[BDL+20] Walter Boscheri, Giacomo Dimarco, Raphaël Loubère, Maurizio Tavelli, and Marie-Hélène Vignal. A second order all Mach number IMEX finite volume solver for the three dimensional Euler equations. *Journal of Computational Physics*, 415(??):Article 109486, August 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120302606.

Bonaldi:2022:ESD

[BDMP22] Francesco Bonaldi, Jérôme Droniou, Roland Masson, and Antoine Pasteau. Energy-stable discretization of two-phase flows in deformable porous media with frictional contact at matrix-fracture interfaces. *Journal of Computational Physics*, 455(??):??, April 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999122000468`.

Bretin:2022:LPF

[BDMT22] Elie Bretin, Roland Denis, Simon Masnou, and Garry Terii. Learning phase field mean curvature flows with neural networks. *Journal of Computational Physics*, 470(??):??, December 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999122006416`.

Boisneault:2023:AST

[BDP23a] Antonin Boisneault, Samuel Dubuis, and Marco Picasso. An adaptive space-time algorithm for the incompressible Navier–Stokes equations. *Journal of Computational Physics*, 493(??):??, November 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999123005521`.

Boscheri:2023:LSP

[BDP23b] Walter Boscheri, Giacomo Dimarco, and Lorenzo Pareschi. Locally structure-preserving div-curl operators for high order discontinuous Galerkin schemes. *Journal of Computational Physics*, 486(??):??, August 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999123002255`.

Barnafi:2023:PBP

[BDS23] Nicolás A. Barnafi, Franco Dassi, and Simone Scacchi. Parallel block preconditioners for virtual element discretizations of the time-dependent Maxwell equations. *Journal of Computational Physics*, 478(??):??, April 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

URL http://www.sciencedirect.com/science/article/pii/S0021999123000657.

Baara:2021:TDA

[BDT21] Nacéra Baara, Julien Diaz, and Mounir Tlemcani. Time domain analysis and localization of a non-local PML for dispersive wave equations. *Journal of Computational Physics*, 445(??):Article 110638, November 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121005337.

Bibal:2024:CST

[BDTU24] M. Bibal, M. Deferrez, S. Tanguy, and A. Urbano. A compressible solver for two phase-flows with phase change for bubble cavitation. *Journal of Computational Physics*, 500(??):??, March 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912300846X.

Billuart:2023:WCB

[BDWC23] P. Billuart, M. Duponcheel, G. Winckelmans, and P. Chatelain. A weak coupling between a near-wall Eulerian solver and a Vortex Particle-Mesh method for the efficient simulation of 2D external flows. *Journal of Computational Physics*, 473(??):??, January 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122007896.

Bilbao:2023:EEE

[BDZ23] Stefan Bilbao, Michele Ducceschi, and Fabiana Zama. Explicit exactly energy-conserving methods for Hamiltonian systems. *Journal of Computational Physics*, 472(??):??, January 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122007604.

Bui:2020:SSN

[BE20] Quan M. Bui and Howard C. Elman. Semi-smooth Newton methods for nonlinear complementarity formulation of compositional two-phase flow in porous media. *Journal of Computational Physics*, 407(??):Article 109163, April 15, 2020.

CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199911930868X.

Bayat:2022:SNM

[BEB+22] Elyce Bayat, Raphael Egan, Daniil Bochkov, Alban Sauret, and Frederic Gibou. A sharp numerical method for the simulation of Stefan problems with convective effects. *Journal of Computational Physics*, 471(??):??, December 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122006908.

Bellotti:2024:ILB

[Bel24] Thomas Bellotti. Initialisation from lattice Boltzmann to multi-step Finite Difference methods: Modified equations and discrete observability. *Journal of Computational Physics*, 504(??):??, May 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124001207.

Beneddine:2023:NIF

[Ben23] Samir Beneddine. Nonlinear input feature reduction for data-based physical modeling. *Journal of Computational Physics*, 474(??):??, February 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122008956.

Bocharov:2020:IMS

[BEP+20] A. N. Bocharov, N. M. Evstigneev, V. P. Petrovskiy, O. I. Ryabkov, and I. O. Teplyakov. Implicit method for the solution of supersonic and hypersonic 3D flow problems with lower-upper symmetric-Gauss–Seidel preconditioner on multiple graphics processing units. *Journal of Computational Physics*, 406(??):Article 109189, April 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119308940.

Barnett:2022:QAM

[BF22] Joshua Barnett and Charbel Farhat. Quadratic approximation manifold for mitigating the Kolmogorov barrier in nonlinear projection-based model order reduction. *Journal of Computational Physics*, 464(??):??, September 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999122004107`.

Blaustein:2024:SAP

[BF24] Alain Blaustein and Francis Filbet. A structure and asymptotic preserving scheme for the Vlasov–Poisson–Fokker–Planck model. *Journal of Computational Physics*, 498(??): ??, February 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S002199912300788X`.

Bryngelson:2023:CMM

[BFC23] Spencer H. Bryngelson, Rodney O. Fox, and Tim Colonius. Conditional moment methods for polydisperse cavitating flows. *Journal of Computational Physics*, 477(??):??, March 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999123000128`.

Benitez:2024:DRB

[BFF+24] Jose Antonio Lara Benitez, Takashi Furuya, Florian Faucher, Anastasis Kratsios, Xavier Tricoche, and Maarten V. de Hoop. Out-of-distributional risk bounds for neural operators with applications to the Helmholtz equation. *Journal of Computational Physics*, 513(??):??, September 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999124004170`.

Barrett:2022:HSL

[BFG22] Aaron Barrett, Aaron L. Fogelson, and Boyce E. Griffith. A hybrid semi-Lagrangian cut cell method for advection-diffusion problems with Robin boundary conditions in moving domains. *Journal of Computational Physics*, 449 (??):Article 110805, January 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

URL http://www.sciencedirect.com/science/article/pii/S0021999121007002.

Busuioc:2023:WPS

[BFG23] Sergiu Busuioc, Aldo Frezzotti, and Livio Gibelli. A weighted particle scheme for Enskog–Vlasov equation to simulate spherical nano-droplets/bubbles. *Journal of Computational Physics*, 475(??):??, February 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122009366.

Bergmann:2022:EFV

[BFI22] Michel Bergmann, Antoine Fondanèche, and Angelo Iollo. An Eulerian finite-volume approach of fluid-structure interaction problems on quadtree meshes. *Journal of Computational Physics*, 471(??):??, December 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122007100.

Bruno:2020:EQP

[BFL20] Oscar P. Bruno and Agustin G. Fernandez-Lado. On the evaluation of quasi-periodic Green functions and wave-scattering at and around Rayleigh–Wood anomalies. *Journal of Computational Physics*, 410(??):Article 109352, June 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120301261.

Bassenne:2021:TAH

[BFM21] Maxime Bassenne, Lin Fu, and Ali Mani. Time-accurate and highly-stable explicit operators for stiff differential equations. *Journal of Computational Physics*, 424(??):Article 109847, January 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120306215.

Barnett:2023:NNA

[BFM23] Joshua Barnett, Charbel Farhat, and Yvon Maday. Neural-network-augmented projection-based model order reduction for mitigating the Kolmogorov barrier to reducibility. *Journal of Computational Physics*, 492(??):??, November 1, 2023.

CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123005156.

Bouchut:2021:DDG

[BFNK+21] François Bouchut, Enrique D. Fernández-Nieto, El Hadji Koné, Anne Mangeney, and Gladys Narbona-Reina. Dilatancy in dry granular flows with a compressible $\mu(I)$ rheology. *Journal of Computational Physics*, 429(??): Article 110013, March 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120307877.

Bachini:2021:IFE

[BFP21] Elena Bachini, Matthew W. Farthing, and Mario Putti. Intrinsic finite element method for advection-diffusion-reaction equations on surfaces. *Journal of Computational Physics*, 424(??):Article 109827, January 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912030601X.

Boutsikakis:2023:QPB

[BFS23] Athanasios Boutsikakis, Pascal Fede, and Olivier Simonin. Quasi-periodic boundary conditions for hierarchical algorithms used for the calculation of inter-particle electrostatic interactions. *Journal of Computational Physics*, 472(??):??, January 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122007495.

Bukac:2023:TAP

[BFST23] Martina Bukac, Guosheng Fu, Anyastassia Seboldt, and Catalin Trenchea. Time-adaptive partitioned method for fluid-structure interaction problems with thick structures. *Journal of Computational Physics*, 473(??):??, January 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122007719.

Blanes:2020:HOE

[BG20a] Sergio Blanes and Vasile Gradinaru. High order efficient splittings for the semiclassical time-dependent Schrödinger equation. *Journal of Computational Physics*, 405(??): Article 109157, March 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119308629.

Bochkov:2020:SEI

[BG20b] Daniil Bochkov and Frederic Gibou. Solving elliptic interface problems with jump conditions on Cartesian grids. *Journal of Computational Physics*, 407(??):Article 109269, April 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120300437.

Bruno:2020:CBR

[BG20c] Oscar P. Bruno and Emmanuel Garza. A Chebyshev-based rectangular-polar integral solver for scattering by geometries described by non-overlapping patches. *Journal of Computational Physics*, 421(??):Article 109740, November 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120305143.

Berger:2021:SRA

[BG21] Marsha Berger and Andrew Giuliani. A state redistribution algorithm for finite volume schemes on cut cell meshes. *Journal of Computational Physics*, 428(??):Article 109820, March 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120305945.

Balsara:2020:ECW

[BGFB20] Dinshaw S. Balsara, Sudip Garain, Vladimir Florinski, and Walter Boscheri. An efficient class of WENO schemes with adaptive order for unstructured meshes. *Journal of Computational Physics*, 404(??):Article 109062, March 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119307673.

Betteridge:2021:MPH

[BGGM21] Jack Betteridge, Thomas H. Gibson, Ivan G. Graham, and Eike H. Müller. Multigrid preconditioners for the hybridised discontinuous Galerkin discretisation of the shallow water equations. *Journal of Computational Physics*, 426(??):Article 109948, February 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120307221.

Bellotti:2022:MFA

[BGGM22] Thomas Bellotti, Loïc Gouarin, Benjamin Graille, and Marc Massot. Multidimensional fully adaptive lattice Boltzmann methods with error control based on multiresolution analysis. *Journal of Computational Physics*, 471(??):??, December 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122007331.

Barnett:2020:HOD

[BGH20] Alex Barnett, Leslie Greengard, and Thomas Hagstrom. High-order discretization of a stable time-domain integral equation for 3D acoustic scattering. *Journal of Computational Physics*, 402(??):Article 109047, February 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119307521.

Borowska:2021:GPE

[BGH21] Agnieszka Borowska, Diana Giurghita, and Dirk Husmeier. Gaussian process enhanced semi-automatic approximate Bayesian computation: parameter inference in a stochastic differential equation system for chemotaxis. *Journal of Computational Physics*, 429(??):Article 109999, March 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120307737.

Beccantini:2024:TAV

[BGLB24] A. Beccantini, P. Galon, N. Lelong, and F. Baj. Tangential artificial viscosity to alleviate the carbuncle phenomenon, with applications to single-component and multi-material flows. *Journal of Computational Physics*, 516(??):??, November 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912400617X.

Bonito:2022:LAL

[BGNY22] Andrea Bonito, Diane Guignard, Ricardo H. Nochetto, and Shuo Yang. LDG approximation of large deformations of prestrained plates. *Journal of Computational Physics*, 448(??):Article 110719, January 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121006148.

Bao:2022:VPP

[BGNZ22] Weizhu Bao, Harald Garcke, Robert Nürnberg, and Quan Zhao. Volume-preserving parametric finite element methods for axisymmetric geometric evolution equations. *Journal of Computational Physics*, 460(??):??, July 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912200242X.

Bucelli:2023:SLC

[BGQ+23] Michele Bucelli, Martin Geraint Gabriel, Alfio Quarteroni, Giacomo Gigante, and Christian Vergara. A stable loosely-coupled scheme for cardiac electro-fluid-structure interaction. *Journal of Computational Physics*, 490(??):??, October 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123004217.

Beaufort:2020:ASM

[BGR20] Pierre-Alexandre Beaufort, Christophe Geuzaine, and Jean-François Remacle. Automatic surface mesh generation for discrete models — a complete and automatic pipeline based on reparametrization. *Journal of Computational Physics*, 417(??):Article 109575, September 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120303491.

Berrone:2022:CNC

[BGS22a] Stefano Berrone, Denise Grappein, and Stefano Scialò. 3D-1D coupling on non conforming meshes via a three-field optimization based domain decomposition. *Journal of Computational Physics*, 448(??):Article 110738, January 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121006331.

Boureima:2022:DCD

[BGS+22b] I. Boureima, V. Gyrya, J. A. Saenz, S. Kurien, and M. Francois. Dynamic calibration of differential equations using machine learning, with application to turbulence models. *Journal of Computational Physics*, 457(??):??, May 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121008196.

Bociu:2022:NSA

[BGSP22] Lorena Bociu, Giovanna Guidoboni, Riccardo Sacco, and Daniele Prada. Numerical simulation and analysis of multiscale interface coupling between a poroelastic medium and a lumped hydraulic circuit: Comparison between functional iteration and operator splitting methods. *Journal of Computational Physics*, 466(??):??, October 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122004417.

Bhattacharyya:2020:GSA

[Bha20] Biswarup Bhattacharyya. Global sensitivity analysis: a Bayesian learning based polynomial chaos approach. *Journal of Computational Physics*, 415(??):Article 109539, August 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120303132.

Behnoudfar:2024:ASF

[BHDC24] Pouria Behnoudfar, Ali Hashemian, Quanling Deng, and Victor M. Calo. Adaptive-stabilized finite element methods for eigenvalue problems based on residual minimization onto a dual discontinuous Galerkin norm. *Journal of Computational Physics*, 519(??):??, December 15, 2024. CODEN

JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124006697.

Boon:2022:PRM

[BHK+22] Wietse M. Boon, Martin Hornkjøl, Miroslav Kuchta, Kent-André Mardal, and Ricardo Ruiz-Baier. Parameter-robust methods for the Biot–Stokes interfacial coupling without Lagrange multipliers. *Journal of Computational Physics*, 467(??):??, October 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122005265.

Blanc:2024:AOP

[BHLP24] Xavier Blanc, Francois Hermeline, Emmanuel Labourasse, and Julie Patela. Arbitrary order positivity preserving finite-volume schemes for 2D elliptic problems. *Journal of Computational Physics*, 518(??):??, December 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124005734.

Banks:2023:FSF

[BHNS23] J. W. Banks, W. D. Henshaw, A. Newell, and D. W. Schwendeman. Fractional-step finite difference schemes for incompressible elasticity on overset grids. *Journal of Computational Physics*, 488(??):??, September 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123003169.

Bonizzoni:2024:RBS

[BHP24] Francesca Bonizzoni, Moritz Hauck, and Daniel Peterseim. A reduced basis super-localized orthogonal decomposition for reaction–convection–diffusion problems. *Journal of Computational Physics*, 499(??):??, February 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123007933.

Behbahani:2022:SEF

[BHVJ22] Sara Shokrollahzadeh Behbahani, Hadi Hajibeygi, Denis Voskov, and Jan Dirk Jansen. Smoothed embedded finite-volume method (sEFVM) for modeling contact mechanics in deformable faulted and fractured porous media. *Journal of Computational Physics*, 459(??):??, June 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999122002054`.

Bal:2023:ATC

[BHW23] Guillaume Bal, Jeremy G. Hoskins, and Zhongjian Wang. Asymmetric transport computations in Dirac models of topological insulators. *Journal of Computational Physics*, 487(??):??, August 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999123002462`.

Ba:2021:TSV

[BJ21] Yuming Ba and Lijian Jiang. A two-stage variable-separation Kalman filter for data assimilation. *Journal of Computational Physics*, 434(??):Article 110244, June 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S002199912100139X`.

Blondeau:2024:RKS

[BJ24] Christophe Blondeau and Mehdi Jadoui. Recycling Krylov subspaces for efficient partitioned solution of aerostructural adjoint systems. *Journal of Computational Physics*, 512(??):??, September 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999124003917`.

Bernades:2023:KEP

[BJC23] Marc Bernades, Lluís Jofre, and Francesco Capuano. Kinetic-energy- and pressure-equilibrium-preserving schemes for real-gas turbulence in the transcritical regime. *Journal of Computational Physics*, 493(??):??, November 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (elec-

tronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123005727.

Bressan:2021:NSN

[BJL21] Alberto Bressan, Yi Jiang, and Hailiang Liu. Numerical study of non-uniqueness for 2D compressible isentropic Euler equations. *Journal of Computational Physics*, 445 (??):Article 110588, November 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121004836.

Bossy:2022:ITK

[BJR22] Mireille Bossy, Jean-François Jabir, and Kerlyns Martínez Rodríguez. Instantaneous turbulent kinetic energy modelling based on Lagrangian stochastic approach in CFD and application to wind energy. *Journal of Computational Physics*, 464(??):??, September 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912100824X. See corrigendum [BJR24].

Bossy:2024:CIT

[BJR24] Mireille Bossy, Jean-François Jabir, and Kerlyns Martínez Rodríguez. Corrigendum to "Instantaneous turbulent kinetic energy modelling based on Lagrangian stochastic approach in CFD and application to wind energy" journal of computational physics **464** (2022). *Journal of Computational Physics*, 511(??):??, August 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124003498. See [BJR22].

Butler:2020:OED

[BJW20] T. Butler, J. D. Jakeman, and T. Wildey. Optimal experimental design for prediction based on push-forward probability measures. *Journal of Computational Physics*, 416 (??):Article 109518, September 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120302928.

Babbar:2022:LWF

[BKC22] Arpit Babbar, Sudarshan Kumar Kenettinkara, and Praveen Chandrashekar. Lax–Wendroff flux reconstruction method for hyperbolic conservation laws. *Journal of Computational Physics*, 467(??):??, October 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122004855.

Bhoriya:2023:HOF

[BKC23] Deepak Bhoriya, Harish Kumar, and Praveen Chandrashekar. High-order finite-difference entropy stable schemes for two-fluid relativistic plasma flow equations. *Journal of Computational Physics*, 488(??):??, September 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123003029.

Bosma:2021:EMR

[BKMC21] Sebastian B. M. Bosma, Sergey Klevtsov, Olav Møyner, and Nicola Castelletto. Enhanced multiscale restriction-smoothed basis (MsRSB) preconditioning with applications to porous media flow and geomechanics. *Journal of Computational Physics*, 428(??):Article 109934, March 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120307087.

Boccelli:2024:NSR

[BKMM24] Stefano Boccelli, Willem Kaufmann, Thierry E. Magin, and James G. McDonald. Numerical simulation of rarefied supersonic flows using a fourth-order maximum-entropy moment method with interpolative closure. *Journal of Computational Physics*, 497(??):??, January 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912300726X.

Burkner:2023:FBS

[BKON23] Paul-Christian Bürkner, Ilja Kröker, Sergey Oladyshkin, and Wolfgang Nowak. A fully Bayesian sparse polynomial chaos expansion approach with joint priors on the coefficients and global selection of terms. *Journal of Computational Physics*, 488(??):??, September 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123003054.

Biswas:2021:ESD

[BKY21] Biswarup Biswas, Harish Kumar, and Anshu Yadav. Entropy stable discontinuous Galerkin methods for ten-moment Gaussian closure equations. *Journal of Computational Physics*, 431(??):Article 110148, April 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121000401.

Bai:2020:FMS

[BL20] Zhong-Zhi Bai and Kang-Ya Lu. Fast matrix splitting preconditioners for higher dimensional spatial fractional diffusion equations. *Journal of Computational Physics*, 404(??):Article 109117, March 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119308228.

Beyer:2021:NAF

[BL21a] Florian Beyer and Philippe G. LeFloch. A numerical algorithm for Fuchsian equations and fluid flows on cosmological spacetimes. *Journal of Computational Physics*, 431(??):Article 110145, April 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121000371.

Brady:2021:FHO

[BL21b] P. T. Brady and D. Livescu. Foundations for high-order, conservative cut-cell methods: Stable discretizations on degenerate meshes. *Journal of Computational Physics*, 426(??):Article 109794, February 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120305684.

Bai:2022:SCT

[BL22a] Xiao Bai and Maojun Li. Simulating compressible two-phase flows with sharp-interface discontinuous Galerkin methods based on ghost fluid method and cut cell scheme. *Journal of Computational Physics*, 459(??):??, June 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122001693.

Bourgeois:2022:GMP

[BL22b] Rémi Bourgeois and Dongwook Lee. GP-MOOD: a positivity-preserving high-order finite volume method for hyperbolic conservation laws. *Journal of Computational Physics*, 471(??):??, December 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122006659.

Boscheri:2024:GTC

[BLBM24] Walter Boscheri, Raphaël Loubère, Jean-Philippe Braeunig, and Pierre-Henri Maire. A geometrically and thermodynamically compatible finite volume scheme for continuum mechanics on unstructured polygonal meshes. *Journal of Computational Physics*, 507(??):??, June 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124002067.

Banjai:2020:NAS

[BLF20] L. Banjai and M. López-Fernández. Numerical approximation of the Schrödinger equation with concentrated potential. *Journal of Computational Physics*, 405(??):Article 109155, March 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119308605.

Bourne:2023:SCP

[BLK+23] Emily Bourne, Philippe Leleux, Katharina Kormann, Carola Kruse, Virginie Grandgirard, Yaman Güçlü, Martin J. Kühn, Ulrich Rüde, Eric Sonnendrücker, and Edoardo Zoni. Solver comparison for Poisson-like equations on tokamak geometries. *Journal of Computational Physics*, 488(??):??, September 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print),

1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123003443.

Balachandar:2019:SIV

[BLL19] S. Balachandar, Kai Liu, and Mandar Lakhote. Self-induced velocity correction for improved drag estimation in Euler–Lagrange point-particle simulations. *Journal of Computational Physics*, 376(??):160–185, January 1, 2019. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999118306351. See corrigendum [BLL20].

Balachandar:2020:CSI

[BLL20] S. Balachandar, Kai Liu, and Mandar Lakhote. Corrigendum to "Self-induced velocity correction for improved drag estimation in Euler–Lagrange point-particle simulations" [j. comput. phys. **376** (2019) 160–185]. *Journal of Computational Physics*, 401(??):Article 108813, January 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119304978. See [BLL19].

Biezemans:2023:NII

[BLLL23] Rutger A. Biezemans, Claude Le Bris, Frédéric Legoll, and Alexei Lozinski. Non-intrusive implementation of Multiscale Finite Element Methodsl: an illustrative example. *Journal of Computational Physics*, 477(??):??, March 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123000098.

Boscheri:2022:CCA

[BLM22] Walter Boscheri, Raphaël Loubère, and Pierre-Henri Maire. A 3D cell-centered ADER MOOD finite volume method for solving updated Lagrangian hyperelasticity on unstructured grids. *Journal of Computational Physics*, 449 (??):Article 110779, January 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121006744.

Bomarito:2022:OAC

[BLWL22] G. F. Bomarito, P. E. Leser, J. E. Warner, and W. P. Leser. On the optimization of approximate control variates with parametrically defined estimators. *Journal of Computational Physics*, 451(??):Article 110882, February 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121007774.

Borcea:2024:EIW

[BLZ24] Liliana Borcea, Yiyang Liu, and Jörn Zimmerling. Electromagnetic inverse wave scattering in anisotropic media via reduced order modeling. *Journal of Computational Physics*, 515(??):??, October 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124005205.

Bekar:2021:PEL

[BM21] Ali C. Bekar and Erdogan Madenci. Peridynamics enabled learning partial differential equations. *Journal of Computational Physics*, 434(??):Article 110193, June 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121000887.

Buvoli:2024:ERK

[BM24] Tommaso Buvoli and Michael Minion. Exponential Runge–Kutta parareal for non-diffusive equations. *Journal of Computational Physics*, 497(??):??, January 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123007180.

Berta:2024:OAF

[BMBM24] V. Berta, A. Mignone, M. Bugli, and G. Mattia. A 4^{th}-order accurate finite volume method for ideal classical and special relativistic MHD based on pointwise reconstructions. *Journal of Computational Physics*, 499(??):??, February 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123007969.

Bourne:2023:NUS

[BMG+23] Emily Bourne, Yann Munschy, Virginie Grandgirard, Michel Mehrenberger, and Philippe Ghendrih. Non-uniform splines for semi-Lagrangian kinetic simulations of the plasma sheath. *Journal of Computational Physics*, 488(??):??, September 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123003248.

Bertoluzza:2024:VEM

[BMPP24] S. Bertoluzza, M. Montardini, M. Pennacchio, and D. Prada. The virtual element method on polygonal pixel-based tessellations. *Journal of Computational Physics*, 518(??):??, December 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124005825.

Brenner:2020:VAG

[BMQ20] K. Brenner, R. Masson, and E. H. Quenjel. Vertex Approximate Gradient discretization preserving positivity for two-phase Darcy flows in heterogeneous porous media. *Journal of Computational Physics*, 409(??):Article 109357, May 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120301315.

Badia:2022:GDU

[BMV22] Santiago Badia, Pere A. Martorell, and Francesc Verdugo. Geometrical discretisations for unfitted finite elements on explicit boundary representations. *Journal of Computational Physics*, 460(??):??, July 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122002248.

Bonito:2020:DGA

[BNN20] Andrea Bonito, Ricardo H. Nochetto, and Dimitris Ntogkas. Discontinuous Galerkin approach to large bending deformation of a bilayer plate with isometry constraint. *Journal of Computational Physics*, 423(??):Article 109785, December 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120305593.

Bhole:2022:TPG

[BNP+22] Ashish Bhole, Boniface Nkonga, Stanislas Pamela, Guido Huijsmans, and Matthias Hoelzl. Treatment of polar grid singularities in the bi-cubic Hermite–Bézier approximations: Isoparametric finite element framework. *Journal of Computational Physics*, 471(??):??, December 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912200674X.

Bouziani:2023:UFD

[BNT23] Nacime Bouziani, Frédéric Nataf, and Pierre-Henri Tournier. A unified framework for double sweep methods for the Helmholtz equation. *Journal of Computational Physics*, 490 (??):??, October 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912300400X.

Buchan:2024:ROM

[BNY24] Andrew G. Buchan, Ionel M. Navon, and Liang Yang. A reduced order model discretisation of the space-angle phase-space dimensions of the Boltzmann transport equation with application to nuclear reactor problems. *Journal of Computational Physics*, 517(??):??, November 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124005163.

Bassett:2022:MDD

[BO22] Brody R. Bassett and J. Michael Owen. Meshless discretization of the discrete-ordinates transport equation with integration based on Voronoi cells. *Journal of Computational Physics*, 449(??):Article 110697, January 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121005921.

Bassett:2021:ESPb

[BOB21a] Brody R. Bassett, J. Michael Owen, and Thomas A. Brunner. Efficient smoothed particle radiation hydrodynamics I: Thermal radiative transfer. *Journal of Computational Physics*, 429(??):Article 109996, March 15, 2021. CODEN

JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120307701.

Bassett:2021:ESPa

[BOB21b] Brody R. Bassett, J. Michael Owen, and Thomas A. Brunner. Efficient smoothed particle radiation hydrodynamics II: Radiation hydrodynamics. *Journal of Computational Physics*, 429(??):Article 109994, March 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120307683.

Boscheri:2021:HOP

[BP21] Walter Boscheri and Lorenzo Pareschi. High order pressure-based semi-implicit IMEX schemes for the 3D Navier–Stokes equations at all Mach numbers. *Journal of Computational Physics*, 434(??):Article 110206, June 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121001017.

Bihlo:2022:PIN

[BP22] Alex Bihlo and Roman O. Popovych. Physics-informed neural networks for the shallow-water equations on the sphere. *Journal of Computational Physics*, 456(??):??, May 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122000869.

Bhola:2023:MFR

[BPBM23] Sahil Bhola, Suraj Pawar, Prasanna Balaprakash, and Romit Maulik. Multi-fidelity reinforcement learning framework for shape optimization. *Journal of Computational Physics*, 482(??):??, June 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123001134.

Bhosale:2021:RVM

[BPG21] Yashraj Bhosale, Tejaswin Parthasarathy, and Mattia Gazzola. A remeshed vortex method for mixed rigid/soft body fluid-structure interaction. *Journal of Computational*

Physics, 444(??):Article 110577, November 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121004721.

Bochkov:2023:NMS

[BPG23] Daniil Bochkov, Tresa Pollock, and Frederic Gibou. A numerical method for sharp-interface simulations of multicomponent alloy solidification. *Journal of Computational Physics*, 494(??):??, December 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123005892.

Brenner:2022:EAS

[BPJ22] Oliver Brenner, Pasha Piroozmand, and Patrick Jenny. Efficient assimilation of sparse data into RANS-based turbulent flow simulations using a discrete adjoint method. *Journal of Computational Physics*, 471(??):??, December 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122007306.

Barnafi:2023:CSS

[BPS23] Nicolás A. Barnafi, Luca F. Pavarino, and Simone Scacchi. A comparative study of scalable multilevel preconditioners for cardiac mechanics. *Journal of Computational Physics*, 492(??):??, November 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123005168.

Burger:2020:ICI

[BPT+20] Martin Burger, René Pinnau, Claudia Totzeck, Oliver Tse, and Andreas Roth. Instantaneous control of interacting particle systems in the mean-field limit. *Journal of Computational Physics*, 405(??):Article 109181, March 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119308861.

Bruna:2024:NGS

[BPVE24] Joan Bruna, Benjamin Peherstorfer, and Eric Vanden-Eijnden. Neural Galerkin schemes with active learning for high-dimensional evolution equations. *Journal of Computational Physics*, 496(??):??, January 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123006836.

Bailo:2022:PTP

[BR22a] Rafael Bailo and Thomas Rey. Projective and telescopic projective integration for non-linear kinetic mixtures. *Journal of Computational Physics*, 458(??):??, June 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122001449.

Burbulla:2022:FVM

[BR22b] Samuel Burbulla and Christian Rohde. A finite-volume moving-mesh method for two-phase flow in dynamically fracturing porous media. *Journal of Computational Physics*, 458(??):??, June 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122000936.

Bhattacharyya:2023:FEM

[BR23] Maitraya K. Bhattacharyya and David Radice. A finite element method for angular discretization of the radiation transport equation on spherical geodesic grids. *Journal of Computational Physics*, 491(??):??, October 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123004606.

Barwey:2024:JSM

[BR24] Shivam Barwey and Venkat Raman. Jacobian-scaled K-means clustering for physics-informed segmentation of reacting flows. *Journal of Computational Physics*, 514(??):??, October 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124004765.

Bradley:2024:SBH

[Bra24] Andrew M. Bradley. Stabilized bases for high-order, interpolation semi-Lagrangian, element-based tracer transport. *Journal of Computational Physics*, 508(??):??, July 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124002833.

Bremer:2020:QCA

[Bre20] James Bremer. A quasilinear complexity algorithm for the numerical simulation of scattering from a two-dimensional radially symmetric potential. *Journal of Computational Physics*, 410(??):Article 109401, June 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120301753.

Brinkerhoff:2022:VIG

[Bri22] Douglas J. Brinkerhoff. Variational inference at glacier scale. *Journal of Computational Physics*, 459(??):??, June 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122001577.

Brugnoli:2022:DFS

[BRS22] Andrea Brugnoli, Ramy Rashad, and Stefano Stramigioli. Dual field structure-preserving discretization of port-Hamiltonian systems using finite element exterior calculus. *Journal of Computational Physics*, 471(??):??, December 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122006635.

Barucq:2022:LOP

[BRT22] Hélène Barucq, Nathan Rouxelin, and Sébastien Tordeux. Low-order Prandtl–Glauert–Lorentz based Absorbing Boundary Conditions for solving the convected Helmholtz equation with Discontinuous Galerkin methods. *Journal of Computational Physics*, 468(??):??, November 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122005125.

Benedusi:2023:SMF

[BRZ+23] Pietro Benedusi, Simone Riva, Patrick Zulian, Jiří Štěpán, Luca Belluzzi, and Rolf Krause. Scalable matrix-free solver for 3D transfer of polarized radiation in stellar atmospheres. *Journal of Computational Physics*, 479(??):??, April 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123001080.

Bencomo:2020:PEM

[BS20] Mario J. Bencomo and William W. Symes. Preconditioner for estimation of multipole sources via full waveform inversion. *Journal of Computational Physics*, 419 (??):Article 109667, October 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120304411.

Blanchard:2021:BOO

[BS21] Antoine Blanchard and Themistoklis Sapsis. Bayesian optimization with output-weighted optimal sampling. *Journal of Computational Physics*, 425(??):Article 109901, January 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120306756.

Bakhvalov:2022:MAE

[BS22a] P. A. Bakhvalov and M. D. Surnachev. Method of averaged element splittings for diffusion terms discretization in vertex-centered framework. *Journal of Computational Physics*, 450(??):Article 110819, February 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121007142.

Basir:2022:PEC

[BS22b] Shamsulhaq Basir and Inanc Senocak. Physics and equality constrained artificial neural networks: Application to forward and inverse problems with multi-fidelity data fusion. *Journal of Computational Physics*, 463(??):??, August 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122003631.

Bezgin:2021:DDP

[BSA21] Deniz A. Bezgin, Steffen J. Schmidt, and Nikolaus A. Adams. A data-driven physics-informed finite-volume scheme for nonclassical undercompressive shocks. *Journal of Computational Physics*, 437(??):Article 110324, July 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121002199.

Bezgin:2022:WNM

[BSA22] Deniz A. Bezgin, Steffen J. Schmidt, and Nikolaus A. Adams. WENO3-NN: a maximum-order three-point data-driven weighted essentially non-oscillatory scheme. *Journal of Computational Physics*, 452(??):Article 110920, March 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121008159.

Benezech:2024:SMS

[BSB+24] Jean Bénézech, Linus Seelinger, Peter Bastian, Richard Butler, Timothy Dodwell, Chupeng Ma, and Robert Scheichl. Scalable multiscale-spectral GFEM with an application to composite aero-structures. *Journal of Computational Physics*, 508(??):??, July 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124002626.

BenHassanSaidi:2022:CDS

[BSCG22] Ismaïl Ben Hassan Saïdi, Martin Schmelzer, Paola Cinnella, and Francesco Grasso. CFD-driven symbolic identification of algebraic Reynolds-stress models. *Journal of Computational Physics*, 457(??):??, May 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122000997.

Bravo:2024:GPR

[BSH+24] J. R. Bravo, G. Stabile, M. Hess, J. A. Hernandez, R. Rossi, and G. Rozza. Geometrically parametrised reduced order models for studying the hysteresis of the Coanda effect in finite element-based incompressible fluid dynamics. *Journal of*

Computational Physics, 509(??):??, July 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124003073.

Bukreev:2023:CLB

[BSK+23] Fedor Bukreev, Stephan Simonis, Adrian Kummerländer, Julius Jeßberger, and Mathias J. Krause. Consistent lattice Boltzmann methods for the volume averaged Navier–Stokes equations. *Journal of Computational Physics*, 490(??):??, October 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123003960.

Bryngelson:2024:FMF

[BSLM24] Spencer H. Bryngelson, Florian Schäfer, Jessie Liu, and Ali Mani. Fast macroscopic forcing method. *Journal of Computational Physics*, 499(??):??, February 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123008161.

Bures:2021:PLI

[BSP21] Lubomír Bures, Yohei Sato, and Andreas Pautz. Piecewise linear interface-capturing volume-of-fluid method in axisymmetric cylindrical coordinates. *Journal of Computational Physics*, 436(??):Article 110291, July 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121001868.

Bauer:2020:TED

[BSR20] Martin Bauer, Goncalo Silva, and Ulrich Rüde. Truncation errors of the D3Q19 lattice model for the lattice Boltzmann method. *Journal of Computational Physics*, 405(??):Article 109111, March 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119308162.

Broms:2023:LCM

[BST23] Anna Broms, Mattias Sandberg, and Anna-Karin Tornberg. A locally corrected multiblob method with hydrodynamically matched grids for the Stokes mobility problem. *Journal of Computational Physics*, 487(??):??, August 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912300267X.

Boniou:2022:CAS

[BSV22] Victor Boniou, Thomas Schmitt, and Aymeric Vié. Consistency and accuracy in the simulation of two-phase flows with phase change using sharp interface capturing methods. *Journal of Computational Physics*, 470(??):??, December 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122006660.

Bernal:2024:RBF

[BSVL24] Francisco Bernal, Ali Safdari-Vaighani, and Elisabeth Larsson. A radial basis function partition of unity method for steady flow simulations. *Journal of Computational Physics*, 503(??):??, April 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124000913.

Barwey:2023:MGN

[BSVM23] Shivam Barwey, Varun Shankar, Venkatasubramanian Viswanathan, and Romit Maulik. Multiscale graph neural network autoencoders for interpretable scientific machine learning. *Journal of Computational Physics*, 495(??):??, December 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123006320.

Bogdanov:2022:LSB

[BSW+22] Vladimir Bogdanov, Felix S. Schranner, Josef M. Winter, Stefan Adami, and Nikolaus A. Adams. A level-set-based sharp-interface method for moving contact lines. *Journal of Computational Physics*, 467(??):??, October 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122005071.

Beddrich:2024:NST

[BSW24] Jonas Beddrich, Endre Süli, and Barbara Wohlmuth. Numerical simulation of the time-fractional Fokker–Planck equation and applications to polymeric fluids. *Journal of Computational Physics*, 497(??):??, January 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123006939.

Brachet:2023:CNS

[BSZ+23] Marc Brachet, Georges Sadaka, Zhentong Zhang, Victor Kalt, and Ionut Danaila. Coupling Navier–Stokes and Gross–Pitaevskii equations for the numerical simulation of two-fluid quantum flows. *Journal of Computational Physics*, 488(??):??, September 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123002887.

Bohmer:2020:EQM

[BT20] Niclas Böhmer and Manuel Torrilhon. Entropic quadrature for moment approximations of the Boltzmann-BGK equation. *Journal of Computational Physics*, 401(??): Article 108992, January 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119306977.

Bakarji:2021:DDD

[BT21] Joseph Bakarji and Daniel M. Tartakovsky. Data-driven discovery of coarse-grained equations. *Journal of Computational Physics*, 434(??):Article 110219, June 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121001145.

Boso:2022:IGP

[BT22] F. Boso and D. M. Tartakovsky. Information geometry of physics-informed statistical manifolds and its use in data assimilation. *Journal of Computational Physics*, 467(??):??, October 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL

http://www.sciencedirect.com/science/article/pii/S0021999122005009.

Bagge:2023:FES

[BT23] Joar Bagge and Anna-Karin Tornberg. Fast Ewald summation for Stokes flow with arbitrary periodicity. *Journal of Computational Physics*, 493(??):??, November 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123005685.

Broms:2024:BMC

[BT24] Anna Broms and Anna-Karin Tornberg. A barrier method for contact avoiding particles in Stokes flow. *Journal of Computational Physics*, 497(??):??, January 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912300743X.

Bi:2022:ACC

[BTCV22] Désir-André Koffi Bi, Mathilde Tavares, Eric Chénier, and Stéphane Vincent. Accuracy and convergence of the curvature and normal vector discretizations for 3D static and dynamic front-tracking interfaces. *Journal of Computational Physics*, 461(??):??, July 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122002595.

Boledi:2022:LSB

[BTEK22] Leonardo Boledi, Benjamin Terschanski, Stefanie Elgeti, and Julia Kowalski. A level-set based space-time finite element approach to the modelling of solidification and melting processes. *Journal of Computational Physics*, 457(??):??, May 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122001097.

Bloch:2022:TMM

[BTGA22] Hélène Bloch, Pascal Tremblin, Matthias González, and Edouard Audit. Towards a multigrid method for the M_1 model for radiative transfer. *Journal of Computational Physics*, 470(??):??, December 1, 2022. CODEN

JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122006362.

Bohle:2022:CIA

[BTK22] Tobias Böhle, Mechthild Thalhammer, and Christian Kuehn. Community integration algorithms (CIAs) for dynamical systems on networks. *Journal of Computational Physics*, 469(??):??, November 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122005861.

Bourgeois:2024:ROS

[BTKP24] Rémi Bourgeois, Pascal Tremblin, Samuel Kokh, and Thomas Padioleau. Recasting an operator splitting solver into a standard finite volume flux-based algorithm. The case of a Lagrange-projection-type method for gas dynamics. *Journal of Computational Physics*, 496(??):??, January 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123006897.

Brugger:2023:ECF

[BTL23] Matthias Brugger, Roland Traxl, and Roman Lackner. Energy-conserving formulation of the CSF model for the simulation of surface tension at fluid-fluid interfaces with smoothed particle hydrodynamics. *Journal of Computational Physics*, 476(??):??, March 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122009585.

Barral:2024:RBM

[BTT24] Nicolas Barral, Tommaso Taddei, and Ishak Tifouti. Registration-based model reduction of parameterized PDEs with spatio-parameter adaptivity. *Journal of Computational Physics*, 499(??):??, February 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123008227.

Bendahmane:2022:OEB

[BTZ22] Mostafa Bendahmane, Jacques Tagoudjeu, and Mohamed Zagour. Odd–even based asymptotic preserving scheme for a 2D stochastic kinetic-fluid model. *Journal of Computational Physics*, 471(??):??, December 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122007124.

Bempedelis:2020:SAS

[BV20] Nikolaos Bempedelis and Yiannis Ventikos. A simplified approach for simulations of multidimensional compressible multicomponent flows: the grid-aligned ghost fluid method. *Journal of Computational Physics*, 405(??):Article 109129, March 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119308344.

Bempedelis:2021:SGF

[BV21] Nikolaos Bempedelis and Yiannis Ventikos. A simple ghost fluid method for compressible multicomponent flows with capillary effects. *Journal of Computational Physics*, 424(??):Article 109861, January 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120306355.

Botti:2022:BDG

[BV22] Lorenzo Botti and Luca Verzeroli. BR2 discontinuous Galerkin methods for finite hyperelastic deformations. *Journal of Computational Physics*, 463(??):??, August 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122003655.

Behne:2022:MIP

[BVR22] Patrick Behne, Jan Vermaak, and Jean C. Ragusa. Minimally-invasive parametric model-order reduction for sweep-based radiation transport. *Journal of Computational Physics*, 469(??):??, November 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122005873.

Bergkamp:2022:DRF

[BVRS22] Elisa A. Bergkamp, Clemens V. Verhoosel, Joris J. C. Remmers, and David M. J. Smeulders. A dimensionally-reduced fracture flow model for poroelastic media with fluid entry resistance and fluid slip. *Journal of Computational Physics*, 455(??):??, April 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122000341.

Boelens:2020:TMB

[BVT20] Arnout M. P. Boelens, Daniele Venturi, and Daniel M. Tartakovsky. Tensor methods for the Boltzmann-BGK equation. *Journal of Computational Physics*, 421(??): Article 109744, November 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120305180.

Bonito:2020:ETL

[BW20] Andrea Bonito and Peng Wei. Electroconvection of thin liquid crystals: Model reduction and numerical simulations. *Journal of Computational Physics*, 405(??):Article 109140, March 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119308459.

Bendall:2023:IAD

[BW23] T. M. Bendall and G. A. Wimmer. Improving the accuracy of discretisations of the vector transport equation on the lowest-order quadrilateral Raviart–Thomas finite elements. *Journal of Computational Physics*, 474(??):??, February 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912200897X.

Blomquist:2024:SNP

[BWBT24] Matthew Blomquist, Scott R. West, Adam L. Binswanger, and Maxime Theillard. Stable nodal projection method on octree grids. *Journal of Computational Physics*, 499(??):??, February 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL

http://www.sciencedirect.com/science/article/pii/S0021999123007908.

Bohm:2020:ESN

[BWG+20] Marvin Bohm, Andrew R. Winters, Gregor J. Gassner, Dominik Derigs, Florian Hindenlang, and Joachim Saur. An entropy stable nodal discontinuous Galerkin method for the resistive MHD equations. Part I: Theory and numerical verification. *Journal of Computational Physics*, 422 (??):Article 108076, December 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999118304054.

Buli:2020:DGM

[BX20] Joshua Buli and Yulong Xing. A discontinuous Galerkin method for the aw-Rascle traffic flow model on networks. *Journal of Computational Physics*, 406(??):Article 109183, April 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119308885.

Bruno:2020:RIE

[BY20] Oscar P. Bruno and Tao Yin. Regularized integral equation methods for elastic scattering problems in three dimensions. *Journal of Computational Physics*, 410(??):Article 109350, June 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120301248.

Borleske:2020:EGR

[BZ20] George Borleske and Y. C. Zhou. Enriched gradient recovery for interface solutions of the Poisson–Boltzmann equation. *Journal of Computational Physics*, 421(??): Article 109725, November 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912030499X.

Barclay:2021:PBC

[BZ21] Paul L. Barclay and Duan Z. Zhang. Periodic boundary conditions for arbitrary deformations in molecular dynamics simulations. *Journal of Computational Physics*, 435(??):Article 110238, June 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121001339.

Bertin:2023:ADD

[BZ23] Nicolas Bertin and Fei Zhou. Accelerating discrete dislocation dynamics simulations with graph neural networks. *Journal of Computational Physics*, 487(??):??, August 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123002759.

Binkowski:2020:RPB

[BZB20] Felix Binkowski, Lin Zschiedrich, and Sven Burger. A Riesz-projection-based method for nonlinear eigenvalue problems. *Journal of Computational Physics*, 419(??): Article 109678, October 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120304526.

Bilotta:2022:NRP

[BZC+22] Giuseppe Bilotta, Vito Zago, Veronica Centorrino, Robert A. Dalrymple, Alexis Hérault, Ciro Del Negro, and Elie Saikali. A numerically robust, parallel-friendly variant of BiCGSTAB for the semi-implicit integration of the viscous term in Smoothed Particle Hydrodynamics. *Journal of Computational Physics*, 466(??):??, October 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122004752.

Bourantas:2024:MMF

[BZL+24] G. C. Bourantas, B. F. Zwick, D. S. Lampropoulos, V. C. Loukopoulos, K. Katsanos, A. A. Dimas, V. N. Burganos, A. Wittek, and K. Miller. A multiblock (MIB) finite element method for accurate and efficient blood flow simulation. *Journal of Computational Physics*, 518(??):??, December 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124005771.

Beck:2020:NNB

[BZSF20] Andrea D. Beck, Jonas Zeifang, Anna Schwarz, and David G. Flad. A neural network based shock detection and localization approach for discontinuous Galerkin methods. *Journal of Computational Physics*, 423(??):Article 109824, December 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999120305982`.

Bao:2024:SBF

[BZZ24] Feng Bao, Zezhong Zhang, and Guannan Zhang. A score-based filter for nonlinear data assimilation. *Journal of Computational Physics*, 514(??):??, October 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S002199912400456X`.

Colbrook:2022:CMT

[CA22a] Matthew J. Colbrook and Lorna J. Ayton. A contour method for time-fractional PDEs and an application to fractional viscoelastic beam equations. *Journal of Computational Physics*, 454(??):Article 110995, April 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999122000572`.

Costa:2022:NAT

[CA22b] Pedro M. P. Costa and Duarte M. S. Albuquerque. A novel approach for temporal simulations with very high-order finite volume schemes on polyhedral unstructured grids. *Journal of Computational Physics*, 453(??):Article 110960, March 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999122000225`.

Chaabi:2024:AMM

[CA24a] Omar Chaabi and Mohammed Al Kobaisi. Algorithmic monotone multiscale finite volume methods for porous media flow. *Journal of Computational Physics*, 499(??):??, February 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999123008355`.

Coale:2024:ROM

[CA24b] Joseph M. Coale and Dmitriy Y. Anistratov. A reduced-order model for nonlinear radiative transfer problems based on moment equations and POD–Petrov–Galerkin projection of the normalized Boltzmann transport equation. *Journal of Computational Physics*, 509(??):??, July 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124002936.

Cant:2022:UAM

[CAF+22] R. S. Cant, U. Ahmed, J. Fang, N. Chakarborty, G. Nivarti, C. Moulinec, and D. R. Emerson. An unstructured adaptive mesh refinement approach for computational fluid dynamics of reacting flows. *Journal of Computational Physics*, 468(??):??, November 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122005423.

Caudron:2020:OWC

[CAG20] B. Caudron, X. Antoine, and C. Geuzaine. Optimized weak coupling of boundary element and finite element methods for acoustic scattering. *Journal of Computational Physics*, 421(??):Article 109737, November 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120305118.

Cai:2021:MMN

[Cai21] Zhenning Cai. Moment method as a numerical solver: Challenge from shock structure problems. *Journal of Computational Physics*, 444(??):Article 110593, November 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121004885.

Cai:2022:PID

[Cai22] Difeng Cai. Physics-informed distribution transformers via molecular dynamics and deep neural networks. *Journal of Computational Physics*, 468(??):??, November 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (elec-

tronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122005733.

Caltagirone:2021:ADM

[Cal21] Jean-Paul Caltagirone. Application of discrete mechanics model to jump conditions in two-phase flows. *Journal of Computational Physics*, 432(??):Article 110151, May 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121000437.

Campbell:2021:AHO

[Cam21] Bryce K. Campbell. An arbitrarily high-order three-dimensional Cartesian-grid method for reconstructing interfaces from volume fraction fields. *Journal of Computational Physics*, 426(??):Article 109727, February 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120305015.

Capdeville:2023:GKP

[Cap23] G. Capdeville. Gas kinetic principles in Navier–Stokes finite-volume solvers. *Journal of Computational Physics*, 488(??):??, September 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123002577.

Chi:2020:DGC

[CAT20] Cheng Chi, Abouelmagd Abdelsamie, and Dominique Thévenin. A directional ghost-cell immersed boundary method for incompressible flows. *Journal of Computational Physics*, 404(??):Article 109122, March 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119308277.

Chan:2023:GPR

[CB23] Wai Hong Ronald Chan and Iain D. Boyd. Grid-point requirements for direct kinetic simulation of weakly collisional plasma plume expansion. *Journal of Computational Physics*, 475(??):??, February 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

URL http://www.sciencedirect.com/science/article/pii/S002199912200924X.

Carlino:2024:ALE

[CB24] Michele Giuliano Carlino and Walter Boscheri. Arbitrary-Lagrangian–Eulerian finite volume IMEX schemes for the incompressible Navier–Stokes equations on evolving Chimera meshes. *Journal of Computational Physics*, 501(??):??, March 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124000135.

Choi:2020:GBC

[CBA+20] Youngsoo Choi, Gabriele Boncoraglio, Spenser Anderson, David Amsallem, and Charbel Farhat. Gradient-based constrained optimization using a database of linear reduced-order models. *Journal of Computational Physics*, 423 (??):Article 109787, December 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120305611.

Choi:2021:STR

[CBA+21] Youngsoo Choi, Peter Brown, William Arrighi, Robert Anderson, and Kevin Huynh. Space-time reduced order model for large-scale linear dynamical systems with application to Boltzmann transport problems. *Journal of Computational Physics*, 424(??):Article 109845, January 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120306197.

Cohen:2024:PIG

[CBB24] Benjamin G. Cohen, Burcu Beykal, and George M. Bollas. Physics-informed genetic programming for discovery of partial differential equations from scarce and noisy data. *Journal of Computational Physics*, 514(??):??, October 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124005096.

Ching:2020:TWC

[CBBI20] Eric J. Ching, Steven R. Brill, Michael Barnhardt, and Matthias Ihme. A two-way coupled Euler–Lagrange method for simulating multiphase flows with discontinuous Galerkin schemes on arbitrary curved elements. *Journal of Computational Physics*, 405(??):Article 109096, March 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999119308010`.

Codina:2023:ESL

[CBC+23] Ramon Codina, Joan Baiges, Inocencio Castañar, Ignacio Martínez-Suárez, Laura Moreno, and Samuel Parada. An embedded strategy for large scale incompressible flow simulations in moving domains. *Journal of Computational Physics*, 488(??):??, September 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999123002760`.

Chung:2020:RSC

[CBCF20] Seung Whan Chung, Stephen D. Bond, Eric C. Cyr, and Jonathan B. Freund. Regular sensitivity computation avoiding chaotic effects in particle-in-cell plasma methods. *Journal of Computational Physics*, 400(??):Article 108969, January 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999119306746`.

Casquero:2021:DCI

[CBCT+21] Hugo Casquero, Carles Bona-Casas, Deepesh Toshniwal, Thomas J. R. Hughes, Hector Gomez, and Yongjie Jessica Zhang. The divergence-conforming immersed boundary method: Application to vesicle and capsule dynamics. *Journal of Computational Physics*, 425(??):Article 109872, January 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S002199912030646X`.

Chamarthi:2022:IHF

[CBF22] Amareshwara Sainadh Chamarthi, Sean Bokor, and Steven H. Frankel. On the importance of high-frequency damping in high-order conservative finite-difference schemes for viscous fluxes. *Journal of Computational Physics*, 460(??):??, July 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122002571.

Cai:2021:HOS

[CBQ21] Xiaofeng Cai, Sebastiano Boscarino, and Jing-Mei Qiu. High order semi-Lagrangian discontinuous Galerkin method coupled with Runge–Kutta exponential integrators for nonlinear Vlasov dynamics. *Journal of Computational Physics*, 427(??):Article 110036, February 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912030810X.

Cho:2021:CSLa

[CBRY21a] Seung Yeon Cho, Sebastiano Boscarino, Giovanni Russo, and Seok-Bae Yun. Conservative semi-Lagrangian schemes for kinetic equations. Part I: Reconstruction. *Journal of Computational Physics*, 432(??):Article 110159, May 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121000516.

Cho:2021:CSLb

[CBRY21b] Seung Yeon Cho, Sebastiano Boscarino, Giovanni Russo, and Seok-Bae Yun. Conservative semi-Lagrangian schemes for kinetic equations. Part II: Applications. *Journal of Computational Physics*, 436(??):Article 110281, July 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121001765.

Choi:2023:RSO

[CBY23] Byeongyeob Choi, Jehyun Baek, and Donghyun You. A realizable second-order advection method with variable flux limiters for moment transport equations. *Journal of Computational Physics*, 473(??):??, January 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122008300.

Chevallier:2020:WLA

[CC20] A. Chevallier and F. Cazals. Wang–Landau algorithm: an adapted random walk to boost convergence. *Journal of Computational Physics*, 410(??):Article 109366, June 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120301406.

Chen:2022:RPM

[CC22a] Xingding Chen and Xiao-Chuan Cai. A recycling preconditioning method with auxiliary tip subspace for elastic crack propagation simulation using XFEM. *Journal of Computational Physics*, 452(??):Article 110910, March 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121008056.

Chin:2022:ABT

[CC22b] Siu A. Chin and Durward Cator. The anatomy of Boris type solvers and the Lie operator formalism for deriving large time-step magnetic field integrators. *Journal of Computational Physics*, 466(??):??, October 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122004843.

Chen:2023:ICA

[CC23] G. Chen and L. Chacón. An implicit, conservative and asymptotic-preserving electrostatic particle-in-cell algorithm for arbitrarily magnetized plasmas in uniform magnetic fields. *Journal of Computational Physics*, 487(??):??, August 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123002553.

Caliari:2024:SOD

[CC24] Marco Caliari and Fabio Cassini. A second order directional split exponential integrator for systems of advection–diffusion–reaction equations. *Journal of Computational Physics*, 498(??):??, February 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123007350.

Christensen:2022:FAN

[CCAR22] Samuel Christensen, Raymond Chu, Christopher Anderson, and Marcus Roper. Fast asymptotic-numerical method for coarse mesh particle simulation in channels of arbitrary cross section. *Journal of Computational Physics*, 471(??):??, December 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999122006854`.

Colera:2022:NCH

[CCB22] Manuel Colera, Jaime Carpio, and Rodolfo Bermejo. A nearly-conservative, high-order, forward Lagrange–Galerkin method for the resolution of compressible flows on unstructured triangular meshes. *Journal of Computational Physics*, 467(??):??, October 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999122005332`.

Cheung:2023:LLR

[CCCH23] Siu Wun Cheung, Youngsoo Choi, Dylan Matthew Copeland, and Kevin Huynh. Local Lagrangian reduced-order modeling for the Rayleigh–Taylor instability by solution manifold decomposition. *Journal of Computational Physics*, 472(??):??, January 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999122007185`.

Colnago:2020:HOI

[CCdS20] Marilaine Colnago, Wallace Casaca, and Leandro Franco de Souza. A high-order immersed interface method free of derivative jump conditions for Poisson equations on irregular domains. *Journal of Computational Physics*, 423 (??):Article 109791, December 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999120305659`.

Chetverushkin:2021:CMM

[CCE+21] Boris Chetverushkin, Eric Chung, Yalchin Efendiev, Sai-Mang Pun, and Zecheng Zhang. Computational multiscale methods for quasi-gas dynamic equations. *Journal of*

Computational Physics, 440(??):Article 110352, September 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121002473.

Caliari:2022:MIS

[CCE+22] Marco Caliari, Fabio Cassini, Lukas Einkemmer, Alexander Ostermann, and Franco Zivcovich. A μ-mode integrator for solving evolution equations in Kronecker form. *Journal of Computational Physics*, 455(??):??, April 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122000511.

C:2020:CSR

[CCER20] Juan C. Araujo C., Carmen Campos, Christian Engström, and Jose E. Roman. Computation of scattering resonances in absorptive and dispersive media with applications to metal-dielectric nano-structures. *Journal of Computational Physics*, 407(??):Article 109220, April 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119309258.

Chen:2023:MRM

[CCGC23] Peter Yichen Chen, Maurizio M. Chiaramonte, Eitan Grinspun, and Kevin Carlberg. Model reduction for the material point method via an implicit neural representation of the deformation map. *Journal of Computational Physics*, 478(??):??, April 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123000037.

Crockatt:2020:ICH

[CCH20] Michael M. Crockatt, Andrew J. Christlieb, and Cory D. Hauck. Improvements to a class of hybrid methods for radiation transport: Nyström reconstruction and defect correction methods. *Journal of Computational Physics*, 422(??):Article 109765, December 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120305398.

Chertock:2023:LCD

[CCH+23] Alina Chertock, Shaoshuai Chu, Michael Herty, Alexander Kurganov, and Mária Lukácová-Medvid'ová. Local characteristic decomposition based central-upwind scheme. *Journal of Computational Physics*, 473(??):??, January 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122007811.

Chen:2020:GMA

[CCHS20a] Jie Chen, Eric T. Chung, Zhengkang He, and Shuyu Sun. Generalized multiscale approximation of mixed finite elements with velocity elimination for subsurface flow. *Journal of Computational Physics*, 404(??):Article 109133, March 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119308381.

Cohen:2020:EIS

[CCHS20b] David Cohen, Jianbo Cui, Jialin Hong, and Liying Sun. Exponential integrators for stochastic Maxwell's equations driven by Itô noise. *Journal of Computational Physics*, 410(??):Article 109382, June 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912030156X.

Cai:2024:FTI

[CCJW24] Li Cai, Jin Cao, Feifei Jing, and Yongheng Wang. A fast time integral finite difference method for a space-time fractional FitzHugh–Nagumo monodomain model in irregular domains. *Journal of Computational Physics*, 501(??):??, March 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123008409.

Cai:2021:LSR

[CCL21] Zhiqiang Cai, Jingshuang Chen, and Min Liu. Least-squares ReLU neural network (LSNN) method for linear advection-reaction equation. *Journal of Computational Physics*, 443(??):Article 110514, October 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

URL http://www.sciencedirect.com/science/article/pii/S0021999121004095.

Cai:2022:SAD

[CCL22] Zhiqiang Cai, Jingshuang Chen, and Min Liu. Self-adaptive deep neural network: Numerical approximation to functions and PDEs. *Journal of Computational Physics*, 455(??):??, April 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122000833.

Cai:2020:DLS

[CCLL20] Zhiqiang Cai, Jingshuang Chen, Min Liu, and Xinyu Liu. Deep least-squares methods: an unsupervised learning-based numerical method for solving elliptic PDEs. *Journal of Computational Physics*, 420(??):Article 109707, November 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120304812.

Crestetto:2022:CHO

[CCLM22] Anaïs Crestetto, Nicolas Crouseilles, Yingzhe Li, and Josselin Massot. Comparison of high-order Eulerian methods for electron hybrid model. *Journal of Computational Physics*, 451(??):Article 110857, February 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912100752X.

Chaillat:2022:EET

[CCM+22] Stéphanie Chaillat, Benjamin Cotté, Jean-François Mercier, Gilles Serre, and Nicolas Trafny. Efficient evaluation of three-dimensional Helmholtz Green's functions tailored to arbitrary rigid geometries for flow noise simulations. *Journal of Computational Physics*, 452(??):Article 110915, March 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912100810X.

Cortesi:2020:FBU

[CCMC20] Andrea F. Cortesi, Paul G. Constantine, Thierry E. Magin, and Pietro M. Congedo. Forward and backward uncertainty quantification with active subspaces: Application to hypersonic flows around a cylinder. *Journal of Computational Physics*, 407(??):Article 109079, April 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119307843.

Chen:2021:UML

[CCN21] G. Chen, L. Chacón, and T. B. Nguyen. An unsupervised machine-learning checkpoint-restart algorithm using Gaussian mixtures for particle-in-cell simulations. *Journal of Computational Physics*, 436(??):Article 110185, July 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121000802.

Colombo:2023:ECI

[CCN23] A. Colombo, A. Crivellini, and A. Nigro. Entropy conserving implicit time integration in a discontinuous Galerkin solver in entropy variables. *Journal of Computational Physics*, 472(??):??, January 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912200746X.

Canon:2021:NSV

[CCPS21] Éric Canon, Frédéric Chardard, Grigory Panasenko, and Olga Stikoniene. Numerical solution of the viscous flows in a network of thin tubes: Equations on the graph. *Journal of Computational Physics*, 435(??):Article 110262, June 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121001571.

Canon:2023:ADW

[CCPS23] Éric Canon, Frédéric Chardard, Grigory Panasenko, and Olga Stikoniene. Asymptotics and discretization of a weakly singular kernel: Application to viscous flows in a network of thin tubes. *Journal of Computational Physics*, 491(??):??, October 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123004229.

Chen:2024:GFO

[CCS24] Ying Chen, Zhenhua Chai, and Baochang Shi. A general fourth-order mesoscopic multiple-relaxation-time lattice Boltzmann model and its macroscopic finite-difference scheme for two-dimensional diffusion equations. *Journal of Computational Physics*, 509(??):??, July 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124002948.

Cremon:2020:MSP

[CCW20] Matthias A. Cremon, Nicola Castelletto, and Joshua A. White. Multi-stage preconditioners for thermal-compositional-reactive flow in porous media. *Journal of Computational Physics*, 418(??):Article 109607, October 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120303818.

Cai:2022:SON

[CCWX22a] Yongyong Cai, Jingrun Chen, Cheng Wang, and Changjian Xie. A second-order numerical method for Landau–Lifshitz–Gilbert equation with large damping parameters. *Journal of Computational Physics*, 451(??):Article 110831, February 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121007269.

Chen:2022:DNN

[CCWX22b] Zhen Chen, Victor Churchill, Kailiang Wu, and Dongbin Xiu. Deep neural network modeling of unknown partial differential equations in nodal space. *Journal of Computational Physics*, 449(??):Article 110782, January 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912100677X.

Churchill:2023:DMP

[CCXX23] Victor Churchill, Yuan Chen, Zhongshu Xu, and Dongbin Xiu. DNN modeling of partial differential equations with incomplete data. *Journal of Computational Physics*, 493(??):??, November 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

URL http://www.sciencedirect.com/science/article/pii/S0021999123005971.

Chen:2020:SIE

[CCY+20] G. Chen, L. Chacón, L. Yin, B. J. Albright, D. J. Stark, and R. F. Bird. A semi-implicit, energy- and charge-conserving particle-in-cell algorithm for the relativistic Vlasov–Maxwell equations. *Journal of Computational Physics*, 407(??):Article 109228, April 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120300024.

Chiodi:2022:GRE

[CD22] Robert Chiodi and Olivier Desjardins. General, robust, and efficient polyhedron intersection in the Interface Reconstruction Library. *Journal of Computational Physics*, 449(??):Article 110787, January 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121006823.

Chen:2023:NWS

[CD23] Yaming Chen and Xiaogang Deng. Nonlinear weights for shock capturing schemes with unconditionally optimal high order. *Journal of Computational Physics*, 478(??):??, April 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123000736.

Chacon:2024:APS

[CD24] L. Chacón and G. Di Giannatale. An asymptotic-preserving semi-Lagrangian algorithm for the anisotropic heat transport equation with arbitrary magnetic fields. *Journal of Computational Physics*, 516(??):??, November 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124006168.

Cai:2021:CTW

[CDBS21] Shang-Gui Cai, Johan Degrigny, Jean-François Boussuge, and Pierre Sagaut. Coupling of turbulence wall models and immersed boundaries on Cartesian grids. *Journal of Computational Physics*, 429(??):Article 109995, March 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120307695.

Chen:2024:IMM

[CDG+24a] Rongliang Chen, Youjun Deng, Yang Gao, Jingzhi Li, and Hongyu Liu. Imaging multiple magnetized anomalies by geomagnetic monitoring. *Journal of Computational Physics*, 498(??):??, February 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123007568.

Cherchi:2024:MGM

[CDG+24b] Gian-Michele Cherchi, Alain Dequidt, Arnaud Guillin, Nicolas Martzel, Patrice Hauret, and Vincent Barra. ML-GLE: a machine learning enhanced Generalized Langevin equation framework for transient anomalous diffusion in polymer dynamics. *Journal of Computational Physics*, 514(??):??, October 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124004595.

Chan:2021:ITB

[CDJM21] Wai Hong Ronald Chan, Michael S. Dodd, Perry L. Johnson, and Parviz Moin. Identifying and tracking bubbles and drops in simulations: a toolbox for obtaining sizes, lineages, and breakup and coalescence statistics. *Journal of Computational Physics*, 432(??):Article 110156, May 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121000486.

Camier:2023:AHO

[CDK+23] Jean-Sylvain Camier, Veselin Dobrev, Patrick Knupp, Tzanio Kolev, Ketan Mittal, Robert Rieben, and Vladimir Tomov. Accelerating high-order mesh optimization using finite element partial assembly on GPUs. *Journal of Computational Physics*, 474(??):??, February 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

URL http://www.sciencedirect.com/science/article/pii/S0021999122008713.

Chehade:2021:EPW

[CDL21] Samar Chehade, Michel Darmon, and Gilles Lebeau. 3D elastic plane-wave diffraction by a stress-free wedge for incident skew angles below the critical angle in diffraction. *Journal of Computational Physics*, 427(??):Article 110062, February 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120308366.

Cheng:2022:MSC

[CDL+22] Qing Cheng, Pourya Delafrouz, Jie Liang, Chun Liu, and Jie Shen. Modeling and simulation of cell nuclear architecture reorganization process. *Journal of Computational Physics*, 449(??):Article 110808, January 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121007038.

Chen:2023:SOF

[CDLX23] Haifan Chen, Guozhi Dong, Wei Liu, and Ziqing Xie. Second-order flows for computing the ground states of rotating Bose–Einstein condensates. *Journal of Computational Physics*, 475(??):??, February 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122009354.

Coutinho:2023:PIN

[CDM+23] Emilio Jose Rocha Coutinho, Marcelo Dall'Aqua, Levi McClenny, Ming Zhong, Ulisses Braga-Neto, and Eduardo Gildin. Physics-informed neural networks with adaptive localized artificial viscosity. *Journal of Computational Physics*, 489(??):??, September 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123003601.

Cicchino:2022:PSF

[CDN+22] Alexander Cicchino, David C. Del Rey Fernández, Siva Nadarajah, Jesse Chan, and Mark H. Carpenter. Provably stable flux reconstruction high-order methods on curvilinear elements. *Journal of Computational Physics*, 463(??):??, August 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999122003217`.

Croci:2022:MPE

[CdS22] Matteo Croci and Giacomo Rosilho de Souza. Mixed-precision explicit stabilized Runge–Kutta methods for single- and multi-scale differential equations. *Journal of Computational Physics*, 464(??):??, September 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999122004119`.

Chacon:2022:APR

[CDT22a] L. Chacón, D. Daniel, and W. T. Taitano. An asymptotic-preserving 2D-2P relativistic drift-kinetic-equation solver for runaway electron simulations in axisymmetric tokamaks. *Journal of Computational Physics*, 449(??):Article 110772, January 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999121006677`.

Chalons:2022:NAU

[CDT22b] Christophe Chalons, Alessia Del Grosso, and Eleuterio F. Toro. Numerical approximation and uncertainty quantification for arterial blood flow models with viscoelasticity. *Journal of Computational Physics*, 457(??):??, May 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999122001334`.

Chen:2024:MFP

[CDV24] Jinqiang Chen, Vandana Dwarka, and Cornelis Vuik. A matrix-free parallel two-level deflation preconditioner for two-dimensional heterogeneous Helmholtz problems. *Journal of Computational Physics*, 514(??):??, October 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999124005126`.

Cui:2023:CCD

[CDW23] Shumo Cui, Shengrong Ding, and Kailiang Wu. Is the classic convex decomposition optimal for bound-preserving schemes in multiple dimensions? *Journal of Computational Physics*, 476(??):??, March 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122009457.

Chen:2024:PCB

[CDWW24] Huangxin Chen, Piaopiao Dong, Dong Wang, and Xiao-Ping Wang. A prediction-correction based iterative convolution-thresholding method for topology optimization of heat transfer problems. *Journal of Computational Physics*, 511(??):??, August 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124003681.

Cheng:2021:LDB

[CDX+21] Lidong Cheng, Xi Deng, Bin Xie, Yi Jiang, and Feng Xiao. Low-dissipation BVD schemes for single and multi-phase compressible flows on unstructured grids. *Journal of Computational Physics*, 428(??):Article 110088, March 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120308627.

Chen:2022:MMM

[CDX22] Yuyan Chen, Bin Dong, and Jinchao Xu. Meta-MgNet: Meta multigrid networks for solving parameterized partial differential equations. *Journal of Computational Physics*, 455(??):??, April 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122000584.

Cui:2023:SCD

[CDZ23] Tiangang Cui, Sergey Dolgov, and Olivier Zahm. Scalable conditional deep inverse Rosenblatt transports using tensor trains and gradient-based dimension reduction. *Journal of Computational Physics*, 485(??):??, July 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123001985.

C:2021:SSE

[CE21] Juan C. Araújo C. and Christian Engström. On spurious solutions encountered in Helmholtz scattering resonance computations in Rd with applications to nanophotonics and acoustics. *Journal of Computational Physics*, 429(??):Article 110024, March 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120307981.

Chowdhury:2022:ECF

[CEBG22] Rochishnu Chowdhury, Raphael Egan, Daniil Bochkov, and Frederic Gibou. Efficient calculation of fully resolved electrostatics around large biomolecules. *Journal of Computational Physics*, 448(??):Article 110718, January 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121006136.

Chung:2024:MHG

[CEGL24] E. Chung, Y. Efendiev, J. Galvis, and W. T. Leung. Multicontinuum homogenization. general theory and applications. *Journal of Computational Physics*, 510(??):??, August 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124002298.

Cances:2020:ECP

[CEL+20] Eric Cancès, Virginie Ehrlacher, Frédéric Legoll, Benjamin Stamm, and Shuyang Xiang. An embedded corrector problem for homogenization. Part II: Algorithms and discretization. *Journal of Computational Physics*, 407(??):Article 109254, April 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120300280.

Chung:2021:CIP

[CELV21] Eric T. Chung, Yalchin Efendiev, Wing Tat Leung, and Petr N. Vabishchevich. Contrast-independent partially explicit time discretizations for multiscale flow problems. *Journal of Computational Physics*, 445(??):

Article 110578, November 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121004733.

Chung:2022:CIP

[CELV22] Eric T. Chung, Yalchin Efendiev, Wing Tat Leung, and Petr N. Vabishchevich. Contrast-independent partially explicit time discretizations for multiscale wave problems. *Journal of Computational Physics*, 466(??):??, October 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122002881.

Crouseilles:2020:EMS

[CEM20] Nicolas Crouseilles, Lukas Einkemmer, and Josselin Massot. Exponential methods for solving hyperbolic problems with application to collisionless kinetic equations. *Journal of Computational Physics*, 420(??):Article 109688, November 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120304629.

Caliari:2021:ATP

[CEMO21] Marco Caliari, Lukas Einkemmer, Alexander Moriggl, and Alexander Ostermann. An accurate and time-parallel rational exponential integrator for hyperbolic and oscillatory PDEs. *Journal of Computational Physics*, 437(??):Article 110289, July 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121001844.

C:2023:SOS

[CEW23] Juan C. Araújo C., Christian Engström, and Eddie Wadbro. Shape optimization for the strong routing of light in periodic diffraction gratings. *Journal of Computational Physics*, 472(??):??, January 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122007471.

Croci:2020:CBS

[CF20] Matteo Croci and Patrick E. Farrell. Complexity bounds on supermesh construction for quasi-uniform meshes. *Journal of Computational Physics*, 414(??):Article 109459, August 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120302333.

Chamarthi:2021:HOC

[CF21] Amareshwara Sainadh Chamarthi and Steven H. Frankel. High-order central-upwind shock capturing scheme using a Boundary Variation Diminishing (BVD) algorithm. *Journal of Computational Physics*, 427(??):Article 110067, February 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912030841X.

Chung:2022:OMC

[CF22] Seung Whan Chung and Jonathan B. Freund. An optimization method for chaotic turbulent flow. *Journal of Computational Physics*, 457(??):??, May 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122001395.

Chandravamsi:2024:HRO

[CF24a] Hemanth Chandravamsi and Steven H. Frankel. High resolution optimized high-order schemes for discretization of non-linear straight and mixed second derivative terms. *Journal of Computational Physics*, 513(??):??, September 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124004194.

Chen:2024:EDD

[CF24b] Kuangxu Chen and Lin Fu. Efficient dimension-by-dimension adaptive TENO-based limiter and troubled-cell indicator for nodal-based high-order spectral difference method. *Journal of Computational Physics*, 513(??):??, September 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124004054.

Chung:2023:DDS

[CFGJ23] K. Chung, F. Fei, M. H. Gorji, and P. Jenny. Data-driven stochastic particle scheme for collisional plasma simulations. *Journal of Computational Physics*, 492(??):??, November 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123004953.

Cheylan:2023:AIB

[CFJF23] Isabelle Cheylan, Tom Fringand, Jérôme Jacob, and Julien Favier. Analysis of the immersed boundary method for turbulent fluid-structure interaction with lattice Boltzmann method. *Journal of Computational Physics*, 492(??):??, November 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123005132.

Chen:2022:ESA

[CFM22] Nan Chen, Shubin Fu, and Georgy E. Manucharyan. An efficient and statistically accurate Lagrangian data assimilation algorithm with applications to discrete element sea ice models. *Journal of Computational Physics*, 455(??):??, April 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122000626.

Cao:2022:MLR

[CFS+22] Xiulei Cao, Kirk Fraser, Zilong Song, Chris Drummond, and Huaxiong Huang. Machine learning and reduced order computation of a friction stir welding model. *Journal of Computational Physics*, 454(??):Article 110863, April 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121007580.

Chiapolino:2023:FCC

[CFS23] Alexandre Chiapolino, François Fraysse, and Richard Saurel. Fast 3D computations of compressible flow discharge in buildings and complex networks. *Journal of Computational Physics*, 474(??):??, February 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122008701.

Carciopolo:2020:CMM

[CFSH20] Ludovica Delpopolo Carciopolo, Luca Formaggia, Anna Scotti, and Hadi Hajibeygi. Conservative multirate multiscale simulation of multiphase flow in heterogeneous porous media. *Journal of Computational Physics*, 404 (??):Article 109134, March 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119308393.

Chen:2023:PIN

[CG23] Hao Chen and Zhihao Ge. Physical information neural networks for 2D and 3D nonlinear Biot model and simulation on the pressure of brain. *Journal of Computational Physics*, 490(??):??, October 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123004047.

Calvo:2024:RDD

[CG24] Juan G. Calvo and Juan Galvis. Robust domain decomposition methods for high-contrast multiscale problems on irregular domains with virtual element discretizations. *Journal of Computational Physics*, 505(??):??, May 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912400158X.

Che:2021:GPC

[CGC21] Yiming Che, Ziqi Guo, and Changqing Cheng. Generalized polynomial chaos-informed efficient stochastic kriging. *Journal of Computational Physics*, 445(??): Article 110598, November 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121004939.

Cleary:2021:CES

[CGIL+21] Emmet Cleary, Alfredo Garbuno-Inigo, Shiwei Lan, Tapio Schneider, and Andrew M. Stuart. Calibrate, emulate, sample. *Journal of Computational Physics*, 424 (??):Article 109716, January 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL

http://www.sciencedirect.com/science/article/pii/S0021999120304903.

Chen:2021:EDF

[CGJM21] Yanlai Chen, Sigal Gottlieb, Lijie Ji, and Yvon Maday. An EIM-degradation free reduced basis method via over collocation and residual hyper reduction-based error estimation. *Journal of Computational Physics*, 444 (??):Article 110545, November 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912100440X.

Canic:2023:GOV

[CGL+23] Suncica Canić, Luka Grubisić, Matko Ljulj, Marcel Maretić, and Josip Tambaca. Geometric optimization of vascular stents modeled as networks of 1D rods. *Journal of Computational Physics*, 494(??):??, December 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123005922.

Chang:2023:RSL

[CGLZ23] Yan Chang, Yukun Guo, Hongyu Liu, and Deyue Zhang. Recovering source location, polarization, and shape of obstacle from elastic scattering data. *Journal of Computational Physics*, 489(??):??, September 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123003844.

Clayton:2023:RSO

[CGM+23] Bennett Clayton, Jean-Luc Guermond, Matthias Maier, Bojan Popov, and Eric J. Tovar. Robust second-order approximation of the compressible Euler equations with an arbitrary equation of state. *Journal of Computational Physics*, 478(??):??, April 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123000219.

Chen:2023:LCS

[CGZ23] Yongsheng Chen, Wei Guo, and Xinghui Zhong. A learned conservative semi-Lagrangian finite volume scheme for transport simulations. *Journal of Computational Physics*, 490(??):??, October 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123004242.

Coughlin:2022:EDL

[CH22] Jack Coughlin and Jingwei Hu. Efficient dynamical low-rank approximation for the Vlasov–Ampère–Fokker–Planck system. *Journal of Computational Physics*, 470(??):??, December 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122006520.

Crouseilles:2024:EDM

[CH24] Nicolas Crouseilles and Xue Hong. Exponential DG methods for Vlasov equations. *Journal of Computational Physics*, 498(??):??, February 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123007775.

Chan:2020:ESR

[Cha20] Jesse Chan. Entropy stable reduced order modeling of nonlinear conservation laws. *Journal of Computational Physics*, 423(??):Article 109789, December 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120305635.

Chakraborty:2021:TLB

[Cha21] Souvik Chakraborty. Transfer learning based multi-fidelity physics informed deep neural network. *Journal of Computational Physics*, 426(??):Article 109942, February 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120307166.

Chamarthi:2023:EHO

[Cha23] Amareshwara Sainadh Chamarthi. Efficient high-order gradient-based reconstruction for compressible flows. *Journal of Computational Physics*, 486(??):??, August 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123002140.

Chappell:2024:TDD

[Cha24] David J. Chappell. Time-dependent dynamical energy analysis via convolution quadrature. *Journal of Computational Physics*, 515(??):??, October 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124005229.

Chang:2023:MCF

[CHCC23] Yu-Jen Chang, Hsuan-Yu Huang, Ruey-Lin Chern, and Yi-Ju Chou. A multiscale computational framework using active learning to model complex suspension flows. *Journal of Computational Physics*, 493(??):??, November 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123005764.

Carli:2023:ADA

[CHDB23] Stefano Carli, Laurent Hascoët, Wouter Dekeyser, and Maarten Blommaert. Algorithmic differentiation for adjoint sensitivity calculation in plasma edge codes. *Journal of Computational Physics*, 491(??):??, October 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123004989.

Chen:2020:LNT

[Che20] Nan Chen. Learning nonlinear turbulent dynamics from partial observations via analytically solvable conditional statistics. *Journal of Computational Physics*, 418(??): Article 109635, October 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120304095.

Chen:2023:HSI

[Che23a] Duan Chen. A hybrid stochastic interpolation and compression method for kernel matrices. *Journal of Computational Physics*, 494(??):??, December 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999123005867`.

Chen:2023:DGM

[Che23b] Shuangshuang Chen. Discontinuous Galerkin method for hybrid-dimensional fracture models of two-phase flow. *Journal of Computational Physics*, 488(??):??, September 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S002199912300339X`.

Chen:2021:IGF

[CHF21] Shang-Ying Chen, Kuo-Chin Hsu, and Chia-Ming Fan. Improvement of generalized finite difference method for stochastic subsurface flow modeling. *Journal of Computational Physics*, 429(??):Article 110002, March 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999120307762`.

Carson:2020:AMA

[CHG+20] Hugh A. Carson, Arthur C. Huang, Marshall C. Galbraith, Steven R. Allmaras, and David L. Darmofal. Anisotropic mesh adaptation for continuous finite element discretization through mesh optimization via error sampling and synthesis. *Journal of Computational Physics*, 420(??):Article 109620, November 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999120303946`.

Chen:2021:ODA

[CHG21] Peng Chen, Michael R. Haberman, and Omar Ghattas. Optimal design of acoustic metamaterial cloaks under uncertainty. *Journal of Computational Physics*, 431(??):Article 110114, April 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

URL http://www.sciencedirect.com/science/article/pii/S0021999121000061.

Chiu:2023:CCD

[Chi23] Pao-Hsiung Chiu. cDFIB: a convolutional direct forcing immersed boundary method for solving incompressible flows with time-varying geometries. *Journal of Computational Physics*, 487(??):??, August 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123002735.

Chen:2023:CFT

[CHKL23] Yian Chen, Jeremy Hoskins, Yuehaw Khoo, and Michael Lindsey. Committor functions via tensor networks. *Journal of Computational Physics*, 472(??):??, January 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122007094.

Chandra:2024:MMP

[CHKS24] Bodhinanda Chandra, Ryota Hashimoto, Ken Kamrin, and Kenichi Soga. Mixed material point method formulation, stabilization, and validation for a unified analysis of free-surface and seepage flow. *Journal of Computational Physics*, 519(??):??, December 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124007058.

Corot:2020:STC

[CHL20] T. Corot, P. Hoch, and E. Labourasse. Surface tension for compressible fluids in ALE framework. *Journal of Computational Physics*, 407(??):Article 109247, April 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120300218.

Ciaramella:2024:CAO

[CHM24] Gabriele Ciaramella, Laurence Halpern, and Luca Mechelli. Convergence analysis and optimization of a Robin Schwarz waveform relaxation method for time-periodic parabolic optimal control problems. *Journal of Computational*

Physics, 496(??):??, January 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123006678.

Caboussat:2024:CCM

[CHMP24] Alexandre Caboussat, Julien Hess, Alexandre Masserey, and Marco Picasso. A cut-cell method for the numerical simulation of 3D multiphase flows with strong interfacial effects. *Journal of Computational Physics*, 504(??):??, May 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124000950.

Cakoni:2024:FIL

[CHN24] Fioralba Cakoni, Houssem Haddar, and Thi-Phong Nguyen. Fast imaging of local perturbations in a unknown biperiodic layered medium. *Journal of Computational Physics*, 501(??):??, March 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124000226.

Chen:2021:SLN

[CHOS21] Yifan Chen, Bamdad Hosseini, Houman Owhadi, and Andrew M. Stuart. Solving and learning nonlinear PDEs with Gaussian processes. *Journal of Computational Physics*, 447(??):Article 110668, December 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121005635.

Cagas:2020:PMB

[CHS20] Petr Cagas, Ammar Hakim, and Bhuvana Srinivasan. Plasma-material boundary conditions for discontinuous Galerkin continuum-kinetic simulations, with a focus on secondary electron emission. *Journal of Computational Physics*, 406(??):Article 109215, April 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119309209.

Coughlin:2024:RCD

[CHS24] Jack Coughlin, Jingwei Hu, and Uri Shumlak. Robust and conservative dynamical low-rank methods for the Vlasov equation via a novel macro-micro decomposition. *Journal of Computational Physics*, 509(??):??, July 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999124003048`.

Chen:2020:EQI

[CHSS20] Chuchu Chen, Jialin Hong, Chol Sim, and Kwang Sonwu. Energy and quadratic invariants preserving (EQUIP) multi-symplectic methods for Hamiltonian wave equations. *Journal of Computational Physics*, 418(??):Article 109599, October 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999120303739`.

Chekroun:2020:ENS

[CHT20] Mickaël D. Chekroun, Youngjoon Hong, and Roger M. Temam. Enriched numerical scheme for singularly perturbed barotropic quasi-geostrophic equations. *Journal of Computational Physics*, 416(??):Article 109493, September 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999120302679`.

Chen:2021:TGH

[CHZ+21] Yuntian Chen, Dou Huang, Dongxiao Zhang, Junsheng Zeng, Nanzhe Wang, Haoran Zhang, and Jinyue Yan. Theory-guided hard constraint projection (HCP): a knowledge-based data-driven scientific machine learning method. *Journal of Computational Physics*, 445(??):Article 110624, November 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999121005192`.

Chow:2022:DSM

[CHZ22] Yat Tin Chow, Fuqun Han, and Jun Zou. A direct sampling method for simultaneously recovering electromagnetic inhomogeneous inclusions of different nature. *Journal of Computational Physics*, 470(??):??, December 1, 2022. CODEN

JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122006465.

Ching:2021:DPC

[CI21a] Eric J. Ching and Matthias Ihme. Development of a particle collision algorithm for discontinuous Galerkin simulations of compressible multiphase flows. *Journal of Computational Physics*, 436(??):Article 110319, July 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912100214X.

Ching:2021:EPK

[CI21b] Eric J. Ching and Matthias Ihme. Efficient projection kernels for discontinuous Galerkin simulations of disperse multiphase flows on arbitrary curved elements. *Journal of Computational Physics*, 435(??):Article 110266, June 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121001613.

Ciesla:2020:EMA

[Cie20] Michał Cieśla. Effective modelling of adsorption monolayers built of complex molecules. *Journal of Computational Physics*, 401(??):Article 108999, January 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119307041.

Colaitis:2021:IRT

[CIMG21] A. Colaïtis, I. Igumenshchev, J. Mathiaud, and V. Goncharov. Inverse ray tracing on icosahedral tetrahedron grids for non-linear laser plasma interaction coupled to 3D radiation hydrodynamics. *Journal of Computational Physics*, 443(??):Article 110537, October 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121004320.

Cucchiara:2024:MOR

[CITT24] Simona Cucchiara, Angelo Iollo, Tommaso Taddei, and Haysam Telib. Model order reduction by convex displacement interpolation. *Journal of Computational Physics*, 514 (??):??, October 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124004790.

Celledoni:2021:DCL

[CJ21] Elena Celledoni and James Jackaman. Discrete conservation laws for finite element discretisations of multisymplectic PDEs. *Journal of Computational Physics*, 444 (??):Article 110520, November 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121004150.

Ching:2024:PPEb

[CJK24a] Eric J. Ching, Ryan F. Johnson, and Andrew D. Kercher. Positivity-preserving and entropy-bounded discontinuous Galerkin method for the chemically reacting, compressible Euler equations. Part I: the one-dimensional case. *Journal of Computational Physics*, 505(??):??, May 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912400130X.

Ching:2024:PPEa

[CJK24b] Eric J. Ching, Ryan F. Johnson, and Andrew D. Kercher. Positivity-preserving and entropy-bounded discontinuous Galerkin method for the chemically reacting, compressible Euler equations. Part II: the multidimensional case. *Journal of Computational Physics*, 505(??):??, May 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912400127X.

Chen:2021:FAE

[CJLL21] Yanli Chen, Xue Jiang, Jun Lai, and Peijun Li. A fast algorithm for the electromagnetic scattering from a large rectangular cavity in three dimensions. *Journal of Computational Physics*, 437(??):Article 110331, July 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121002266.

Cen:2023:EIT

[CJSZ23] Siyu Cen, Bangti Jin, Kwancheol Shin, and Zhi Zhou. Electrical impedance tomography with deep Calderón method. *Journal of Computational Physics*, 493(??):??, November 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999123005223`.

Chen:2020:AFM

[CJT+20] Jing Chen, Hao Jing, Ping Tong, Hao Wu, and Dinghui Yang. The auxiliary function method for waveform based earthquake location. *Journal of Computational Physics*, 413(??):Article 109453, July 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999120302278`.

Chen:2022:HRM

[CJW22] Yanlai Chen, Lijie Ji, and Zhu Wang. A hyper-reduced MAC scheme for the parametric Stokes and Navier–Stokes equations. *Journal of Computational Physics*, 466(??):??, October 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999122004740`.

Chalmers:2020:RCC

[CK20] N. Chalmers and L. Krivodonova. A robust CFL condition for the discontinuous Galerkin method on triangular meshes. *Journal of Computational Physics*, 403 (??):Article 109095, February 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999119308009`.

Cho:2021:FIA

[CK21] Hyuntae Cho and Myungjoo Kang. Fully implicit and accurate treatment of jump conditions for two-phase incompressible Navier–Stokes equations. *Journal of Computational Physics*, 445(??):Article 110587, November 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999121004824`.

Christensen:2024:CFC

[CKL+24] Alex B. Christensen, Adam Kunen, John Loffeld, Peter Brown, and Massimiliano Fratoni. A conservative first-collision source treatment for ray effect mitigation in discrete-ordinate radiation transport solutions. *Journal of Computational Physics*, 509(??):??, July 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124002985.

Chertock:2023:SGM

[CKLM+23] A. Chertock, A. Kurganov, M. Lukácová-Medvid'ová, P. Spichtinger, and B. Wiebe. Stochastic Galerkin method for cloud simulation. Part II: a fully random Navier–Stokes-cloud model. *Journal of Computational Physics*, 479(??):??, April 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123000827.

Cao:2023:FGB

[CKLZ23] Yangyang Cao, Alexander Kurganov, Yongle Liu, and Vladimir Zeitlin. Flux globalization based well-balanced path-conservative central-upwind scheme for two-layer thermal rotating shallow water equations. *Journal of Computational Physics*, 474(??):??, February 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122008531.

Cao:2024:FGB

[CKLZ24] Yangyang Cao, Alexander Kurganov, Yongle Liu, and Vladimir Zeitlin. Flux globalization-based well-balanced path-conservative central-upwind scheme for two-dimensional two-layer thermal rotating shallow water equations. *Journal of Computational Physics*, 515(??):??, October 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124005217.

Cho:2022:NDF

[CKN22a] Myung-Hoon Cho, Minseok Kim, and Inhyuk Nam. Numerical dispersion free in longitudinal axis for particle-in-cell simulation. *Journal of Computational Physics*, 462(??):??, August 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122002832.

Chu:2022:FOW

[CKN22b] Shaoshuai Chu, Alexander Kurganov, and Mingye Na. Fifth-order A-WENO schemes based on the path-conservative central-upwind method. *Journal of Computational Physics*, 469(??):??, November 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122005708.

Choi:2024:RAR

[CKPP24] Seongyu Choi, Donguk Kim, Jaehyong Park, and Jin Seok Park. Robust and accurate Roe-type Riemann solver with compact stencil: Rotated-RoeM scheme. *Journal of Computational Physics*, 505(??):??, May 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124001621.

Chertock:2024:LDF

[CKRZ24] Alina Chertock, Alexander Kurganov, Michael Redle, and Vladimir Zeitlin. Locally divergence-free well-balanced path-conservative central-upwind schemes for rotating shallow water MHD. *Journal of Computational Physics*, 518(??):??, December 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124005485.

Chen:2021:SOA

[CKT21] Yaping Chen, Yangyu Kuang, and Huazhong Tang. Second-order accurate BGK schemes for the special relativistic hydrodynamics with the Synge equation of state. *Journal of Computational Physics*, 442(??):Article 110438, October 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121003338.

Chu:2024:LDC

[CKX24] Shaoshuai Chu, Alexander Kurganov, and Ruixiao Xin. Low-dissipation central-upwind schemes for compressible multifluids. *Journal of Computational Physics*, 518(??):??, December 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912400559X.

Cai:2020:SSC

[CL20a] Y. Cai and E. Lorin. Stationary state computation for nonlinear Dirac operators. *Journal of Computational Physics*, 420(??):Article 109679, November 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120304538.

Chen:2020:AGP

[CL20b] Chen Chen and Qifeng Liao. ANOVA Gaussian process modeling for high-dimensional stochastic computational models. *Journal of Computational Physics*, 416 (??):Article 109519, September 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912030293X.

Chen:2020:NAT

[CL20c] Jian-Bing Chen and Meng-Ze Lyu. A new approach for time-variant probability density function of the maximal value of stochastic dynamical systems. *Journal of Computational Physics*, 415(??):Article 109525, August 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120302990.

Chen:2020:KBC

[CL20d] Meng Chen and Leevan Ling. Kernel-based collocation methods for heat transport on evolving surfaces. *Journal of Computational Physics*, 405(??):Article 109166, March 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199911930871X.

Cai:2021:EAG

[CL21] Yongyong Cai and Wei Liu. Efficient and accurate gradient flow methods for computing ground states of spinor Bose–Einstein condensates. *Journal of Computational Physics*, 433(??):Article 110183, May 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121000784.

Chen:2023:AHO

[CL23a] Zhiming Chen and Yong Liu. An arbitrarily high order unfitted finite element method for elliptic interface problems with automatic mesh generation. *Journal of Computational Physics*, 491(??):??, October 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123004795.

Cruz:2023:VIB

[CL23b] Rodrigo Vicente Cruz and Eric Lamballais. A versatile immersed boundary method for high-fidelity simulation of Conjugate Heat Transfer. *Journal of Computational Physics*, 488(??):??, September 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123002772.

Cai:2023:ASL

[CLB23] Xinwei Cai, Zhen Li, and Xin Bian. Arbitrary slip length for fluid-solid interface of arbitrary geometry in smoothed particle dynamics. *Journal of Computational Physics*, 494(??):??, December 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123006046.

Cao:2024:ESR

[CLC24a] Yanchuang Cao, Jun Liu, and Dawei Chen. An explicitly-sparse representation for oscillatory kernels with wave atom-like functions. *Journal of Computational Physics*, 497(??):??, January 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123007155.

Chang:2024:CAB

[CLC24b] Siyuan Chang, Jun Liu, and Kai Cui. A cluster analysis-based shock wave pattern recognition method for two-dimensional inviscid compressible flows. *Journal of Computational Physics*, 506(??):??, June 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124001955.

Chen:2024:BTO

[CLD+24] Leilei Chen, Haojie Lian, Hao-Wen Dong, Peng Yu, Shujie Jiang, and Stéphane P. A. Bordas. Broadband topology optimization of three-dimensional structural-acoustic interaction with reduced order isogeometric FEM/BEM. *Journal of Computational Physics*, 509(??):??, July 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124003000.

Chen:2020:UFC

[CLDC20] Xi Chen, Yuwen Li, Corina Drapaca, and John Cimbala. A unified framework of continuous and discontinuous Galerkin methods for solving the incompressible Navier–Stokes equation. *Journal of Computational Physics*, 422 (??):Article 109799, December 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120305738.

Cheng:2024:EDD

[CLGA24] Sibo Cheng, Che Liu, Yike Guo, and Rossella Arcucci. Efficient deep data assimilation with sparse observations and time-varying sensors. *Journal of Computational Physics*, 496(??):??, January 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123006769.

Cheng:2020:SOC

[CLJ+20] Jun-Bo Cheng, Li Liu, Song Jiang, Ming Yu, and Zhanli Liu. A second-order cell-centered Lagrangian scheme with a HLLC Riemann solver of elastic and plastic waves for two-dimensional elastic-plastic flows. *Journal of Computational Physics*, 413(??):Article 109452, July 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120302266.

Cheng:2020:EFB

[CLLL20] Zekang Cheng, Jie Li, Ching Y. Loh, and Li-Shi Luo. An exactly force-balanced boundary-conforming arbitrary-Lagrangian–Eulerian method for interfacial dynamics. *Journal of Computational Physics*, 408(??):Article 109237, May 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120300115.

Clain:2021:VHO

[CLP21] S. Clain, D. Lopes, and R. M. S. Pereira. Very high-order Cartesian-grid finite difference method on arbitrary geometries. *Journal of Computational Physics*, 434 (??):Article 110217, June 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121001121.

Chow:2022:CDA

[CLP22] Yat Tin Chow, Wing Tat Leung, and Ali Pakzad. Continuous data assimilation for two-phase flow: Analysis and simulations. *Journal of Computational Physics*, 466(??):??, October 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122004570.

Clain:2024:VHO

[CLPP24] S. Clain, D. Lopes, Rui M. S. Pereira, and Paulo A. Pereira. Very high-order finite difference method on arbitrary geometries with Cartesian grids for non-linear convection diffusion reaction equations. *Journal of Computational Physics*, 498(??):??, February 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123007623.

Chai:2020:FDD

[CLS+20a] Min Chai, Kun Luo, Changxiao Shao, Haiou Wang, and Jianren Fan. A finite difference discretization method for heat and mass transfer with Robin boundary conditions on irregular domains. *Journal of Computational Physics*, 400(??):Article 108890, January 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

URL http://www.sciencedirect.com/science/article/pii/S0021999119305881.

Cheng:2020:NIC

[CLS20b] Qing Cheng, Chun Liu, and Jie Shen. A new interface capturing method for Allen–Cahn type equations based on a flow dynamic approach in Lagrangian coordinates, I. One-dimensional case. *Journal of Computational Physics*, 419(??):Article 109509, October 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120302837.

Cheng:2024:HOCa

[CLS24a] Juan Cheng, Nuo Lei, and Chi-Wang Shu. High order conservative Lagrangian scheme for three-temperature radiation hydrodynamics. *Journal of Computational Physics*, 496(??):??, January 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123006903.

Coulaud:2024:AMA

[CLS24b] Olivier Coulaud, Adrien Loseille, and Pierre Schrooyen. Anisotropic mesh adaptation for high-order finite elements spaces with the log-simplex method. Application to discontinuous Galerkin methods. *Journal of Computational Physics*, 501(??):??, March 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124000238.

Chen:2021:CSL

[CLT21] Xianyang Chen, Jiacai Lu, and Gretar Tryggvason. Condensing smooth layers into singular sheets by weighted coordinate smoothing. *Journal of Computational Physics*, 431(??):Article 110140, April 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121000322.

Chang:2020:EMC

[CLW20] Wei-Chen Chang, Wen-Wei Lin, and Jenn-Nan Wang. Efficient methods of computing interior transmission eigenvalues for the elastic waves. *Journal of Computational Physics*, 407(??):Article 109227, April 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120300012.

Chan:2022:ESM

[CLW22] Jesse Chan, Yimin Lin, and Tim Warburton. Entropy stable modal discontinuous Galerkin schemes and wall boundary conditions for the compressible Navier–Stokes equations. *Journal of Computational Physics*, 448(??):Article 110723, January 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121006185.

Chen:2024:CIM

[CLW+24] Lingwei Chen, Chao Li, Jinghan Wang, Gang Hu, and Yiqing Xiao. A coherence-improved and mass-balanced inflow turbulence generation method for large eddy simulation. *Journal of Computational Physics*, 498(??):??, February 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912300801X.

Chen:2023:NAD

[CLXS23] Chungang Chen, Xingliang Li, Feng Xiao, and Xueshun Shen. A nonhydrostatic atmospheric dynamical core on cubed sphere using multi-moment finite-volume method. *Journal of Computational Physics*, 473(??):??, January 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912200780X.

Chen:2021:CLV

[CLY21] Shi Chen, Qin Li, and Xu Yang. Classical limit for the varying-mass Schrödinger equation with random inhomogeneities. *Journal of Computational Physics*, 438(??):Article 110365, August 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121002606.

Chen:2020:ENO

[CM20] Nan Chen and Andrew J. Majda. Efficient nonlinear optimal smoothing and sampling algorithms for complex turbulent nonlinear dynamical systems with partial observations. *Journal of Computational Physics*, 410(??):Article 109381, June 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120301558.

Churchill:2023:RMU

[CMCX23] Victor Churchill, Steve Manns, Zhen Chen, and Dongbin Xiu. Robust modeling of unknown dynamical systems via ensemble averaged learning. *Journal of Computational Physics*, 474(??):??, February 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122009056.

Cartier-Michaud:2023:VAC

[CMGGS23] Thomas Cartier-Michaud, Philippe Ghendrih, Virginie Grandgirard, and Eric Serre. Verification and accuracy check of simulations with PoPe and iPoPe. *Journal of Computational Physics*, 474(??):??, February 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122008221.

Chandramouli:2020:LSV

[CMH20] Pranav Chandramouli, Etienne Memin, and Dominique Heitz. 4D large scale variational data assimilation of a turbulent flow with a dynamics error model. *Journal of Computational Physics*, 412(??):Article 109446, July 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120302205.

Colomes:2021:WSB

[CMNS21] Oriol Colomés, Alex Main, Léo Nouveau, and Guglielmo Scovazzi. A weighted shifted boundary method for free surface flow problems. *Journal of Computational Physics*, 424(??):Article 109837, January 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

URL http://www.sciencedirect.com/science/article/pii/S0021999120306112.

Carrillo:2021:OAC

[CMP+21] H. Carrillo, E. Macca, C. Parés, G. Russo, and D. Zorío. An order-adaptive compact approximation Taylor method for systems of conservation laws. *Journal of Computational Physics*, 438(??):Article 110358, August 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121002539.

Carrillo:2023:WBA

[CMPR23] H. Carrillo, E. Macca, Carlos Parés, and G. Russo. Well-balanced adaptive compact approximate Taylor methods for systems of balance laws. *Journal of Computational Physics*, 478(??):??, April 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123000748.

Chirco:2022:MDV

[CMPZ22] Leonardo Chirco, Jacob Maarek, Stéphane Popinet, and Stéphane Zaleski. Manifold death: a volume of fluid implementation of controlled topological changes in thin sheets by the signature method. *Journal of Computational Physics*, 467(??):??, October 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122005307.

Calvo:2021:NST

[CMR21] M. Calvo, J. I. Montijano, and L. Rández. A note on the stability of time-accurate and highly-stable explicit operators for stiff differential equations. *Journal of Computational Physics*, 436(??):Article 110316, July 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121002114.

Coquel:2021:ESH

[CMRR21] Frédéric Coquel, Claude Marmignon, Pratik Rai, and Florent Renac. An entropy stable high-order discontinuous

Galerkin spectral element method for the Baer–Nunziato two-phase flow model. *Journal of Computational Physics*, 431(??):Article 110135, April 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121000279.

Chaussonnet:2022:MMS

[CMS+22a] Geoffroy Chaussonnet, Loïc Mees, Milos Sormaz, Patrick Jenny, and Philippe M. Bardet. Modeling multiple scattering transient of an ultrashort laser pulse by spherical particles. *Journal of Computational Physics*, 457(??):??, May 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912100591X.

Crockatt:2022:IMA

[CMS+22b] Michael M. Crockatt, Sibusiso Mabuza, John N. Shadid, Sidafa Conde, Thomas M. Smith, and Roger P. Pawlowski. An implicit monolithic AFC stabilization method for the CG finite element discretization of the fully-ionized ideal multifluid electromagnetic plasma system. *Journal of Computational Physics*, 464(??):??, September 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912200290X.

Coco:2023:GPS

[CMS23] Armando Coco, Mariarosa Mazza, and Matteo Semplice. A ghost-point smoothing strategy for geometric multigrid on curved boundaries. *Journal of Computational Physics*, 478(??):??, April 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123000773.

Chin:2021:SEF

[CMSS21] Eric B. Chin, Amir Ashkan Mokhtari, Ankit Srivastava, and N. Sukumar. Spectral extended finite element method for band structure calculations in phononic crystals. *Journal of Computational Physics*, 427(??):Article 110066, February 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120308408.

Cicchino:2021:NNS

[CN21] Alexander Cicchino and Siva Nadarajah. A new norm and stability condition for tensor product flux reconstruction schemes. *Journal of Computational Physics*, 429 (??):Article 110025, March 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120307993.

Chen:2022:USG

[CN22] Guoxian Chen and Sebastian Noelle. A unified surface-gradient and hydrostatic reconstruction scheme for the shallow water equations. *Journal of Computational Physics*, 467(??):??, October 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122005253.

Cicchino:2024:SEH

[CN24] Alexander Cicchino and Siva Nadarajah. Scalable evaluation of Hadamard products with tensor product basis for entropy-stable high-order methods. *Journal of Computational Physics*, 513(??):??, September 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124003838.

Carlier:2023:ESB

[CNB+23] T. Carlier, L. Nouveau, H. Beaugendre, M. Colin, and M. Ricchiuto. An enriched shifted boundary method to account for moving fronts. *Journal of Computational Physics*, 489(??):??, September 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912300390X.

Chattopadhyay:2023:DLE

[CNBH23] Ashesh Chattopadhyay, Ebrahim Nabizadeh, Eviatar Bach, and Pedram Hassanzadeh. Deep learning-enhanced ensemble-based data assimilation for high-dimensional nonlinear dynamical systems. *Journal of Computational Physics*, 477 (??):??, March 15, 2023. CODEN JCTPAH. ISSN 0021-

9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912300013X.

Chiu:2021:AHA

[CNC21] Te-Yao Chiu, Yang-Yao Niu, and Yi-Ju Chou. Accurate hybrid AUSMD type flux algorithm with generalized discontinuity sharpening reconstruction for two-fluid modeling. *Journal of Computational Physics*, 443 (??):Article 110540, October 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121004356.

Costa:2021:EVH

[CNCM21] Ricardo Costa, João M. Nóbrega, Stéphane Clain, and Gaspar J. Machado. Efficient very high-order accurate polyhedral mesh finite volume scheme for 3D conjugate heat transfer problems in curved domains. *Journal of Computational Physics*, 445(??):Article 110604, November 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912100499X.

Cicchino:2022:NSF

[CND22] Alexander Cicchino, Siva Nadarajah, and David C. Del Rey Fernández. Nonlinearly stable flux reconstruction high-order methods in split form. *Journal of Computational Physics*, 458(??):??, June 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122001565.

Chandrashekar:2020:PCF

[CNMB20] Praveen Chandrashekar, Boniface Nkonga, Asha Kumari Meena, and Ashish Bhole. A path conservative finite volume method for a shear shallow water model. *Journal of Computational Physics*, 413(??):Article 109457, July 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912030231X.

Coatleven:2021:PNE

[Coa21] Julien Coatléven. Principles of a network element method. *Journal of Computational Physics*, 433(??):Article 110197, May 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999121000929`.

Coatleven:2022:NEM

[Coa22] Julien Coatléven. A network element method for heterogeneous and anisotropic diffusion–reaction problems. *Journal of Computational Physics*, 470(??):??, December 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999122006593`.

Coco:2020:MGP

[Coc20] Armando Coco. A multigrid ghost-point level-set method for incompressible Navier–Stokes equations on moving domains with curved boundaries. *Journal of Computational Physics*, 418(??):Article 109623, October 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999120303971`.

Cao:2023:RBE

[CORJ+23] Lianghao Cao, Thomas O'Leary-Roseberry, Prashant K. Jha, J. Tinsley Oden, and Omar Ghattas. Residual-based error correction for neural operator accelerated infinite-dimensional Bayesian inverse problems. *Journal of Computational Physics*, 486(??):??, August 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999123001997`.

Chung:2020:CMM

[CP20] Eric Chung and Sai-Mang Pun. Computational multiscale methods for first-order wave equation using mixed CEM-GMsFEM. *Journal of Computational Physics*, 409 (??):Article 109359, May 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999120301339`.

Capodaglio:2022:LTS

[CP22a] Giacomo Capodaglio and Mark Petersen. Local time stepping for the shallow water equations in MPAS. *Journal of Computational Physics*, 449(??):Article 110818, January 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121007130.

Chartrand:2022:MGM

[CP22b] Chris Chartrand and J. Blair Perot. A method for generating moving, orthogonal, area preserving polygonal meshes. *Journal of Computational Physics*, 454(??):Article 110940, April 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912200002X.

Chen:2024:FSI

[CP24] Zhe Chen and Charles S. Peskin. A Fourier spectral immersed boundary method with exact translation invariance, improved boundary resolution, and a divergence-free velocity field. *Journal of Computational Physics*, 509(??):??, July 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124002973.

Contreras:2023:EIG

[CPA+23] L. F. Contreras, D. Pardo, E. Abreu, J. Muñoz-Matute, C. Diaz, and J. Galvis. An exponential integration generalized multiscale finite element method for parabolic problems. *Journal of Computational Physics*, 479(??):??, April 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123001092.

Constant:2021:IIB

[CPBB21] Benjamin Constant, Stéphanie Péron, Héloïse Beaugendre, and Christophe Benoit. An improved immersed boundary method for turbulent flow simulations on Cartesian grids. *Journal of Computational Physics*, 435(??):Article 110240, June 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121001352.

Constant:2024:IIB

[CPBB24] Benjamin Constant, Stéphanie Péron, Héloïse Beaugendre, and Christophe Benoit. An improved immersed boundary method for turbulent flow simulations on Cartesian grids: extension of a global geometric approach for thin boundary layers and strong flow incidence. *Journal of Computational Physics*, 519(??):??, December 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124006892.

Caze:2024:MSC

[CPD+24] Joris Cazé, Fabien Petitpas, Eric Daniel, Matthieu Queguineur, and Sébastien Le Martelot. Modeling and simulation of the cavitation phenomenon in turbopumps. *Journal of Computational Physics*, 502(??):??, April 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124000664.

Couture-Peck:2020:NTA

[CPGD20] Danika Couture-Peck, André Garon, and Michel C. Delfour. A new k-TMI/ALE fluid-structure formulation to study the low mass ratio dynamics of an elliptical cylinder. *Journal of Computational Physics*, 422(??):Article 109734, December 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120305088.

Chiocchetti:2021:HOA

[CPGD21] Simone Chiocchetti, Ilya Peshkov, Sergey Gavrilyuk, and Michael Dumbser. High order ADER schemes and GLM curl cleaning for a first order hyperbolic formulation of compressible flow with surface tension. *Journal of Computational Physics*, 426(??):Article 109898, February 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120306720.

Cheng:2022:DDS

[CPH+22] Sibo Cheng, I. Colin Prentice, Yuhan Huang, Yufang Jin, Yi-Ke Guo, and Rossella Arcucci. Data-driven surrogate model with latent data assimilation: Application to wildfire forecasting. *Journal of Computational Physics*, 464(??):??, September 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122003643.

Cho:2022:SIN

[CPK22] Hyuntae Cho, Yesom Park, and Myungjoo Kang. Solving incompressible Navier–Stokes equations on irregular domains and quadtrees by monolithic approach. *Journal of Computational Physics*, 463(??):??, August 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122003667.

Capodaglio:2023:UCG

[CPTR23] Giacomo Capodaglio, Mark R. Petersen, Adrian K. Turner, and Andrew F. Roberts. An unstructured CD-grid variational formulation for sea ice dynamics. *Journal of Computational Physics*, 473(??):??, January 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122008051.

Cao:2021:TDH

[CPX21] Guiyu Cao, Liang Pan, and Kun Xu. Three dimensional high-order gas-kinetic scheme for supersonic isotropic turbulence II: Coarse-graining analysis of compressible K $_{sgs}$ budget. *Journal of Computational Physics*, 439(??): Article 110402, August 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121002977.

Cao:2022:HOG

[CPX22] Guiyu Cao, Liang Pan, and Kun Xu. High-order gas-kinetic scheme with parallel computation for direct numerical simulation of turbulent flows. *Journal of Computational Physics*, 448(??):Article 110739, January 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121006343.

Chiarini:2021:DSN

[CQA21] A. Chiarini, M. Quadrio, and F. Auteri. A direction-splitting Navier–Stokes solver on co-located grids. *Journal of Computational Physics*, 429(??):Article 110023, March 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S002199912030797X`.

Cai:2024:PCN

[CQW24] Chaoyi Cai, Jianxian Qiu, and Kailiang Wu. Provably convergent Newton–Raphson methods for recovering primitive variables with applications to physical-constraint-preserving Hermite WENO schemes for relativistic hydrodynamics. *Journal of Computational Physics*, 498(??):??, February 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999123007647`.

Cai:2021:ELD

[CQY21] Xiaofeng Cai, Jing-Mei Qiu, and Yang Yang. An Eulerian–Lagrangian discontinuous Galerkin method for transport problems and its application to nonlinear dynamics. *Journal of Computational Physics*, 439(??):Article 110392, August 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999121002874`.

Cirrottola:2021:ADU

[CRF+21] Luca Cirrottola, Mario Ricchiuto, Algiane Froehly, Barbara Re, Alberto Guardone, and Giuseppe Quaranta. Adaptive deformation of 3D unstructured meshes with curved body fitted boundaries with application to unsteady compressible flows. *Journal of Computational Physics*, 433(??):Article 110177, May 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999121000723`.

Ciallella:2020:EST

[CRPB20] Mirco Ciallella, Mario Ricchiuto, Renato Paciorri, and Aldo Bonfiglioli. Extrapolated Shock Tracking: Bridging shock-fitting and embedded boundary methods. *Journal of Compu-*

tational Physics, 412(??):Article 109440, July 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912030214X.

Cai:2020:TCL

[CS20] Jiaxiang Cai and Jie Shen. Two classes of linearly implicit local energy-preserving approach for general multi-symplectic Hamiltonian PDEs. *Journal of Computational Physics*, 401(??):Article 108975, January 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119306801.

Chen:2021:NMS

[CS21a] Fang Chen and Ravi Samtaney. A numerical method for self-similar solutions of ideal magnetohydrodynamics. *Journal of Computational Physics*, 447(??):Article 110690, December 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121005854.

Chen:2021:RGP

[CS21b] Parry Y. Chen and Yonatan Sivan. Resolving the Gibbs phenomenon via a discontinuous basis in a mode solver for open optical systems. *Journal of Computational Physics*, 429(??):Article 110004, March 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120307786.

Comminal:2021:TDC

[CS21c] Raphaël Comminal and Jon Spangenberg. Three-dimensional cellwise conservative unsplit geometric VOF schemes. *Journal of Computational Physics*, 442(??):Article 110479, October 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121003740.

Cosgrove:2022:SAH

[CS22] P. Cosgrove and E. Shwageraus. Stability analysis of higher-order neutronics-depletion coupling schemes and Bateman operators. *Journal of Computational Physics*,

448(??):Article 110702, January 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121005970.

Chu:2023:RFD

[CS23] Tianyi Chu and Oliver T. Schmidt. RBF-FD discretization of the Navier–Stokes equations on scattered but staggered nodes. *Journal of Computational Physics*, 474(??):??, February 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122008191.

Chen:2024:FAM

[CS24a] Wenqian Chen and Panos Stinis. Feature-adjacent multi-fidelity physics-informed machine learning for partial differential equations. *Journal of Computational Physics*, 498 (??):??, February 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123007787.

Cheng:2024:HOCb

[CS24b] Juan Cheng and Chi-Wang Shu. High order conservative finite difference WENO scheme for three-temperature radiation hydrodynamics. *Journal of Computational Physics*, 517(??):??, November 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124005527.

Chu:2024:MFH

[CS24c] Tianyi Chu and Oliver T. Schmidt. Mesh-free hydrodynamic stability. *Journal of Computational Physics*, 502(??):??, April 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124000718.

Chiabo:2021:LSV

[CSA21] L. Chiabó and G. Sánchez-Arriaga. Limitations of stationary Vlasov–Poisson solvers in probe theory. *Journal of Computational Physics*, 438(??):Article 110366, August 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121002618.

Clerici:2024:TDG

[CSA24] F. Clerici, P. R. Spalart, and F. Alauzet. Turbulence driven goal-oriented anisotropic mesh adaptation for RANS simulations in aerodynamics. *Journal of Computational Physics*, 514(??):??, October 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124004406.

Calvo:2021:HRN

[CSASS21] M. P. Calvo, D. Sanz-Alonso, and J. M. Sanz-Serna. HMC: Reducing the number of rejections by not using leapfrog and some results on the acceptance rate. *Journal of Computational Physics*, 437(??):Article 110333, July 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912100228X.

Carmouze:2020:RSI

[CSCL20] Quentin Carmouze, Richard Saurel, Alexandre Chiapolino, and Emmanuel Lapebie. Riemann solver with internal reconstruction (RSIR) for compressible single-phase and non-equilibrium two-phase flows. *Journal of Computational Physics*, 408(??):Article 109176, May 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119308812.

Costanzo:2022:PTA

[CSdP+22] S. Costanzo, T. Sayadi, M. Fosas de Pando, P. J. Schmid, and P. Frey. Parallel-in-time adjoint-based optimization — application to unsteady incompressible flows. *Journal of Computational Physics*, 471(??):??, December 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122007276.

Cipriano:2024:MDE

[CSF+24] Edoardo Cipriano, Abd Essamade Saufi, Alessio Frassoldati, Tiziano Faravelli, Stéphane Popinet, and Alberto Cuoci. Multicomponent droplet evaporation in a geometric volume-of-fluid framework. *Journal of Computa-*

tional Physics, 507(??):??, June 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124002043.

Choung:2021:NWP

[CSLC21] Hanahchim Choung, Vignesh Saravanan, Soogab Lee, and Haeseong Cho. Nonlinear weighting process in ghost-cell immersed boundary methods for compressible flow. *Journal of Computational Physics*, 433(??):Article 110198, May 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121000930.

Chen:2020:ESG

[CSM20] Parry Y. Chen, Yonatan Sivan, and Egor A. Muljarov. An efficient solver for the generalized normal modes of non-uniform open optical resonators. *Journal of Computational Physics*, 422(??):Article 109754, December 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120305283.

Chirammel:2023:GFM

[CSM23] Sanjid S. Chirammel, Atul Sharma, and Janani Srree Murallidharan. On ghost fluid method-based sharp interface level set method on a co-located grid and its comparison with balanced force-based diffuse interface method. *Journal of Computational Physics*, 485(??):??, July 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123002048.

Chuna:2024:MSK

[CSMH24] Thomas Chuna, Irina Sagert, Michael S. Murillo, and Jeffrey R. Haack. Multi-species kinetic-fluid coupling for high-energy density simulations. *Journal of Computational Physics*, 505(??):??, May 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124001578.

Cheng:2020:HOC

[CSS20] Juan Cheng, Chi-Wang Shu, and Peng Song. High order conservative Lagrangian schemes for one-dimensional radiation hydrodynamics equations in the equilibrium-diffusion limit. *Journal of Computational Physics*, 421(??):Article 109724, November 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999120304988`.

Corcos:2024:HFD

[CSS24] Luke P. Corcos, Robert I. Saye, and James A. Sethian. A hybrid finite difference level set-implicit mesh discontinuous Galerkin method for multi-layer coating flows. *Journal of Computational Physics*, 507(??):??, June 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999124002092`.

Chan:2024:HOE

[CSW+24] Jesse Chan, Khemraj Shukla, Xinhui Wu, Ruofeng Liu, and Prani Nalluri. High order entropy stable schemes for the quasi-one-dimensional shallow water and compressible Euler equations. *Journal of Computational Physics*, 504(??):??, May 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999124001256`.

Cao:2021:CIQ

[CSX21] Duo Cao, Jie Shen, and Jie Xu. Computing interface with quasiperiodicity. *Journal of Computational Physics*, 424(??):Article 109863, January 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999120306379`.

Christlieb:2020:KBE

[CSY20] Andrew Christlieb, William Sands, and Hyoseon Yang. A kernel-based explicit unconditionally stable scheme for Hamilton–Jacobi equations on nonuniform meshes. *Journal of Computational Physics*, 415(??):Article 109543, August 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print),

1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912030317X.

Caflisch:2021:ADN

[CSY21] Russel Caflisch, Denis Silantyev, and Yunan Yang. Adjoint DSMC for nonlinear Boltzmann equation constrained optimization. *Journal of Computational Physics*, 439 (??):Article 110404, August 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121002990.

Christlieb:2023:OEF

[CSY23] Andrew J. Christlieb, William A. Sands, and Hyoseon Yang. Order enhanced finite volume methods through non-polynomial approximation. *Journal of Computational Physics*, 478(??):??, April 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123000554.

Cao:2024:SHD

[CSZ24] Wenbo Cao, Jiahao Song, and Weiwei Zhang. Solving high-dimensional parametric engineering problems for inviscid flow around airfoils based on physics-informed neural networks. *Journal of Computational Physics*, 516(??): ??, November 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124005333.

Chan:2022:ECJ

[CT22] Jesse Chan and Christina G. Taylor. Efficient computation of Jacobian matrices for entropy stable summation-by-parts schemes. *Journal of Computational Physics*, 448 (??):Article 110701, January 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121005969.

Cheng:2022:WBW

[CTCS22] Mingyang Cheng, Lingyan Tang, Yaming Chen, and Songhe Song. A well-balanced weighted compact nonlinear scheme for shallow water equations on curvilinear grids. *Journal of*

Computational Physics, 463(??):??, August 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122003126.

Chen:2023:CFA

[CTG23] Jiahui Chen, Johannes Tausch, and Weihua Geng. A Cartesian FMM-accelerated Galerkin boundary integral Poisson–Boltzmann solver. *Journal of Computational Physics*, 478(??):??, April 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123000761.

Coppola:2023:GLC

[CV23] Gennaro Coppola and Arthur E. P. Veldman. Global and local conservation of mass, momentum and kinetic energy in the simulation of compressible flow. *Journal of Computational Physics*, 475(??):??, February 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122009421.

Cifani:2023:EGM

[CVM23] P. Cifani, M. Viviani, and K. Modin. An efficient geometric method for incompressible hydrodynamics on the sphere. *Journal of Computational Physics*, 473(??):??, January 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912200835X.

Chandramoorthy:2021:PFN

[CW21] Nisha Chandramoorthy and Qiqi Wang. On the probability of finding nonphysical solutions through shadowing. *Journal of Computational Physics*, 440(??):Article 110389, September 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121002849.

Chen:2022:PCP

[CW22a] Yaping Chen and Kailiang Wu. A physical-constraint-preserving finite volume WENO method for special relativistic hydrodynamics on unstructured meshes. *Journal of Computational Physics*, 466(??):??, October 1, 2022. CODEN

JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122004600.

Cheng:2022:IBM

[CW22b] Zihao Cheng and Anthony Wachs. An immersed boundary/multi-relaxation time lattice Boltzmann method on adaptive octree grids for the particle-resolved simulation of particle-laden flows. *Journal of Computational Physics*, 471(??):??, December 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912200732X.

Chen:2023:DOD

[CW23] Junfeng Chen and Kailiang Wu. Deep-OSG: Deep learning of operators in semigroup. *Journal of Computational Physics*, 493(??):??, November 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123005934.

Chen:2021:PIM

[CWHZ21] Wenqian Chen, Qian Wang, Jan S. Hesthaven, and Chuhua Zhang. Physics-informed machine learning for reduced-order modeling of nonlinear problems. *Journal of Computational Physics*, 446(??):Article 110666, December 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121005611.

Cai:2021:DIE

[CWL+21] Shengze Cai, Zhicheng Wang, Lu Lu, Tamer A. Zaki, and George Em Karniadakis. DeepM&Mnet: Inferring the electroconvection multiphysics fields based on operator approximation by neural networks. *Journal of Computational Physics*, 436(??):Article 110296, July 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121001911.

Cheng:2023:SFS

[CWL+23] Yu Cheng, Yuhui Wang, Hanhong Liu, Lilin Li, Xiang-Hua Wang, Xingqi Zhang, Zhizhang Chen, and Shunchuan Yang. A stable FDTD subgridding scheme with SBP-SAT for transient TM analysis. *Journal of Computational Physics*, 494(??):??, December 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123006058.

Cheng:2024:EQH

[CWT24] Ming Cheng, Peng Wang, and Daniel M. Tartakovsky. Efficient quadratures for high-dimensional Bayesian data assimilation. *Journal of Computational Physics*, 506(??):??, June 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124001943.

Cheng:2020:WNE

[CWW20] Kelong Cheng, Cheng Wang, and Steven M. Wise. A weakly nonlinear, energy stable scheme for the strongly anisotropic Cahn–Hilliard equation and its convergence analysis. *Journal of Computational Physics*, 405(??):Article 109109, March 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119308149.

Cao:2022:NPD

[CWW22] Waixiang Cao, Chunmei Wang, and Junping Wang. A new primal-dual weak Galerkin method for elliptic interface problems with low regularity assumptions. *Journal of Computational Physics*, 470(??):??, December 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122006003.

Chen:2023:HOA

[CWX23] Wei Chen, Kailiang Wu, and Tao Xiong. High order asymptotic preserving finite difference WENO schemes with constrained transport for MHD equations in all sonic Mach numbers. *Journal of Computational Physics*, 488(??):??, September 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print),

1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123003352.

Chen:2021:DNT

[CWY21] Rongqian Chen, Linkuan Wu, and Yancheng You. Development of a new type of weighted compact scheme. *Journal of Computational Physics*, 446(??):Article 110662, December 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912100557X.

Chen:2021:GRN

[CX21] Zhen Chen and Dongbin Xiu. On generalized residual network for deep learning of unknown dynamical systems. *Journal of Computational Physics*, 438(??):Article 110362, August 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121002576.

Cockburn:2022:ABA

[CX22a] Bernardo Cockburn and Shiqiang Xia. An adjoint-based adaptive error approximation of functionals by the hybridizable discontinuous Galerkin method for second-order elliptic equations. *Journal of Computational Physics*, 457(??):??, May 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122001401.

Cockburn:2022:ABS

[CX22b] Bernardo Cockburn and Shiqiang Xia. An adjoint-based super-convergent Galerkin approximation of eigenvalues. *Journal of Computational Physics*, 449(??): Article 110816, January 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121007117.

Chen:2024:LSD

[CX24] Yuan Chen and Dongbin Xiu. Learning stochastic dynamical system via flow map operator. *Journal of Computational Physics*, 508(??):??, July 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912400233X.

Chang:2024:CHD

[CXZ24] Cheng Chang, Zhouping Xin, and Tieyong Zeng. A conservative hybrid deep learning method for Maxwell–Ampère–Nernst–Planck equations. *Journal of Computational Physics*, 501(??):??, March 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124000408.

Choi:2021:PTD

[CY21] Jeong-Ok Choi and Unjong Yu. Phase transition in the diffusion and bootstrap percolation models on regular random and Erdős–Rényi networks. *Journal of Computational Physics*, 446(??):Article 110670, December 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121005659.

Chassagneux:2022:NAS

[CY22a] Jean-François Chassagneux and Mohan Yang. Numerical approximation of singular forward-backward SDEs. *Journal of Computational Physics*, 468(??):??, November 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122005216.

Chen:2022:SOT

[CY22b] Chuanjun Chen and Xiaofeng Yang. A second-order time accurate and fully-decoupled numerical scheme of the Darcy–Newtonian–Nematic model for two-phase complex fluids confined in the Hele–Shaw cell. *Journal of Computational Physics*, 456(??):??, May 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122000882.

Cai:2023:UAM

[CY23] Yongyong Cai and Wenfan Yi. A uniformly accurate method for the Klein–Gordon–Dirac system in the nonrelativistic regime. *Journal of Computational Physics*, 486(??):??, August 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123002000.

Cheng:2023:NPT

[CYHY23] Tianpei Cheng, Haijian Yang, Jizu Huang, and Chao Yang. Nonlinear parallel-in-time simulations of multiphase flow in porous media. *Journal of Computational Physics*, 494(??):??, December 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123006101.

Cheng:2022:PFC

[CYS22] Tianpei Cheng, Haijian Yang, and Shuyu Sun. Parallel fully coupled methods for bound-preserving solution of subsurface flow and transport in porous media. *Journal of Computational Physics*, 470(??):??, December 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912200599X.

Chen:2023:CBC

[CYS23] Xuan Chen, Kun Yang, and Xiaowen Shan. Characteristic boundary condition for multispeed lattice Boltzmann model in acoustic problems. *Journal of Computational Physics*, 490(??):??, October 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123003972.

Cheng:2022:SSN

[CYYS22] Tianpei Cheng, Haijian Yang, Chao Yang, and Shuyu Sun. Scalable semismooth Newton methods with multilevel domain decomposition for subsurface flow and reactive transport in porous media. *Journal of Computational Physics*, 467(??):??, October 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122005022.

Chen:2020:NSO

[CZ20a] Lizhen Chen and Jia Zhao. A novel second-order linear scheme for the Cahn–Hilliard–Navier–Stokes equations. *Journal of Computational Physics*, 423(??):Article 109782, December 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120305568.

Chen:2020:BIP

[CZ20b] Ziheng Chen and Zhennan Zhou. The Bayesian inversion problem for thermal average sampling of quantum systems. *Journal of Computational Physics*, 413(??):Article 109448, July 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120302229.

Chaikovskii:2022:CAF

[CZ22a] Dmitrii Chaikovskii and Ye Zhang. Convergence analysis for forward and inverse problems in singularly perturbed time-dependent reaction-advection-diffusion equations. *Journal of Computational Physics*, 470(??):??, December 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122006726.

Chen:2022:SRC

[CZ22b] Jun Chen and Jingxin Zhang. A semi-resolved CFD-DEM coupling model using a two-way domain expansion method. *Journal of Computational Physics*, 469(??):??, November 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122005940.

Chang:2023:HDD

[CZ23] Cheng Chang and Tieyong Zeng. A hybrid data-driven-physics-constrained Gaussian process regression framework with deep kernel for uncertainty quantification. *Journal of Computational Physics*, 486(??):??, August 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123002243.

Cen:2024:DFV

[CZ24] Jianhuan Cen and Qingsong Zou. Deep finite volume method for partial differential equations. *Journal of Computational Physics*, 517(??):??, November 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

URL http://www.sciencedirect.com/science/article/pii/S0021999124005552.

Chen:2023:ENI

[CZCY23] Wenyuan Chen, Shufan Zou, Qingdong Cai, and Yantao Yang. An explicit and non-iterative moving-least-squares immersed-boundary method with low boundary velocity error. *Journal of Computational Physics*, 474(??):??, February 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912200866X.

Chen:2020:MPR

[CZHY20] Ze Chen, Juan Zhang, Kenneth L. Ho, and Haizhao Yang. Multidimensional phase recovery and interpolative decomposition butterfly factorization. *Journal of Computational Physics*, 412(??):Article 109427, July 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120302011.

Cheng:2020:DGM

[CZL20] Jian Cheng, Fan Zhang, and Tiegang Liu. A discontinuous Galerkin method for the simulation of compressible gas-gas and gas-water two-medium flows. *Journal of Computational Physics*, 403(??):Article 109059, February 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119307648.

Chen:2020:INB

[CZLC20] Zedong Chen, Fan Zhang, Jun Liu, and Biaosong Chen. An iterative near-boundary reconstruction strategy for unstructured finite volume method. *Journal of Computational Physics*, 418(??):Article 109621, October 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120303958.

Chen:2022:VBR

[CZLC22] Zedong Chen, Fan Zhang, Jun Liu, and Biaosong Chen. A vertex-based reconstruction for cell-centered finite-volume discretization on unstructured grids. *Journal of Computational Physics*, 451(??):Article 110827, February 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121007221.

Chai:2021:SOA

[CZZ21] Shuqing Chai, Zhen Zhang, and Zhiwen Zhang. A second order accuracy preserving method for moving contact lines with Stokes flow. *Journal of Computational Physics*, 445(??):Article 110607, November 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121005027.

Cai:2024:APS

[CZZX24] Yi Cai, Guoliang Zhang, Hongqiang Zhu, and Tao Xiong. Asymptotic preserving semi-Lagrangian discontinuous Galerkin methods for multiscale kinetic transport equations. *Journal of Computational Physics*, 513(??): ??, September 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912400439X.

Da:2022:MRF

[Da22] Daicong Da. Model reduction on 3D fracture resistance design. *Journal of Computational Physics*, 463(??):??, August 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122003369.

Dauricio:2023:WME

[DA23] Eron T. V. Dauricio and João Luiz F. Azevedo. A wall model for external laminar boundary layer flows applied to the Wall-Modeled LES framework. *Journal of Computational Physics*, 484(??):??, July 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123001821.

Dettmer:2024:NIT

[DA24] Wulf G. Dettmer and Eman Alhayki. New implicit time integration schemes combining high frequency damping with high second order accuracy. *Journal of Computational Physics*, 514(??):??, October 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124005084.

Pascuale:2023:CTB

[DAGL23] Sebastian De Pascuale, Kenneth Allen, David L. Green, and Jeremy D. Lore. Compression of tokamak boundary plasma simulation data using a maximum volume algorithm for matrix skeleton decomposition. *Journal of Computational Physics*, 484(??):??, July 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123001845.

Desai:2022:TOS

[DAJ22] Jeet Desai, Grégoire Allaire, and François Jouve. Topology optimization of structures undergoing brittle fracture. *Journal of Computational Physics*, 458(??):??, June 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122001103.

Daszuta:2024:STC

[Das24] Boris Daszuta. Spectrally-tuned compact finite-difference schemes with domain decomposition and applications to numerical relativity. *Journal of Computational Physics*, 508(??):??, July 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124002079.

Dusson:2022:ACE

[DBC+22] Geneviève Dusson, Markus Bachmayr, Gábor Csányi, Ralf Drautz, Simon Etter, Cas van der Oord, and Christoph Ortner. Atomic cluster expansion: Completeness, efficiency and stability. *Journal of Computational Physics*, 454(??):Article 110946, April 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122000080.

Deshpande:2021:UFG

[DBD21] Vedang M. Deshpande, Raktim Bhattacharya, and Diego A. Donzis. A unified framework to generate optimized compact finite difference schemes. *Journal of Computational Physics*, 432(??):Article 110157, May 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121000498.

Dargaville:2020:SAA

[DBSS+20] S. Dargaville, A. G. Buchan, R. P. Smedley-Stevenson, P. N. Smith, and C. C. Pain. Scalable angular adaptivity for Boltzmann transport. *Journal of Computational Physics*, 406(??):Article 109124, April 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119308290.

Deka:2020:NGG

[DBT+20] Mandeep Deka, Shuvayan Brahmachary, Ramakrishnan Thirumalaisamy, Amaresh Dalal, and Ganesh Natarajan. A new Green–Gauss reconstruction on unstructured meshes. Part I: Gradient reconstruction. *Journal of Computational Physics*, 422(??):Article 108325, December 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999118306909.

Desmons:2021:GHO

[DC21] Florian Desmons and Mathieu Coquerelle. A generalized high-order momentum preserving (HOMP) method in the one-fluid model for incompressible two phase flows with high density ratio. *Journal of Computational Physics*, 437(??):Article 110322, July 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121002175.

Du:2022:CDF

[DC22a] Rong Du and Xiao-Xiao Cai. Convolutional discrete Fourier transform method for calculating thermal neutron cross section in liquids. *Journal of Computational*

Physics, 466(??):??, October 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122004442.

Du:2022:NCG

[DC22b] Yongle Du and Jinsheng Cai. A novel coarse grid boundary treatment for multigrid algorithms in computational fluid dynamics simulations. *Journal of Computational Physics*, 451(??):Article 110889, February 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121007841.

DeMichele:2023:AEC

[DC23] Carlo De Michele and Gennaro Coppola. Asymptotically entropy-conservative and kinetic-energy preserving numerical fluxes for compressible Euler equations. *Journal of Computational Physics*, 492(??):??, November 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912300534X.

DeMichele:2024:NPE

[DC24] Carlo De Michele and Gennaro Coppola. Novel pressure-equilibrium and kinetic-energy preserving fluxes for compressible flows based on the harmonic mean. *Journal of Computational Physics*, 518(??):??, December 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124005862.

Daniel:2022:PIC

[DCA+22] Thomas Daniel, Fabien Casenave, Nissrine Akkari, Ali Ketata, and David Ryckelynck. Physics-informed cluster analysis and a priori efficiency criterion for the construction of local reduced-order bases. *Journal of Computational Physics*, 458(??):??, June 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122001826.

Grosso:2024:WBP

[DCC+24] Alessia Del Grosso, Manuel J. Castro, Agnes Chan, Gérard Gallice, Raphaël Loubère, and Pierre-Henri Maire. A well-balanced, positive, entropy-stable, and multi-dimensional-aware finite volume scheme for 2D shallow-water equations with unstructured grids. *Journal of Computational Physics*, 503(??):??, April 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999124000780`.

Ding:2020:SLD

[DCGQ20] Mingchang Ding, Xiaofeng Cai, Wei Guo, and Jing-Mei Qiu. A semi-Lagrangian discontinuous Galerkin (DG) — local DG method for solving convection-diffusion equations. *Journal of Computational Physics*, 409(??):Article 109295, May 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999120300693`.

DeSantis:2021:GMM

[DCHF21] A. De Santis, M. Colombo, B. C. Hanson, and M. Fairweather. A generalized multiphase modelling approach for multiscale flows. *Journal of Computational Physics*, 436(??):Article 110321, July 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999121002163`.

deCastro:2024:ROM

[dCLW24] Amy de Castro, Hyesuk Lee, and Margaret M. Wiecek. Reduced order modeling for a Schur complement method for fluid-structure interaction. *Journal of Computational Physics*, 515(??):??, October 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999124005308`.

Dhulipala:2023:EBI

[DCS23] Somayajulu L. N. Dhulipala, Yifeng Che, and Michael D. Shields. Efficient Bayesian inference with latent Hamiltonian neural networks in No-U-Turn Sampling. *Journal of Computational Physics*, 492(??):??, November 1, 2023. CODEN

JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912300520X.

Duffin:2022:LRS

[DCSG22] Connor Duffin, Edward Cripps, Thomas Stemler, and Mark Girolami. Low-rank statistical finite elements for scalable model-data synthesis. *Journal of Computational Physics*, 463(??):??, August 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122003230.

DiPietro:2021:AOM

[DD21] Daniele A. Di Pietro and Jérôme Droniou. An arbitrary-order method for magnetostatics on polyhedral meshes based on a discrete de Rham sequence. *Journal of Computational Physics*, 429(??):Article 109991, March 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120307658.

De:2022:NNT

[DD22a] Subhayan De and Alireza Doostan. Neural network training using l_1-regularization and bi-fidelity data. *Journal of Computational Physics*, 458(??):??, June 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122000729.

Dhaouadi:2022:FOH

[DD22b] Firas Dhaouadi and Michael Dumbser. A first order hyperbolic reformulation of the Navier–Stokes-Korteweg system based on the GPR model and an augmented Lagrangian approach. *Journal of Computational Physics*, 470(??):??, December 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122006064.

DalSanto:2020:DDA

[DDP20] Niccolò Dal Santo, Simone Deparis, and Luca Pegolotti. Data driven approximation of parametrized PDEs by reduced basis and neural networks. *Journal of Computational*

Physics, 416(??):Article 109550, September 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120303247.

Dahmen:2022:CEN

[DDR22] Nour Dahmen, Jérôme Droniou, and François Rogier. A cost-effective nonlinear extremum-preserving finite volume scheme for highly anisotropic diffusion on Cartesian grids, with application to radiation belt dynamics. *Journal of Computational Physics*, 463(??):??, August 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122003205.

DeVita:2021:FES

[DDVO21] Francesco De Vita, Filippo De Lillo, Roberto Verzicco, and Miguel Onorato. A fully Eulerian solver for the simulation of multiphase flows with solid bodies: Application to surface gravity waves. *Journal of Computational Physics*, 438(??):Article 110355, August 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121002503.

Duchemin:2022:MMA

[DE22] Laurent Duchemin and Jens Eggers. MARS: a method for the adaptive removal of stiffness in PDEs. *Journal of Computational Physics*, 471(??):??, December 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122006878.

Duan:2021:FIP

[DEB21] Yu Duan, Matthew D. Eaton, and Michael J. Bluck. Fixed inducing points online Bayesian calibration for computer models with an application to a scale-resolving CFD simulation. *Journal of Computational Physics*, 434 (??):Article 110243, June 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121001388.

Dai:2022:HPW

[DEN22] Dihan Dai, Yekaterina Epshteyn, and Akil Narayan. Hyperbolicity-preserving and well-balanced stochastic Galerkin method for two-dimensional shallow water equations. *Journal of Computational Physics*, 452(??):Article 110901, March 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121007968.

Deng:2023:UFN

[Den23] Xi Deng. A unified framework for non-linear reconstruction schemes in a compact stencil. Part 1: Beyond second order. *Journal of Computational Physics*, 481(??):??, May 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912300147X.

Deriaz:2023:HOA

[Der23] Erwan Deriaz. High-order Adaptive Mesh Refinement multigrid Poisson solver in any dimension. *Journal of Computational Physics*, 480(??):??, May 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123001079.

Dabaghi:2023:TAS

[DES23] Jad Dabaghi, Virginie Ehrlacher, and Christoph Strössner. Tensor approximation of the self-diffusion matrix of tagged particle processes. *Journal of Computational Physics*, 480(??):??, May 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123001122.

Denner:2020:CFV

[DEvW20] Fabian Denner, Fabien Evrard, and Berend G. M. van Wachem. Conservative finite-volume framework and pressure-based algorithm for flows of incompressible, ideal-gas and real-gas fluids at all speeds. *Journal of Computational Physics*, 409(??):Article 109348, May 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120301224.

Denner:2022:BCT

[DEvW22] Fabian Denner, Fabien Evrard, and Berend van Wachem. Breaching the capillary time-step constraint using a coupled VOF method with implicit surface tension. *Journal of Computational Physics*, 459(??):??, June 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122001905.

Deluzet:2023:EPS

[DFG+23] Fabrice Deluzet, Gwenael Fubiani, Laurent Garrigues, Clément Guillet, and Jacek Narski. Efficient parallelization for 3d-3v sparse grid Particle-In-Cell: Shared memory architectures. *Journal of Computational Physics*, 480(??):??, May 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123001171.

Dumbser:2020:GCC

[DFGR20] Michael Dumbser, Francesco Fambri, Elena Gaburro, and Anne Reinarz. On GLM curl cleaning for a first order reduction of the CCZ4 formulation of the Einstein field equations. *Journal of Computational Physics*, 404(??):Article 109088, March 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119307934.

Dugast:2020:RFF

[DFJ20] Florian Dugast, Yann Favennec, and Christophe Josset. Reactive fluid flow topology optimization with the multi-relaxation time lattice Boltzmann method and a level-set function. *Journal of Computational Physics*, 409(??):Article 109252, May 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120300267.

Daus:2022:RBM

[DFJ22] Esther S. Daus, Markus Fellner, and Ansgar Jüngel. Random-batch method for multi-species stochastic interacting particle systems. *Journal of Computational Physics*, 463(??):??, August 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL

http://www.sciencedirect.com/science/article/pii/S0021999122002820.

Dia:2024:GSO

[DFK+24] Ben Mansour Dia, Michael Fehler, SanLinn I. Kaka, Andrea Scarinci, Umair bin Waheed, and Chen Gu. Greedy selection of optimal location of sensors for uncertainty reduction in seismic moment tensor inversion. *Journal of Computational Physics*, 519(??):??, December 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912400679X.

Dematte:2024:AMN

[DFMN24] Riccardo Dematté, Alexander A. Farmakalides, Stephen Millmore, and Nikos Nikiforakis. An all Mach number scheme for visco-resistive magnetically-dominated MHD flows. *Journal of Computational Physics*, 514(??):??, October 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124004789.

DiGregorio:2021:CMA

[DFP+21a] Simone Di Gregorio, Marco Fedele, Gianluca Pontone, Antonio F. Corno, Paolo Zunino, Christian Vergara, and Alfio Quarteroni. A computational model applied to myocardial perfusion in the human heart: From large coronaries to microvasculature. *Journal of Computational Physics*, 424(??):Article 109836, January 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120306100.

Dutta:2021:GNI

[DFP+21b] Sourav Dutta, Matthew W. Farthing, Emma Perracchione, Gaurav Savant, and Mario Putti. A greedy non-intrusive reduced order model for shallow water equations. *Journal of Computational Physics*, 439(??):Article 110378, August 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121002734.

Duru:2022:DPS

[DFW22] Kenneth Duru, Frederick Fung, and Christopher Williams. Dual-pairing summation by parts finite difference methods for large scale elastic wave simulations in 3D complex geometries. *Journal of Computational Physics*, 454 (??):Article 110966, April 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122000286.

Dobson:2023:SPB

[DG23] Matthew Dobson and Abdel Kader A. Geraldo. Simple periodic boundary conditions for molecular simulation of uniaxial flow. *Journal of Computational Physics*, 473(??):??, January 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122008038.

Discacciati:2024:CCS

[DG24] Marco Discacciati and Paola Gervasio. A coupling concept for Stokes–Darcy systems: the ICDD method. *Journal of Computational Physics*, 513(??):??, September 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124004534.

DeCaria:2022:GLM

[DGGL22] Victor DeCaria, Sigal Gottlieb, Zachary J. Grant, and William J. Layton. A general linear method approach to the design and optimization of efficient, accurate, and easily implemented time-stepping methods in CFD. *Journal of Computational Physics*, 455(??):??, April 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121008226.

Dahm:2024:NDH

[DGH24] Sina Dahm, Jan Giesselmann, and Christiane Helzel. Numerical discretisation of hyperbolic systems of moment equations describing sedimentation in suspensions of rod-like particles. *Journal of Computational Physics*, 513(??):??, September 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-

2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912400411X.

Diaz:2022:PAC

[DGL+22] Adrian Diaz, Boyang Gu, Yang Li, Steven J. Plimpton, David L. McDowell, and Youping Chen. A parallel algorithm for the concurrent atomistic-continuum methodology. *Journal of Computational Physics*, 463(??):??, August 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122002029.

Duchemin:2023:EER

[DGL+23] Ivan Duchemin, Luigi Genovese, Eloïse Letournel, Antoine Levitt, and Simon Ruget. Efficient extraction of resonant states in systems with defects. *Journal of Computational Physics*, 477(??):??, March 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123000232.

Dubois:2022:MLF

[DGPP22] Pierre Dubois, Thomas Gomez, Laurent Planckaert, and Laurent Perret. Machine learning for fluid flow reconstruction from limited measurements. *Journal of Computational Physics*, 448(??):Article 110733, January 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121006288.

Dominguez:2020:ODF

[DGS20] V. Domínguez, M. Ganesh, and F. J. Sayas. An overlapping decomposition framework for wave propagation in heterogeneous and unbounded media: Formulation, analysis, algorithm, and simulation. *Journal of Computational Physics*, 403(??):Article 109052, February 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119307570.

Du:2020:FUE

[DGW20] Ning Du, Xu Guo, and Hong Wang. Fast upwind and Eulerian–Lagrangian control volume schemes for time-dependent directional space-fractional advection-dispersion equations. *Journal of Computational Physics*, 405(??): Article 109127, March 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119308320.

Dzanic:2022:PAN

[DGW22] T. Dzanic, S. S. Girimaji, and F. D. Witherden. Partially-averaged Navier–Stokes simulations of turbulence within a high-order flux reconstruction framework. *Journal of Computational Physics*, 456(??):??, May 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122000547.

Dingfelder:2020:LFA

[DH20] Benedict Dingfelder and Florian J. Hindenlang. A locally field-aligned discontinuous Galerkin method for anisotropic wave equations. *Journal of Computational Physics*, 408 (??):Article 109273, May 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120300474.

Duan:2024:NID

[DH24] Junming Duan and Jan S. Hesthaven. Non-intrusive data-driven reduced-order modeling for time-dependent parametrized problems. *Journal of Computational Physics*, 497(??):??, January 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123007167.

Deng:2022:NPD

[DhJV+22] Xi Deng, Zhen hua Jiang, Peter Vincent, Feng Xiao, and Chao Yan. A new paradigm of dissipation-adjustable, multi-scale resolving schemes for compressible flows. *Journal of Computational Physics*, 466(??):??, October 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122003497.

Dave:2023:VFI

[DHK23] Himanshu Dave, Marcus Herrmann, and M. Houssem Kasbaoui. The volume-filtering immersed boundary method. *Journal of Computational Physics*, 487(??):??, August 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999123002310`.

DAquila:2021:NSM

[DHM21a] Luke M. D'Aquila, Brian T. Helenbrook, and Alireza Mazaheri. A novel stabilization method for high-order shock fitting with finite element methods. *Journal of Computational Physics*, 430(??):Article 110096, April 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999120308706`.

Dhia:2021:CSM

[DHM21b] Anne-Sophie Bonnet-Ben Dhia, Christophe Hazard, and Florian Monteghetti. Complex-scaling method for the complex plasmonic resonances of planar subwavelength particles with corners. *Journal of Computational Physics*, 440 (??):Article 110433, September 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999121003284`.

Ding:2021:QTE

[DHMT21] Lingyun Ding, Jingfang Huang, Jeremy L. Marzuola, and Zhuochao Tang. Quadrature by two expansions: Evaluating Laplace layer potentials using complex polynomial and plane wave expansions. *Journal of Computational Physics*, 428(??):Article 109963, March 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999120307373`.

Discacciati:2020:COH

[DHR20] Niccolò Discacciati, Jan S. Hesthaven, and Deep Ray. Controlling oscillations in high-order Discontinuous Galerkin schemes using artificial viscosity tuned by neural networks. *Journal of Computational Physics*, 409(??):Article 109304, May 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120300784.

Dhruv:2024:VDO

[Dhr24] Akash Dhruv. A vortex damping outflow forcing for multiphase flows with sharp interfacial jumps. *Journal of Computational Physics*, 511(??):??, August 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124003711.

Dai:2024:ASB

[DHXZ24] Xiaoying Dai, Miao Hu, Jack Xin, and Aihui Zhou. An augmented subspace based adaptive proper orthogonal decomposition method for time dependent partial differential equations. *Journal of Computational Physics*, 514(??):??, October 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124004807.

Despres:2020:MLD

[DJ20] Bruno Després and Hervé Jourdren. Machine learning design of volume of fluid schemes for compressible flows. *Journal of Computational Physics*, 408(??):Article 109275, May 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120300498.

Dominesey:2022:ROM

[DJ22] Kurt A. Dominesey and Wei Ji. Reduced-order modeling of neutron transport separated in energy by Proper Generalized Decomposition with applications to nuclear reactor physics. *Journal of Computational Physics*, 449 (??):Article 110744, January 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121006392.

Dominesey:2023:ROM

[DJ23] Kurt A. Dominesey and Wei Ji. Reduced-order modeling of neutron transport eigenvalue problems separated in energy by Proper Generalized Decomposition. *Journal of Com-*

putational Physics, 486(??):??, August 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123002322.

Dunton:2020:PEM

[DJID20] Alec M. Dunton, Lluís Jofre, Gianluca Iaccarino, and Alireza Doostan. Pass-efficient methods for compression of high-dimensional turbulent flow data. *Journal of Computational Physics*, 423(??):Article 109704, December 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120304782.

Dutt:2021:HOM

[DK21] Krishna Dutt and Lilia Krivodonova. A high-order moment limiter for the discontinuous Galerkin method on triangular meshes. *Journal of Computational Physics*, 433(??):Article 110188, May 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121000838.

Dalmon:2020:FMI

[DKM+20] Alexis Dalmon, Kalyani Kentheswaran, Guillaume Mialhe, Benjamin Lalanne, and Sébastien Tanguy. Fluids-membrane interaction with a full Eulerian approach based on the level set method. *Journal of Computational Physics*, 406(??):Article 109171, April 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119308769.

deKinkelder:2021:NMS

[dKSA21] Eloy de Kinkelder, Leonard Sagis, and Sebastian Aland. A numerical method for the simulation of viscoelastic fluid surfaces. *Journal of Computational Physics*, 440 (??):Article 110413, September 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121003089.

Dong:2021:MBI

[DL21] Suchuan Dong and Zongwei Li. A modified batch intrinsic plasticity method for pre-training the random coefficients of extreme learning machines. *Journal of Computational Physics*, 445(??):Article 110585, November 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999121004800`.

Du:2024:VMT

[DL24] Zhifang Du and Jiequan Li. VOF method in two-stage fourth order time-stepping framework. *Journal of Computational Physics*, 496(??):??, January 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999123006757`.

Dai:2024:NSB

[DLAD24] Yuanjun Dai, Zhi Li, Yiran An, and Wanru Deng. Numerical solutions of boundary problems in partial differential equations: a deep learning framework with Green's function. *Journal of Computational Physics*, 511(??):??, August 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S002199912400370X`.

deLara:2023:AHO

[dLF23] Fernando Manrique de Lara and Esteban Ferrer. Accelerating high order discontinuous Galerkin solvers using neural networks: 3D compressible Navier–Stokes equations. *Journal of Computational Physics*, 489(??):??, September 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999123003480`.

DiGiusto:2024:FOH

[DLG+24] Thomas B. J. Di Giusto, Chun Hean Lee, Antonio J. Gil, Javier Bonet, Clare Wood, and Matteo Giacomini. A first-order hyperbolic Arbitrary Lagrangian Eulerian conservation formulation for nonlinear solid dynamics in irreversible processes. *Journal of Computational Physics*, 518(??):??, December 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print),

1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124005709.

Drum:2024:AKS

[DLJ24] C. Drum, J. V. Lambers, and P. M. Jordan. On the application of Krylov subspace spectral methodologies to poroacoustic shock formation in an exponential class of inhomogeneous gases. *Journal of Computational Physics*, 509(??):??, July 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124003036.

Dong:2022:SBI

[DLL22] Heping Dong, Jun Lai, and Peijun Li. A spectral boundary integral method for the elastic obstacle scattering problem in three dimensions. *Journal of Computational Physics*, 469(??):??, November 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122006088.

DiLeoni:2023:NOP

[DLM+23] Patricio Clark Di Leoni, Lu Lu, Charles Meneveau, George Em Karniadakis, and Tamer A. Zaki. Neural operator prediction of linear instability waves in high-speed boundary layers. *Journal of Computational Physics*, 474(??):??, February 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122008567.

Droniou:2024:DMD

[DLM24] Jérôme Droniou, Mohamed Laaziri, and Roland Masson. Discretisations of mixed-dimensional Thermo–Hydro–Mechanical models preserving energy estimates. *Journal of Computational Physics*, 515(??):??, October 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124005436.

Dou:2022:DCA

[DLMZ22] Fangfang Dou, Xiaodong Liu, Shixu Meng, and Bo Zhang. Data completion algorithms and their applications in inverse acoustic scattering with limited-aperture backscattering data. *Journal of Computational Physics*, 469(??):??, November 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912200612X.

Deng:2021:AYS

[DLP21] Shaozhong Deng, Zhilin Li, and Kejia Pan. An ADI–Yee's scheme for Maxwell's equations with discontinuous coefficients. *Journal of Computational Physics*, 438 (??):Article 110356, August 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121002515.

Doppler:2024:DGA

[DLSvW24] Sabine Doppler, Philip L. Lederer, Joachim Schöberl, and Henry von Wahl. A discontinuous Galerkin approach for atmospheric flows with implicit condensation. *Journal of Computational Physics*, 499(??):??, February 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123008082.

Don:2022:NRS

[DLWW22] Wai Sun Don, Run Li, Bao-Shan Wang, and Yinghua Wang. A novel and robust scale-invariant WENO scheme for hyperbolic conservation laws. *Journal of Computational Physics*, 448(??):Article 110724, January 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121006197.

Duan:2022:EDA

[DLY22] Beiping Duan, Buyang Li, and Zongze Yang. An energy diminishing arbitrary Lagrangian–Eulerian finite element method for two-phase Navier–Stokes flow. *Journal of Computational Physics*, 461(??):??, July 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122002777.

Dong:2023:KFB

[DLYZ23] Haixia Dong, Shuwang Li, Wenjun Ying, and Zhongshu Zhao. Kernel-free boundary integral method for two-phase Stokes equations with discontinuous viscosity on staggered grids. *Journal of Computational Physics*, 492(??):??, November 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999123004746`.

Ding:2023:SRU

[DLZ23] Ming-Hui Ding, Hongyu Liu, and Guang-Hui Zheng. Shape reconstructions by using plasmon resonances with enhanced sensitivity. *Journal of Computational Physics*, 486(??):??, August 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999123002267`.

Dai:2021:POU

[DLZZ21] Xiaoying Dai, Zhuang Liu, Xin Zhang, and Aihui Zhou. A parallel orbital-updating based optimization method for electronic structure calculations. *Journal of Computational Physics*, 445(??):Article 110622, November 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999121005179`.

Darbon:2021:SNN

[DM21] Jérôme Darbon and Tingwei Meng. On some neural network architectures that can represent viscosity solutions of certain high dimensional Hamilton–Jacobi partial differential equations. *Journal of Computational Physics*, 425 (??):Article 109907, January 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999120306811`.

David:2023:SLH

[DM23a] Marco David and Florian Méhats. Symplectic learning for Hamiltonian neural networks. *Journal of Computational Physics*, 494(??):??, December 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999123005909`.

Pino:2023:TMB

[DM23b] Stéphane Del Pino and Isabelle Marmajou. Triangular metric-based mesh adaptation for compressible multimaterial flows in semi-Lagrangian coordinates. *Journal of Computational Physics*, 478(??):??, April 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123000700.

Dusson:2023:OPE

[DM23c] Geneviève Dusson and Yvon Maday. An overview of *a posteriori* error estimation and post-processing methods for nonlinear eigenvalue problems. *Journal of Computational Physics*, 491(??):??, October 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123004473.

Drozda:2023:LOS

[DMC+23] Luciano Drozda, Pavanakumar Mohanamuraly, Lionel Cheng, Corentin Lapeyre, Guillaume Daviller, Yuval Realpe, Amir Adler, Gabriel Staffelbach, and Thierry Poinsot. Learning an optimised stable Taylor–Galerkin convection scheme based on a local spectral model for the numerical error dynamics. *Journal of Computational Physics*, 493(??):??, November 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123005259.

Dzanic:2024:DMA

[DMK+24] T. Dzanic, K. Mittal, D. Kim, J. Yang, S. Petrides, B. Keith, and R. Anderson. DynAMO: Multi-agent reinforcement learning for dynamic anticipatory mesh optimization with applications to hyperbolic conservation laws. *Journal of Computational Physics*, 506(??):??, June 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124001736.

Hurtado-de-Mendoza:2022:NMA

[dMKJ+22] Aurelio Hurtado de Mendoza, Jiaqing Kou, Saumitra Joshi, Kunal Puri, Charles Hirsch, and Esteban Ferrer. Non-modal analysis of linear multigrid schemes for the high-order Flux Reconstruction method. *Journal of Computational Physics*, 456(??):??, May 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122001322.

Dao:2022:ESA

[DMN22] Tuan Anh Dao, Ken Mattsson, and Murtazo Nazarov. Energy stable and accurate coupling of finite element methods and finite difference methods. *Journal of Computational Physics*, 449(??):Article 110791, January 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121006860.

Dunning:2020:AMR

[DMRB20] D. Dunning, W. Marts, R. W. Robey, and P. Bridges. Adaptive mesh refinement in the fast lane. *Journal of Computational Physics*, 406(??):Article 109193, April 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119308988.

Dai:2022:MSP

[DMRG22] Ruiyang Dai, Axel Modave, Jean-François Remacle, and Christophe Geuzaine. Multidirectional sweeping preconditioners with non-overlapping checkerboard domain decomposition for Helmholtz problems. *Journal of Computational Physics*, 453(??):Article 110887, March 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121007828.

Dong:2021:MRP

[DN21] Suchuan Dong and Naxian Ni. A method for representing periodic functions and enforcing exactly periodic boundary conditions with deep neural networks. *Journal of Computational Physics*, 435(??):Article 110242, June 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121001376.

Dao:2024:NBH

[DN24] Tuan Anh Dao and Murtazo Nazarov. A nodal based high order nonlinear stabilization for finite element approximation of magnetohydrodynamics. *Journal of Computational Physics*, 512(??):??, September 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124003954.

Do:2023:ADO

[DNO23] Minh-Hieu Do, Van-Thanh Nguyen, and Pascal Omnes. Analysis of dissipation operators that damp spurious modes while maintaining discrete approximate geostrophic equilibriums for the b-grid staggered scheme on triangular meshes. *Journal of Computational Physics*, 489(??):??, September 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912300356X.

Denich:2023:FAN

[DNP23] Eleonora Denich, Paolo Novati, and Stefano Picotti. A fast and accurate numerical approach for electromagnetic inversion. *Journal of Computational Physics*, 475(??):??, February 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122009093.

Dao:2024:SPN

[DNT24] Tuan Anh Dao, Murtazo Nazarov, and Ignacio Tomas. A structure preserving numerical method for the ideal compressible MHD system. *Journal of Computational Physics*, 508(??):??, July 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124002584.

Darde:2023:IBM

[DNW23] Jérémi Dardé, Niami Nasr, and Lisl Weynans. Immersed boundary method for the complete electrode model in electrical impedance tomography. *Journal of Computational Physics*, 487(??):??, August 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

URL http://www.sciencedirect.com/science/article/pii/S0021999123002450.

deOlazabal:2024:AGL

[dOBL24] R. de Olazábal, R. Borrell, and O. Lehmkuhl. An algebraic global linelet preconditioner for incompressible flow solvers. *Journal of Computational Physics*, 514(??):??, October 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124004868.

Dupuy:2023:DDW

[DOL23] D. Dupuy, N. Odier, and C. Lapeyre. Data-driven wall modeling for turbulent separated flows. *Journal of Computational Physics*, 487(??):??, August 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123002681.

Dong:2023:SRS

[Don23] Jian Dong. Surface reconstruction schemes for shallow water equations with a nonconservative product source term. *Journal of Computational Physics*, 473(??):??, January 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122008014.

Droniou:2023:PDR

[DOQ23] Jérôme Droniou, Todd A. Oliynyk, and Jia Jia Qian. A polyhedral discrete de Rham numerical scheme for the Yang–Mills equations. *Journal of Computational Physics*, 478(??):??, April 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123000505.

Giorgio:2024:EAS

[DPI24] Simone Di Giorgio, Sergio Pirozzoli, and Alessandro Iafrati. Evaluation of advection schemes and surface tension model for algebraic and geometric VOF multiphase flow solvers. *Journal of Computational Physics*, 499(??):??, February 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123008124.

dAquino:2024:MGI

[dPS24] M. d'Aquino, S. Perna, and C. Serpico. Midpoint geometric integrators for inertial magnetization dynamics. *Journal of Computational Physics*, 504(??):??, May 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124001232.

Doherty:2023:SFE

[DPX23] William Doherty, Timothy N. Phillips, and Zhihua Xie. A stabilised finite element framework for viscoelastic multiphase flows using a conservative level-set method. *Journal of Computational Physics*, 477(??):??, March 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123000311.

Doherty:2024:LCF

[DPX24] William Doherty, Timothy N. Phillips, and Zhihua Xie. The log-conformation formulation for single- and multiphase axisymmetric viscoelastic flows. *Journal of Computational Physics*, 508(??):??, July 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124002638.

Dong:2024:SDE

[DQ24] Jian Dong and Xu Qian. Semi-discrete entropy-preserving surface reconstruction schemes for the shallow water equations: Analysis of physical structures. *Journal of Computational Physics*, 508(??):??, July 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124002444.

Deck:2020:TEP

[DR20] Sébastien Deck and Nicolas Renard. Towards an enhanced protection of attached boundary layers in hybrid RANS/LES methods. *Journal of Computational Physics*, 400(??):Article 108970, January 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119306758.

Diddens:2024:BTM

[DR24] Christian Diddens and Duarte Rocha. Bifurcation tracking on moving meshes and with consideration of azimuthal symmetry breaking instabilities. *Journal of Computational Physics*, 518(??):??, December 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124005540.

Ding:2020:CGE

[DS20] Ounan Ding and Craig Schroeder. Cached Gaussian elimination for simulating Stokes flow on domains with repetitive geometry. *Journal of Computational Physics*, 423 (??):Article 109812, December 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120305866.

Dolejsi:2021:NST

[DS21] Vít Dolejsí and Magnus Svärd. Numerical study of two models for viscous compressible fluid flows. *Journal of Computational Physics*, 427(??):Article 110068, February 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120308421.

Delmas:2022:PHO

[DS22a] Vincent Delmas and Azzeddine Soulaïmani. Parallel high-order resolution of the shallow-water equations on real large-scale meshes with complex bathymetries. *Journal of Computational Physics*, 471(??):??, December 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122006921.

Duong:2022:ARS

[DS22b] Manh Hong Duong and Xiaocheng Shang. Accurate and robust splitting methods for the generalized Langevin equation with a positive Prony series memory kernel. *Journal of Computational Physics*, 464(??):??, September 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122003941.

Datta:2023:CEH

[DS23a] I. A. M. Datta and U. Shumlak. Computationally efficient high-fidelity plasma simulations by coupling multi-species kinetic and multi-fluid models on decomposed domains. *Journal of Computational Physics*, 483(??):??, June 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123001687.

Du:2023:FLM

[DS23b] Shukai Du and Samuel N. Stechmann. Fast, low-memory numerical methods for radiative transfer via *hp*-adaptive mesh refinement. *Journal of Computational Physics*, 480(??):??, May 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912300116X.

Dyachenko:2023:QPS

[DS23c] Sergey A. Dyachenko and Anastassiya Semenova. Quasiperiodic perturbations of Stokes waves: Secondary bifurcations and stability. *Journal of Computational Physics*, 492(??):??, November 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123005065.

DeSterck:2023:ERR

[DSA23] Hans De Sterck, Chi-Wang Shu, and Rémi Abgrall. Enhancing reproducibility of research papers in SISC, JSC and JCP. *Journal of Computational Physics*, 484(??):??, July 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123001833.

Doherty:2024:QQB

[DSBD24] Kevin Doherty, Cooper Simpson, Stephen Becker, and Alireza Doostan. QuadConv: Quadrature-based convolutions with applications to non-uniform PDE data compression. *Journal of Computational Physics*, 498(??):??, February 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123007313.

Delgado-Sanchez:2020:TLS

[DSBFN+20] J. M. Delgado-Sánchez, F. Bouchut, E. D. Fernández-Nieto, A. Mangeney, and G. Narbona-Reina. A two-layer shallow flow model with two axes of integration, well-balanced discretization and application to submarine avalanches. *Journal of Computational Physics*, 406(??):Article 109186, April 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119308915.

deSouza:2024:NRT

[dSdCdMC+24] Artur Castiel Reis de Souza, Darlan Karlo Elisiário de Carvalho, Túlio de Moura Cavalcante, Fernando Raul Licapa Contreras, Michael G. Edwards, and Paulo Roberto Maciel Lyra. A nonlinear repair technique for the MPFA-D scheme in single-phase flow problems and heterogeneous and anisotropic media. *Journal of Computational Physics*, 501(??):??, March 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124000081.

DeKlerk:2022:VID

[DSG+22] David N. De Klerk, Thomas Shire, Zhiwei Gao, Andrew T. McBride, Christopher J. Pearce, and Paul Steinmann. A variational integrator for the Discrete Element Method. *Journal of Computational Physics*, 462(??):??, August 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122003151.

dosSantos:2022:ADM

[dSLdA+22] José Cícero Araujo dos Santos, Paulo Roberto Maciel Lyra, João Paulo Rodrigues de Andrade, Artur Castiel Reis de Souza, Ricardo Jorge Morais de Lira Filho, and Darlan Karlo Elisiário de Carvalho. An algebraic dynamic multilevel and multiscale method with non-uniform mesh resolution and adaptive algebraic multiscale solver operator for the simulation of two-phase flows in highly heterogeneous petroleum reservoirs. *Journal of Computational Physics*, 462(??):??, August 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122002364.

Doehring:2024:MTI

[DSLGT24] Daniel Doehring, Michael Schlottke-Lakemper, Gregor J. Gassner, and Manuel Torrilhon. Multirate time-integration based on dynamic ODE partitioning through adaptively refined meshes for compressible fluid dynamics. *Journal of Computational Physics*, 514(??):??, October 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124004728.

daSilva:2024:FWR

[dSNAG24] A. A. M. da Silva, A. A. Novotny, A. A. S. Amad, and B. B. Guzina. Full-waveform reconstruction of micro-seismic events via topological derivative approach. *Journal of Computational Physics*, 510(??):??, August 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124003486.

Demou:2022:PBD

[DSPB22] Andreas D. Demou, Nicolò Scapin, Marica Pelanti, and Luca Brandt. A pressure-based diffuse interface method for low-Mach multiphase flows with mass transfer. *Journal of Computational Physics*, 448(??):Article 110730, January 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121006252.

Ding:2020:APC

[DSS20] Ounan Ding, Tamar Shinar, and Craig Schroeder. Affine particle in cell method for MAC grids and fluid simulation. *Journal of Computational Physics*, 408(??):Article 109311, May 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120300851.

Dhulipala:2022:ALM

[DSS+22] Somayajulu L. N. Dhulipala, Michael D. Shields, Benjamin W. Spencer, Chandrakanth Bolisetti, Andrew E. Slaughter, Vincent M. Labouré, and Promit Chakroborty. Active learning with multifidelity modeling for efficient rare event simulation. *Journal of Computational Physics*, 468

(??):??, November 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912200568X.

Dargaville:2020:GBA

[DSSSP20] S. Dargaville, R. P. Smedley-Stevenson, P. N. Smith, and C. C. Pain. Goal-based angular adaptivity for Boltzmann transport in the presence of ray-effects. *Journal of Computational Physics*, 421(??):Article 109759, November 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120305337.

Dargaville:2024:AMG

[DSSSP24] S. Dargaville, R. P. Smedley-Stevenson, P. N. Smith, and C. C. Pain. AIR multigrid with GMRES polynomials (AIRG) and additive preconditioners for Boltzmann transport. *Journal of Computational Physics*, 518(??):??, December 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124005904.

Ding:2020:CFD

[DSZ20] Shengrong Ding, Chi-Wang Shu, and Mengping Zhang. On the conservation of finite difference WENO schemes in non-rectangular domains using the inverse Lax–Wendroff boundary treatments. *Journal of Computational Physics*, 415(??):Article 109516, August 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120302904.

Du:2022:ISW

[DSZ22] Jie Du, Chi-Wang Shu, and Xinghui Zhong. An improved simple WENO limiter for discontinuous Galerkin methods solving hyperbolic systems on unstructured meshes. *Journal of Computational Physics*, 467(??):??, October 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122004867.

Duan:2020:HOA

[DT20] Junming Duan and Huazhong Tang. High-order accurate entropy stable nodal discontinuous Galerkin schemes for the ideal special relativistic magnetohydrodynamics. *Journal of Computational Physics*, 421(??):Article 109731, November 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120305052.

Duan:2021:ESA

[DT21a] Junming Duan and Huazhong Tang. Entropy stable adaptive moving mesh schemes for 2D and 3D special relativistic hydrodynamics. *Journal of Computational Physics*, 426(??):Article 109949, February 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120307233.

Duan:2021:HOA

[DT21b] Junming Duan and Huazhong Tang. High-order accurate entropy stable finite difference schemes for the shallow water magnetohydrodynamics. *Journal of Computational Physics*, 431(??):Article 110136, April 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121000280.

Deucher:2022:HRA

[DT22a] Ricardo H. Deucher and Hamdi A. Tchelepi. High resolution adaptive implicit method for reactive transport in heterogeneous porous media. *Journal of Computational Physics*, 466(??):??, October 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122004533.

Duan:2022:ASI

[DT22b] Junming Duan and Huazhong Tang. An analytical solution of the isentropic vortex problem in the special relativistic magnetohydrodynamics. *Journal of Computational Physics*, 456(??):??, May 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

URL http://www.sciencedirect.com/science/article/pii/S0021999121007981.

Duan:2022:HOA

[DT22c] Junming Duan and Huazhong Tang. High-order accurate entropy stable adaptive moving mesh finite difference schemes for special relativistic (magneto)hydrodynamics. *Journal of Computational Physics*, 456(??):??, May 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122001000.

Dupuy:2020:AAP

[DTB20] Dorian Dupuy, Adrien Toutant, and Françoise Bataille. Analysis of artificial pressure equations in numerical simulations of a turbulent channel flow. *Journal of Computational Physics*, 411(??):Article 109407, June 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120301819.

Das:2020:SIM

[DU20] Pratik Das and H. S. Udaykumar. A sharp-interface method for the simulation of shock-induced vaporization of droplets. *Journal of Computational Physics*, 405(??):Article 109005, March 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119307107.

Delmotte:2024:SMM

[DU24] Blaise Delmotte and Florencio Balboa Usabiaga. A scalable method to model large suspensions of colloidal phoretic particles with arbitrary shapes. *Journal of Computational Physics*, 518(??):??, December 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124005692.

Dupuy:2021:VPA

[Dup21] Mi-Song Dupuy. Variational projector-augmented wave method: a full-potential approach for electronic structure calculations in solid-state physics. *Journal of Computational Physics*, 442(??):Article 110510, October 1, 2021. CODEN

JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121004058.

Dektor:2020:DOT

[DV20] Alec Dektor and Daniele Venturi. Dynamically orthogonal tensor methods for high-dimensional nonlinear PDEs. *Journal of Computational Physics*, 404(??):Article 109125, March 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119308307.

Dektor:2021:DTA

[DV21] Alec Dektor and Daniele Venturi. Dynamic tensor approximation of high-dimensional nonlinear PDEs. *Journal of Computational Physics*, 437(??):Article 110295, July 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912100190X.

Dwarka:2022:SML

[DV22] Vandana Dwarka and Cornelis Vuik. Scalable multi-level deflation preconditioning for highly indefinite time-harmonic waves. *Journal of Computational Physics*, 469(??):??, November 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122003898.

daSilvaInacio:2023:CPI

[dv23a] Leonardo Afonso da Silva Inácio and André von Borries Lopes. Comment on “Progress and investigation on lattice Boltzmann modeling of multiple immiscible fluids or components with variable density and viscosity ratios”. *Journal of Computational Physics*, 474(??):??, February 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912200883X. See [LRT13].

Dektor:2023:TRR

[DV23b] Alec Dektor and Daniele Venturi. Tensor rank reduction via coordinate flows. *Journal of Computational*

Physics, 491(??):??, October 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123004734.

Duran:2020:ESS

[DVB20] Arnaud Duran, Jean-Paul Vila, and Rémy Baraille. Energy-stable staggered schemes for the shallow water equations. *Journal of Computational Physics*, 401(??): Article 109051, January 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119307569.

Dominguez-Vazquez:2024:HOL

[DVCBJT24] Daniel Domínguez-Vázquez, Sergio A. Castiblanco-Ballesteros, Gustaaf B. Jacobs, and Daniel M. Tartakovsky. High-order Lagrangian algorithms for Liouville models of particle-laden flows. *Journal of Computational Physics*, 515(??):??, October 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124005291.

Dasika:2022:CLS

[DVS22] Sunder Dasika, Dipak Vaghani, and Ratnesh K. Shukla. Constrained least-squares based adaptive-order finite-volume WENO scheme for the simulation of viscous compressible flows on unstructured grids. *Journal of Computational Physics*, 470(??):??, December 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122005964.

DelCorso:2022:FCM

[DVV22] Giulio Del Corso, Roberto Verzicco, and Francesco Viola. A fast computational model for the electrophysiology of the whole human heart. *Journal of Computational Physics*, 457(??):??, May 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122001462.

Drake:2020:FAA

[DW20a] Kathryn P. Drake and Grady B. Wright. A fast and accurate algorithm for spherical harmonic analysis on HEALPix grids with applications to the cosmic microwave background radiation. *Journal of Computational Physics*, 416 (??):Article 109544, September 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999120303181`.

Drake:2020:SAD

[DW20b] Kathryn P. Drake and Grady B. Wright. A stable algorithm for divergence-free radial basis functions in the flat limit. *Journal of Computational Physics*, 417(??): Article 109595, September 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999120303697`.

Dorn:2021:SRS

[DW21] Oliver Dorn and Yifan Wu. Shape reconstruction in seismic full waveform inversion using a level set approach and time reversal. *Journal of Computational Physics*, 427 (??):Article 110059, February 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999120308330`.

Dzanic:2022:PPE

[DW22] T. Dzanic and F. D. Witherden. Positivity-preserving entropy-based adaptive filtering for discontinuous spectral element methods. *Journal of Computational Physics*, 468 (??):??, November 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999122005630`.

Dong:2023:MCI

[DW23] Suchuan Dong and Yiran Wang. A method for computing inverse parametric PDE problems with random-weight neural networks. *Journal of Computational Physics*, 489(??):??, September 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL

http://www.sciencedirect.com/science/article/pii/S0021999123003583.

Ding:2024:GBB

[DW24] Shengrong Ding and Kailiang Wu. GQL-based bound-preserving and locally divergence-free central discontinuous Galerkin schemes for relativistic magnetohydrodynamics. *Journal of Computational Physics*, 514(??):??, October 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124004571.

Dzanic:2023:PPC

[DWM23] T. Dzanic, F. D. Witherden, and L. Martinelli. A positivity-preserving and conservative high-order flux reconstruction method for the polyatomic Boltzmann-BGK equation. *Journal of Computational Physics*, 486(??):??, August 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123002413.

Dong:2021:PPE

[DWWZ21] Lixiu Dong, Cheng Wang, Steven M. Wise, and Zhengru Zhang. A positivity-preserving, energy stable scheme for a ternary Cahn–Hilliard system with the singular interfacial parameters. *Journal of Computational Physics*, 442(??):Article 110451, October 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121003466.

Ding:2020:SPE

[DWZ20] Jie Ding, Zhongming Wang, and Shenggao Zhou. Structure-preserving and efficient numerical methods for ion transport. *Journal of Computational Physics*, 418(??):Article 109597, October 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120303715.

Ding:2023:EDP

[DWZ23] Jie Ding, Zhongming Wang, and Shenggao Zhou. Energy dissipative and positivity preserving schemes for large-convection ion transport with steric and solvation effects.

Journal of Computational Physics, 488(??):??, September 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123003017.

DeMarchi:2024:EMF

[DXFS24] Nico De Marchi, Giovanna Xotta, Massimiliano Ferronato, and Valentina Salomoni. An efficient multi-field dynamic model for 3D wave propagation in saturated anisotropic porous media. *Journal of Computational Physics*, 510(??):??, August 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124003310.

Danis:2022:NDD

[DY22a] Mustafa E. Danis and Jue Yan. A new direct discontinuous Galerkin method with interface correction for two-dimensional compressible Navier–Stokes equations. *Journal of Computational Physics*, 452(??):Article 110904, March 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121007993.

Dong:2022:CHE

[DY22b] Suchuan Dong and Jielin Yang. On computing the hyperparameter of extreme learning machines: Algorithm and application to computational PDEs, and comparison with classical and high-order finite elements. *Journal of Computational Physics*, 463(??):??, August 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122003527.

Du:2022:EHH

[DY22c] Eugene Du and Masayuki Yano. Efficient hyperreduction of high-order discontinuous Galerkin methods: Element-wise and point-wise reduced quadrature formulations. *Journal of Computational Physics*, 466(??):??, October 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122004612.

Du:2022:HOB

[DY22d] Jie Du and Yang Yang. High-order bound-preserving discontinuous Galerkin methods for multicomponent chemically reacting flows. *Journal of Computational Physics*, 469(??):??, November 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122006106.

Dong:2022:SHO

[DYGC22] Hao Dong, Zihao Yang, Xiaofei Guan, and Junzhi Cui. Stochastic higher-order three-scale strength prediction model for composite structures with micromechanical analysis. *Journal of Computational Physics*, 465(??):??, September 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122004144.

Dorschner:2020:FMR

[DYMC20] Benedikt Dorschner, Ke Yu, Gianmarco Mengaldo, and Tim Colonius. A fast multi-resolution lattice Green's function method for elliptic difference equations. *Journal of Computational Physics*, 407(??):Article 109270, April 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120300449.

Du:2024:VBF

[DYS+24] Y. J. Du, L. M. Yang, C. Shu, H. Dong, Y. Xiao, and Y. X. Song. Virtual body-fitted grid-based immersed boundary method for simulation of thermal flows with Dirichlet and Neumann boundary conditions. *Journal of Computational Physics*, 519(??):??, December 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124006983.

Du:2024:WBP

[DYZ24] Jie Du, Yang Yang, and Fangyao Zhu. Well-balanced positivity-preserving high-order discontinuous Galerkin methods for Euler equations with gravitation. *Journal of Computational Physics*, 505(??):??, May 15, 2024. CODEN

JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124001268.

Du:2022:PML

[DZ22] Yu Du and Jiwei Zhang. Perfectly matched layers for nonlocal Helmholtz equations II: Multi-dimensional cases. *Journal of Computational Physics*, 464(??):??, September 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122002546.

Du:2023:NSN

[DZ23] Yu Du and Jiwei Zhang. Numerical solutions for nonlocal wave equations by perfectly matched layers II: the two-dimensional case. *Journal of Computational Physics*, 488(??):??, September 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123003042.

Ding:2024:SOP

[DZ24] Jie Ding and Shenggao Zhou. Second-order, positive, and unconditional energy dissipative scheme for modified Poisson–Nernst–Planck equations. *Journal of Computational Physics*, 510(??):??, August 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124003437.

Dzanic:2024:CBP

[Dza24a] T. Dzanic. Continuously bounds-preserving discontinuous Galerkin methods for hyperbolic conservation laws. *Journal of Computational Physics*, 508(??):??, July 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124002596.

Dzanic:2024:NHO

[Dza24b] T. Dzanic. A note on higher-order and nonlinear limiting approaches for continuously bounds-preserving discontinuous Galerkin methods. *Journal of Computational*

Physics, 516(??):??, November 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124006156.

deZordo-Banliat:2024:SDT

[dZBDMC24] M. de Zordo-Banliat, G. Dergham, X. Merle, and P. Cinnella. Space-dependent turbulence model aggregation using machine learning. *Journal of Computational Physics*, 497(??):??, January 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123007234.

Ding:2023:PIM

[DZC+23] Cuiyang Ding, Yijing Zhou, Wei Cai, Xuan Zeng, and Changhao Yan. A path integral Monte Carlo (PIMC) method based on Feynman–Kac formula for electrical impedance tomography. *Journal of Computational Physics*, 476(??):??, March 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122009251.

Dumbser:2024:WBD

[DZGP24] Michael Dumbser, Olindo Zanotti, Elena Gaburro, and Ilya Peshkov. A well-balanced discontinuous Galerkin method for the first-order Z4 formulation of the Einstein-Euler system. *Journal of Computational Physics*, 504(??):??, May 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124001244.

Dana:2022:TGS

[DZJ22] Saumik Dana, Xiaoxi Zhao, and Birendra Jha. A two-grid simulation framework for fast monitoring of fault stability and ground deformation in multiphase geomechanics. *Journal of Computational Physics*, 466(??):??, October 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122004673.

Deng:2022:TOS

[DZL+22] Yongbo Deng, Weihong Zhang, Zhenyu Liu, Jihong Zhu, and Jan G. Korvink. Topology optimization for surface flows.

Journal of Computational Physics, 467(??):??, October 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122004776.

Estivalezes:2022:PIB

[EAA+22] J.-L. Estivalezes, W. Aniszewski, F. Auguste, Y. Ling, L. Osmar, J.-P. Caltagirone, L. Chirco, A. Pedrono, S. Popinet, A. Berlemont, J. Magnaudet, T. Ménard, S. Vincent, and S. Zaleski. A phase inversion benchmark for multiscale multiphase flows. *Journal of Computational Physics*, 450 (??):Article 110810, February 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121007051.

Esmaeili:2020:GDT

[EAK20] Mohammad Esmaeili, Mohammad Ahmadi, and Alireza Kazemi. A generalized DEIM technique for model order reduction of porous media simulations in reservoir optimizations. *Journal of Computational Physics*, 422 (??):Article 109769, December 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912030543X.

Eshraghi:2023:CGA

[EASA23] H. Eshraghi, E. Amani, and M. Saffar-Avval. Coarse-graining algorithms for the Eulerian–Lagrangian simulation of particle-laden flows. *Journal of Computational Physics*, 493(??):??, November 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123005569.

Egan:2022:NIG

[EBC+22] C. P. Egan, D. P. Bourne, C. J. Cotter, M. J. P. Cullen, B. Pelloni, S. M. Roper, and M. Wilkinson. A new implementation of the geometric method for solving the Eady slice equations. *Journal of Computational Physics*, 469(??):??, November 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

URL http://www.sciencedirect.com/science/article/pii/S0021999122006040.

Elias:2020:ESE

[EC20] Moutaz Elias and Davide Curreli. An explicit scheme to enforce charge conservation in transient Particle-in-Cell simulations with Maxwell–Boltzmann electrons. *Journal of Computational Physics*, 409(??):Article 109320, May 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120300942.

Evangelou:2023:DDM

[EDC+23] Nikolaos Evangelou, Felix Dietrich, Eliodoro Chiavazzo, Daniel Lehmberg, Marina Meila, and Ioannis G. Kevrekidis. Double diffusion maps and their latent harmonics for scientific computations in latent space. *Journal of Computational Physics*, 485(??):??, July 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123001675.

Emmendoerfer:2023:FWI

[EdCC+23] Hélio Emmendoerfer, Paulo Bastos de Castro, Bruno Souza Carmo, Emílio Carlos Nelli Silva, and Eduardo Alberto Fancello. Full-waveform inversion using level set and cut elements for sharp-interface problems. *Journal of Computational Physics*, 495(??):??, December 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123006563.

Elzaabalawy:2023:ASR

[EDEV23] H. Elzaabalawy, G. Deng, L. Eça, and M. Visonneau. Assessment of solving the RANS equations with two-equation eddy-viscosity models using high-order accurate discretization. *Journal of Computational Physics*, 483(??):??, June 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123001547.

Escalante:2024:VAM

[EdLCCCO24] C. Escalante, T. Morales de Luna, F. Cantero-Chinchilla, and O. Castro-Orgaz. Vertically averaged and moment equations: New derivation, efficient numerical solution and comparison with other physical approximations for modeling non-hydrostatic free surface flows. *Journal of Computational Physics*, 504(??):??, May 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999124001311`.

Ekici:2020:MPN

[EDLF20] Kivanc Ekici, Reza Djeddi, Hang Li, and Jay I. Frankel. Modeling periodic and non-periodic response of dynamical systems using an efficient Chebyshev-based time-spectral approach. *Journal of Computational Physics*, 417(??): Article 109560, September 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S002199912030334X`.

Edoh:2022:NKE

[Edo22] Ayaboe K. Edoh. A new kinetic-energy-preserving method based on the convective rotational form. *Journal of Computational Physics*, 454(??):Article 110971, April 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S002199912200033X`.

Edoh:2024:CCP

[Edo24] Ayaboe K. Edoh. Conservative correction procedures utilizing artificial dissipation operators. *Journal of Computational Physics*, 504(??):??, May 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999124001293`.

Eslaminia:2022:FWI

[EEG22] Mehran Eslaminia, Abdelrahman M. Elmeliegy, and Murthy N. Guddati. Full waveform inversion through double-sweeping solver. *Journal of Computational Physics*, 453(??):Article

110914, March 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121008093.

Evans:2019:ANS

[EFO19] Jonathan D. Evans, Hugo L. França, and Cassio M. Oishi. Application of the natural stress formulation for solving unsteady viscoelastic contraction flows. *Journal of Computational Physics*, 388(??):462–489, July 1, 2019. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119301627. See corrigendum [EFO20].

Evans:2020:CAN

[EFO20] Jonathan D. Evans, Hugo L. França, and Cassio M. Oishi. Corrigendum to "Application of the natural stress formulation for solving unsteady viscoelastic contraction flows" [J. Comput. Phys. **388** (462–489)]. *Journal of Computational Physics*, 404(??):Article 108693, March 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119303511. See [EFO19].

Elarif:2021:TFB

[EFR21] Ali Elarif, Blaise Faugeras, and Francesca Rapetti. Tokamak free-boundary plasma equilibrium computation using finite elements of class C0 and C1 within a mortar element approach. *Journal of Computational Physics*, 439(??):Article 110388, August 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121002837.

Efendiev:2020:SIA

[EFS+20] Yalchin Efendiev, Abbas Firoozabadi, Shuyu Sun, Mary F. Wheeler, and Bo Yu. Special issue: Advanced numerical modeling and algorithms for multiphase flow and transport. *Journal of Computational Physics*, 408(??):Article 109222, May 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119309271.

Evstatiev:2021:NEA

[EFSH21] E. G. Evstatiev, J. M. Finn, B. A. Shadwick, and N. Hengartner. Noise and error analysis and optimization in particle-based kinetic plasma simulations. *Journal of Computational Physics*, 440(??):Article 110394, September 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121002898.

Etter:2023:CPR

[EFY23] Philip A. Etter, Yuwei Fan, and Lexing Ying. Coarse-proxy reduced basis methods for integral equations. *Journal of Computational Physics*, 475(??):??, February 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122008981.

Egan:2020:XRC

[EG20] Raphael Egan and Frédéric Gibou. xGFM: Recovering convergence of fluxes in the ghost fluid method. *Journal of Computational Physics*, 409(??):Article 109351, May 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912030125X.

Exposito:2023:WPD

[EGN23] D. Exposito, S. L. Gai, and A. J. Neely. On wave-packets and discontinuities in triple-deck solutions of supersonic separated flows at a compression corner. *Journal of Computational Physics*, 474(??):??, February 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122008336.

Egan:2021:DNS

[EGTC+21] Raphael Egan, Arthur Guittet, Fernando Temprano-Coleto, Tobin Isaac, François J. Peaudecerf, Julien R. Landel, Paolo Luzzatto-Fegiz, Carsten Burstedde, and Frederic Gibou. Direct numerical simulation of incompressible flows on parallel octree grids. *Journal of Computational Physics*, 428(??):Article 110084, March 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

URL http://www.sciencedirect.com/science/article/pii/S0021999120308585.

Endeve:2022:CDM

[EH22a] Eirik Endeve and Cory D. Hauck. Conservative DG method for the micro-macro decomposition of the Vlasov–Poisson–Lenard–Bernstein model. *Journal of Computational Physics*, 462(??):??, August 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122002893.

Escalante:2022:SGM

[EH22b] José A. Morales Escalante and Clemens Heitzinger. Stochastic Galerkin methods for the Boltzmann–Poisson system. *Journal of Computational Physics*, 466(??):??, October 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122004624.

Espig:2020:IAP

[EHL+20] Mike Espig, Wolfgang Hackbusch, Alexander Litvinenko, Hermann G. Matthies, and Elmar Zander. Iterative algorithms for the post-processing of high-dimensional data. *Journal of Computational Physics*, 410(??):Article 109396, June 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120301704.

Einkemmer:2021:APD

[EHW21] Lukas Einkemmer, Jingwei Hu, and Yubo Wang. An asymptotic-preserving dynamical low-rank method for the multi-scale multi-dimensional linear transport equation. *Journal of Computational Physics*, 439(??):Article 110353, August 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121002485.

Einkemmer:2024:ASK

[Ein24] Lukas Einkemmer. Accelerating the simulation of kinetic shear Alfvén waves with a dynamical low-rank approximation. *Journal of Computational Physics*, 501(??):??, March

15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124000068.

Einkemmer:2021:MME

[EJ21] Lukas Einkemmer and Ilon Joseph. A mass, momentum, and energy conservative dynamical low-rank scheme for the Vlasov equation. *Journal of Computational Physics*, 443(??):Article 110495, October 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121003909.

Ellison:2023:GP

[EJ23a] Abram C. Ellison and Keith Julien. Gyroscopic polynomials. *Journal of Computational Physics*, 489(??):??, September 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123003637.

Esmaily:2023:SFS

[EJ23b] Mahdi Esmaily and Dongjie Jia. A stabilized formulation for the solution of the incompressible unsteady Stokes equations in the frequency domain. *Journal of Computational Physics*, 473(??):??, January 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122007999.

Ellison:2022:GPB

[EJV22] Abram C. Ellison, Keith Julien, and Geoffrey M. Vasil. A gyroscopic polynomial basis in the sphere. *Journal of Computational Physics*, 460(??):??, July 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122002327.

Ewert:2021:HAS

[EK21] Roland Ewert and Johannes Kreuzinger. Hydrodynamic/acoustic splitting approach with flow-acoustic feedback for universal subsonic noise computation. *Journal of Computational Physics*, 444(??):Article 110548, November 1, 2021.

CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121004435.

Engel:2023:BUM

[EKPS23] Michael Engel, Oindrila Kanjilal, Iason Papaioannou, and Daniel Straub. Bayesian updating and marginal likelihood estimation by cross entropy based importance sampling. *Journal of Computational Physics*, 473(??):??, January 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122008099.

Efendiev:2023:MHR

[EL23] Yalchin Efendiev and Wing Tat Leung. Multicontinuum homogenization and its relation to nonlocal multicontinuum theories. *Journal of Computational Physics*, 474(??):??, February 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122008245.

Eidnes:2024:PHN

[EL24] Sølve Eidnes and Kjetil Olsen Lye. Pseudo-Hamiltonian neural networks for learning partial differential equations. *Journal of Computational Physics*, 500(??):??, March 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123008343.

Eldredge:2022:MIL

[Eld22] Jeff D. Eldredge. A method of immersed layers on Cartesian grids, with application to incompressible flows. *Journal of Computational Physics*, 448(??):Article 110716, January 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121006112.

Liu:2024:SOF

[eLGQ24] Sheng en Liu, Yongbin Ge, and Yingnan Qi. A sixth-order finite difference method for the two-dimensional nonlinear advection diffusion reaction equation. *Journal of Computational Physics*, 517(??):??, November 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

URL http://www.sciencedirect.com/science/article/pii/S0021999124006090.

Efendiev:2023:NTE

[ELL+23] Yalchin Efendiev, Wing Tat Leung, Wenyuan Li, Sai-Mang Pun, and Petr N. Vabishchevich. Nonlocal transport equations in multiscale media. modeling, dememorization, and discretizations. *Journal of Computational Physics*, 472(??):??, January 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122006179.

Efendiev:2022:EHE

[ELLZ22] Yalchin Efendiev, Wing Tat Leung, Guang Lin, and Zecheng Zhang. Efficient hybrid explicit-implicit learning for multiscale problems. *Journal of Computational Physics*, 467(??):??, October 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122003886.

Elman:2022:SAG

[ELSV22] Howard C. Elman, Jiaxing Liang, and Tonatiuh Sánchez-Vizuet. Surrogate approximation of the Grad–Shafranov free boundary problem via stochastic collocation on sparse grids. *Journal of Computational Physics*, 448(??):Article 110699, January 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121005945.

Einkemmer:2024:SIV

[ELWY24] Lukas Einkemmer, Qin Li, Li Wang, and Yang Yunan. Suppressing instability in a Vlasov–Poisson system by an external electric field through constrained optimization. *Journal of Computational Physics*, 498(??):??, February 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912300757X.

Ejtehadi:2020:MDG

[EM20] Omid Ejtehadi and R. S. Myong. A modal discontinuous Galerkin method for simulating dusty and granular gas flows in thermal non-equilibrium in the Eulerian framework. *Journal of Computational Physics*, 411(??):Article 109410, June 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120301844.

Einkemmer:2024:LRC

[EMP24] Lukas Einkemmer, Julian Mangott, and Martina Prugger. A low-rank complexity reduction algorithm for the high-dimensional kinetic chemical master equation. *Journal of Computational Physics*, 503(??):??, April 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124000767.

Exl:2021:PMD

[EMS+21] Lukas Exl, Norbert J. Mauser, Sebastian Schaffer, Thomas Schrefl, and Dieter Suess. Prediction of magnetization dynamics in a reduced dimensional feature space setting utilizing a low-rank kernel method. *Journal of Computational Physics*, 444(??):Article 110586, November 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121004812.

Einkemmer:2020:LRP

[EOP20] Lukas Einkemmer, Alexander Ostermann, and Chiara Piazzola. A low-rank projector-splitting integrator for the Vlasov–Maxwell equations with divergence correction. *Journal of Computational Physics*, 403(??):Article 109063, February 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119307685.

Einkemmer:2023:RCD

[EOS23] Lukas Einkemmer, Alexander Ostermann, and Carmela Scalone. A robust and conservative dynamical low-rank algorithm. *Journal of Computational Physics*, 484(??):??, July 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123001559.

Esquivel:2021:FDS

[EPL21] Hugo Esquivel, Arun Prakash, and Guang Lin. Flow-driven spectral chaos (FSC) method for simulating long-time dynamics of arbitrary-order non-linear stochastic dynamical systems. *Journal of Computational Physics*, 430 (??):Article 110044, April 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120308184.

Esquivel:2022:MEF

[EPL22] Hugo Esquivel, Arun Prakash, and Guang Lin. Multi-element flow-driven spectral chaos (ME-FSC) method for uncertainty quantification of dynamical systems. *Journal of Computational Physics*, 467(??):??, October 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122004879.

Efendiev:2021:TSA

[EPV21] Yalchin Efendiev, Sai-Mang Pun, and Petr N. Vabishchevich. Temporal splitting algorithms for non-stationary multiscale problems. *Journal of Computational Physics*, 439 (??):Article 110375, August 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121002709.

Epstein:2022:DSR

[ER22] Charles L. Epstein and Manas Rachh. Debye source representations for type-I superconductors, I: the static type I case. *Journal of Computational Physics*, 452(??):Article 110892, March 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121007877.

Eremin:2022:ECC

[Ere22] D. Eremin. An energy- and charge-conserving electrostatic implicit particle-in-cell algorithm for simulations of collisional bounded plasmas. *Journal of Computational Physics*, 452(??):Article 110934, March 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

URL http://www.sciencedirect.com/science/article/pii/S0021999121008299.

Eriksson:2024:ASO

[ES24] Gustav Eriksson and Vidar Stiernström. Acoustic shape optimization using energy stable curvilinear finite differences. *Journal of Computational Physics*, 517(??):??, November 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124005953.

Epp:2023:FCS

[ESJ23] Robert Epp, Franca Schmid, and Patrick Jenny. Fast convergence strategy for ambiguous inverse problems based on hierarchical regularization. *Journal of Computational Physics*, 489(??):??, September 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123003595.

ElKahza:2024:KBA

[ETQC24] Hamad El Kahza, William Taitano, Jing-Mei Qiu, and Luis Chacón. Krylov-based adaptive-rank implicit time integrators for stiff problems with application to nonlinear Fokker–Planck kinetic models. *Journal of Computational Physics*, 518(??):??, December 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124005801.

Eriksson:2023:BIM

[EWN+23] Gustav Eriksson, Jonatan Werpers, David Niemelä, Niklas Wik, Valter Zethrin, and Ken Mattsson. Boundary and interface methods for energy stable finite difference discretizations of the dynamic beam equation. *Journal of Computational Physics*, 476(??):??, March 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123000025.

Faghihifar:2022:ERG

[FA22] Ehsan Faghihifar and Mahmood Akbari. Exclusive robustness of Gegenbauer method to truncated convolution errors.

Journal of Computational Physics, 452(??):Article 110911, March 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121008068.

Fleischmann:2020:SSM

[FAA20] Nico Fleischmann, Stefan Adami, and Nikolaus A. Adams. A shock-stable modification of the HLLC Riemann solver with reduced numerical dissipation. *Journal of Computational Physics*, 423(??):Article 109762, December 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120305362.

Feppon:2020:TOT

[FADJ20] F. Feppon, G. Allaire, C. Dapogny, and P. Jolivet. Topology optimization of thermal fluid-structure systems using body-fitted meshes and parallel computing. *Journal of Computational Physics*, 417(??):Article 109574, September 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912030348X.

Fleischmann:2020:LDM

[FAHA20] Nico Fleischmann, Stefan Adami, Xiangyu Y. Hu, and Nikolaus A. Adams. A low dissipation method to cure the grid-aligned shock instability. *Journal of Computational Physics*, 401(??):Article 109004, January 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119307090.

Fogouang:2024:PTP

[FALS24] Laurez Maya Fogouang, Laurent André, Philippe Leroy, and Cyprien Soulaine. Particulate transport in porous media at pore-scale. Part 2: CFD–DEM and colloidal forces. *Journal of Computational Physics*, 519(??):??, December 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124006879.

Farago:2020:ABD

[Far20] Oded Farago. Algorithms for Brownian dynamics across discontinuities. *Journal of Computational Physics*, 423 (??):Article 109802, December 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120305763.

Fuhg:2022:MDE

[FB22] Jan N. Fuhg and Nikolaos Bouklas. The mixed Deep Energy Method for resolving concentration features in finite strain hyperelasticity. *Journal of Computational Physics*, 451(??):Article 110839, February 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121007348.

Fikl:2023:ABC

[FB23] Alexandru Fikl and Daniel J. Bodony. Adjoint-based control of three dimensional Stokes droplets. *Journal of Computational Physics*, 494(??):??, December 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123006277.

Frambati:2022:PUS

[FBCD22] Stefano Frambati, Hélène Barucq, Henri Calandra, and Julien Diaz. Practical unstructured splines: Algorithms, multi-patch spline spaces, and some applications to numerical analysis. *Journal of Computational Physics*, 471(??):??, December 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912200688X.

Farquhar:2022:GBH

[FBD+22] Megan E. Farquhar, Kevin Burrage, Rodrigo Weber Dos Santos, Alfonso Bueno-Orovio, and Brodie A. J. Lawson. Graph-based homogenisation for modelling cardiac fibrosis. *Journal of Computational Physics*, 459(??):??, June 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122001887.

Flad:2020:LES

[FBG20] David Flad, Andrea Beck, and Philipp Guthke. A large eddy simulation method for DGSEM using non-linearly optimized relaxation filters. *Journal of Computational Physics*, 408(??):Article 109303, May 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120300772.

Firouznia:2023:SBI

[FBS23] Mohammadhossein Firouznia, Spencer H. Bryngelson, and David Saintillan. A spectral boundary integral method for simulating electrohydrodynamic flows in viscous drops. *Journal of Computational Physics*, 489(??):??, September 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123003431.

Fidkowski:2021:MBG

[FC21] Krzysztof J. Fidkowski and Guodong Chen. Metric-based, goal-oriented mesh adaptation using machine learning. *Journal of Computational Physics*, 426(??):Article 109957, February 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120307312.

Ferranti:2024:RSS

[FC24] Dana Ferranti and Ricardo Cortez. Regularized Stokeslet surfaces. *Journal of Computational Physics*, 508(??):??, July 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124002535.

Freno:2022:NMS

[FCBM22] Brian A. Freno, Brian R. Carnes, Victor E. Brunini, and Neil R. Matula. Nonintrusive manufactured solutions for non-decomposing ablation in two dimensions. *Journal of Computational Physics*, 463(??):??, August 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122002996.

Fernandez-Corbaton:2023:MEC

[FCGKR23] Ivan Fernandez-Corbaton, Roland Griesmaier, Marvin Knöller, and Carsten Rockstuhl. Maximizing the electromagnetic chirality of thin metallic nanowires at optical frequencies. *Journal of Computational Physics*, 475(??):??, February 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122009172.

Fu:2021:EMI

[FCL21] Shubin Fu, Eric T. Chung, and Guanglian Li. An Edge Multiscale Interior Penalty Discontinuous Galerkin method for heterogeneous Helmholtz problems with large varying wavenumber. *Journal of Computational Physics*, 441 (??):Article 110387, September 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121002825.

Foucart:2023:DRL

[FCL23] Corbin Foucart, Aaron Charous, and Pierre F. J. Lermusiaux. Deep reinforcement learning for adaptive mesh refinement. *Journal of Computational Physics*, 491(??):??, October 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912300476X.

Faghihi:2020:MPC

[FCM+20a] D. Faghihi, V. Carey, C. Michoski, R. Hager, S. Janhunen, C. S. Chang, and R. D. Moser. Moment preserving constrained resampling with applications to particle-in-cell methods. *Journal of Computational Physics*, 409 (??):Article 109317, May 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120300917.

Fu:2020:CEM

[FCM20b] Shubin Fu, Eric Chung, and Tina Mai. Constraint energy minimizing generalized multiscale finite element method for nonlinear poroelasticity and elasticity. *Journal of Computational Physics*, 417(??):Article 109569, September 15, 2020.

CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120303430.

Facca:2021:BSE

[FCP21] Enrico Facca, Franco Cardin, and Mario Putti. Branching structures emerging from a continuous optimal transport model. *Journal of Computational Physics*, 447(??): Article 110700, December 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121005957.

Fumagalli:2024:PDG

[FCPA24] Ivan Fumagalli, Mattia Corti, Nicola Parolini, and Paola F. Antonietti. Polytopal discontinuous Galerkin discretization of brain multiphysics flow dynamics. *Journal of Computational Physics*, 513(??):??, September 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124003644.

Feng:2024:USP

[FCTZ24] Kaikai Feng, Ziqi Cui, Peng Tian, and Jun Zhang. A unified stochastic particle method with spatiotemporal adaptation for simulating multiscale gas flows. *Journal of Computational Physics*, 505(??):??, May 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124001645.

Freno:2021:CVT

[FCW21] Brian A. Freno, Brian R. Carnes, and V. Gregory Weirs. Code-verification techniques for hypersonic reacting flows in thermochemical nonequilibrium. *Journal of Computational Physics*, 425(??):Article 109752, January 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912030526X.

Feng:2022:FEU

[FCWS22] Xiaoyu Feng, Meng-Huo Chen, Yuanqing Wu, and Shuyu Sun. A fully explicit and unconditionally energy-stable scheme for Peng–Robinson VT flash calculation based on dynamic modeling. *Journal of Computational Physics*, 463 (??):??, August 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122003370.

Franceschini:2022:SPS

[FCWT22] Andrea Franceschini, Nicola Castelletto, Joshua A. White, and Hamdi A. Tchelepi. Scalable preconditioning for the stabilized contact mechanics problem. *Journal of Computational Physics*, 459(??):??, June 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122002121.

Fujii:2020:CSD

[FCY+20] Hiroyuki Fujii, Go Chiba, Yukio Yamada, Yoko Hoshi, Kazumichi Kobayashi, and Masao Watanabe. A comparative study of the delta-Eddington and Galerkin quadrature methods for highly forward scattering of photons in random media. *Journal of Computational Physics*, 423 (??):Article 109825, December 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120305994.

Fang:2024:BSA

[FDH+24] Yibo Fang, Lin Du, Chen He, Dakun Sun, Lijun Yang, Qingfei Fu, and Xiaofeng Sun. BiGlobal stability analysis for flow in complex geometry based on immersed boundary method. *Journal of Computational Physics*, 497(??):??, January 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123007258.

Fievet:2020:SCF

[FDP20] Romain Fiévet, Hugues Deniau, and Estelle Piot. Strong compact formalism for characteristic boundary conditions with discontinuous spectral methods. *Journal of Computational Physics*, 408(??):Article 109276, May 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120300504.

Fei:2023:TRM

[Fei23] Fei Fei. A time-relaxed Monte Carlo method preserving the Navier–Stokes asymptotics. *Journal of Computational Physics*, 486(??):??, August 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999123002231`.

Feliu-Faba:2020:MLP

[FFFY20] Jordi Feliu-Fabà, Yuwei Fan, and Lexing Ying. Meta-learning pseudo-differential operators with deep neural networks. *Journal of Computational Physics*, 408(??):Article 109309, May 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999120300838`.

Ferreiro-Ferreiro:2020:GOD

[FFGRLS+20] A. M. Ferreiro-Ferreiro, J. A. García-Rodríguez, J. G. López-Salas, C. Escalante, and M. J. Castro. Global optimization for data assimilation in landslide tsunami models. *Journal of Computational Physics*, 403(??):Article 109069, February 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999119307740`.

Fernandez:2023:PFE

[FFL+23] Eduardo Fernández, Simon Février, Martin Lacroix, Romain Boman, Luc Papeleux, and Jean-Philippe Ponthot. A particle finite element method based on Level-Set functions. *Journal of Computational Physics*, 487(??):??, August 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999123002826`.

Fernandez-Fidalgo:2021:RDW

[FFRT+21] Javier Fernández-Fidalgo, Luis Ramírez, Panagiotis Tsoutsanis, Ignasi Colominas, and Xesús Nogueira. A reduced-dissipation WENO scheme with automatic dissipation adjustment. *Journal of Computational Physics*, 425(??): Article 109749, January 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999120305234`.

Feliu-Faba:2021:AID

[FFY21] Jordi Feliu-Fabà and Lexing Ying. Approximate inversion of discrete Fourier integral operators. *Journal of Computational Physics*, 446(??):Article 110654, December 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121005490.

Farcas:2020:SDA

[FGB+20] Ionut-Gabriel Farcas, Tobias Görler, Hans-Joachim Bungartz, Frank Jenko, and Tobias Neckel. Sensitivity-driven adaptive sparse stochastic approximations in plasma microinstability analysis. *Journal of Computational Physics*, 410(??):Article 109394, June 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120301686.

Fomenko:2021:ABI

[FGD+21] Sergey I. Fomenko, Mikhail V. Golub, Olga V. Doroshenko, Yanzheng Wang, and Chuanzeng Zhang. An advanced boundary integral equation method for wave propagation analysis in a layered piezoelectric phononic crystal with a crack or an electrode. *Journal of Computational Physics*, 447(??):Article 110669, December 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121005647.

Franceschini:2022:SPF

[FGF22] Andrea Franceschini, Laura Gazzola, and Massimiliano Ferronato. A scalable preconditioning framework for stabilized contact mechanics with hydraulically active fractures. *Journal of Computational Physics*, 463(??):??, August 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122003382.

Fang:2022:SFM

[FGK22] Zhou Fang, Ankit Gupta, and Mustafa Khammash. Stochastic filtering for multiscale stochastic reaction networks based on hybrid approximations. *Journal of Computational Physics*, 467(??):??, October 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122005034.

Feng:2022:BPD

[FGKY22] Wenjing Feng, Hui Guo, Yue Kang, and Yang Yang. Bound-preserving discontinuous Galerkin methods with second-order implicit pressure explicit concentration time marching for compressible miscible displacements in porous media. *Journal of Computational Physics*, 463(??):??, August 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122003023.

Frode:2022:TDC

[FGL+22] Fabian Fröde, Temistocle Grenga, Vincent Le Chenadec, Mathis Bode, and Heinz Pitsch. A three-dimensional cell-based volume-of-fluid method for conservative simulations of primary atomization. *Journal of Computational Physics*, 465(??):??, September 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122004363.

Feng:2023:SPS

[FGTY23] Wenjing Feng, Hui Guo, Lulu Tian, and Yang Yang. Sign-preserving second-order IMPEC time discretization and its application in compressible miscible displacement with Darcy–Forchheimer models. *Journal of Computational Physics*, 474(??):??, February 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122008385.

Fernandez-Gutierrez:2020:DVS

[FGZ20] David Fernández-Gutiérrez and Tarek I. Zohdi. Delta Voronoi smoothed particle hydrodynamics, δ-VSPH. *Journal of Computational Physics*, 401(??):Article 109000, January 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119307053.

Frei:2023:TPT

[FH23] Stefan Frei and Alexander Heinlein. Towards parallel time-stepping for the numerical simulation of atherosclerotic plaque growth. *Journal of Computational Physics*, 491(??): ??, October 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123004424.

Fang:2024:DPA

[FH24] Lean Fang and Ping He. A duality-preserving adjoint method for segregated Navier–Stokes solvers. *Journal of Computational Physics*, 503(??):??, April 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124001098.

Fei:2022:USP

[FHJ22] Fei Fei, Yuan Hu, and Patrick Jenny. A unified stochastic particle method based on the Bhatnagar–Gross–Krook model for polyatomic gases and its combination with DSMC. *Journal of Computational Physics*, 471(??):??, December 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122007033.

Feng:2024:SOH

[FHM24] Qiwei Feng, Bin Han, and Peter Minev. Sixth-order hybrid finite difference methods for elliptic interface problems with mixed boundary conditions. *Journal of Computational Physics*, 497(??):??, January 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123007301.

Fortunato:2021:USE

[FHT21] Daniel Fortunato, Nicholas Hale, and Alex Townsend. The ultraspherical spectral element method. *Journal of Computational Physics*, 436(??):Article 110087, July 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120308615.

Fu:2024:PBL

[FHW24] Shaotong Fu, Zikang Hao, and Limin Wang. A pressure-based lattice Boltzmann method for the volume-averaged Navier–Stokes equations. *Journal of Computational Physics*, 516(??):??, November 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999124005989`.

Fehn:2021:HOA

[FHWK21] Niklas Fehn, Johannes Heinz, Wolfgang A. Wall, and Martin Kronbichler. High-order arbitrary Lagrangian–Eulerian discontinuous Galerkin methods for the incompressible Navier–Stokes equations. *Journal of Computational Physics*, 430(??):Article 110040, April 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999120308147`.

Fei:2021:HPA

[FJ21] Fei Fei and Patrick Jenny. A hybrid particle approach based on the unified stochastic particle Bhatnagar–Gross–Krook and DSMC methods. *Journal of Computational Physics*, 424(??):Article 109858, January 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S002199912030632X`.

Fairbanks:2020:BFA

[FJG+20] Hillary R. Fairbanks, Lluís Jofre, Gianluca Geraci, Gianluca Iaccarino, and Alireza Doostan. Bi-fidelity approximation for uncertainty quantification and sensitivity analysis of irradiated particle-laden turbulence. *Journal of Computational Physics*, 402(??):Article 108996, February 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999119307016`.

Fierro:2020:FCP

[FJH20] Ignacia Fierro and Carlos Jerez-Hanckes. Fast Calderón preconditioning for Helmholtz boundary integral equations. *Journal of Computational Physics*, 409(??):Article 109355, May 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print),

1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120301297.

Feng:2021:CFS

[FL21] Yiwei Feng and Tiegang Liu. A characteristic-featured shock wave indicator on unstructured grids based on training an artificial neuron. *Journal of Computational Physics*, 443(??):Article 110446, October 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121003417.

Fornberg:2023:ETR

[FL23a] Bengt Fornberg and Andrew Lawrence. Enhanced trapezoidal rule for discontinuous functions. *Journal of Computational Physics*, 491(??):??, October 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123004813.

Fu:2023:HOV

[FL23b] Guosheng Fu and Chun Liu. High-order variational Lagrangian schemes for compressible fluids. *Journal of Computational Physics*, 491(??):??, October 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912300493X.

Fu:2023:HOC

[FLOL23] Guosheng Fu, Siting Liu, Stanley Osher, and Wuchen Li. High order computation of optimal transport, mean field planning, and potential mean field games. *Journal of Computational Physics*, 491(??):??, October 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123004412.

Fullana:2023:ABO

[FLS23] Tomas Fullana, Vincent Le Chenadec, and Taraneh Sayadi. Adjoint-based optimization of two-dimensional Stefan problems. *Journal of Computational Physics*, 475(??):??, February 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print),

1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912200938X.

Feng:2020:NDS

[FLW20a] Kaixuan Feng, Zhenzhou Lu, and Lu Wang. A novel dual-stage adaptive kriging method for profust reliability analysis. *Journal of Computational Physics*, 419 (??):Article 109701, October 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120304757.

Fridrich:2020:CCL

[FLW20b] David Fridrich, Richard Liska, and Burton Wendroff. Cell-centered Lagrangian Lax–Wendroff HLL hybrid scheme in cylindrical geometry. *Journal of Computational Physics*, 417(??):Article 109605, September 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912030379X.

Fu:2023:AMS

[FLW+23] Kejie Fu, Mingjie Liao, Yangshuai Wang, Jianjun Chen, and Lei Zhang. Adaptive multigrid strategy for geometry optimization of large-scale three dimensional molecular mechanics. *Journal of Computational Physics*, 485(??):??, July 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123002085.

Fan:2020:NMM

[FLZ20] Yuwei Fan, Ruo Li, and Lingchao Zheng. A nonlinear moment model for radiative transfer equation in slab geometry. *Journal of Computational Physics*, 404(??):Article 109128, March 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119308332.

Francu:2020:AMM

[FM20] Jan Francu and Jirí Mikyska. An alternative model of multicomponent diffusion based on a combination of the Maxwell-Stefan theory and continuum mechanics. *Journal of Computational Physics*, 400(??):Article 108962, January 1, 2020.

CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119306679.

Freno:2022:CVP

[FM22] Brian A. Freno and Neil R. Matula. Code verification for practically singular equations. *Journal of Computational Physics*, 470(??):??, December 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912200643X.

Freno:2023:CVTb

[FM23a] Brian A. Freno and Neil R. Matula. Code-verification techniques for the method-of-moments implementation of the combined-field integral equation. *Journal of Computational Physics*, 488(??):??, September 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123003261.

Freno:2023:CVTa

[FM23b] Brian A. Freno and Neil R. Matula. Code-verification techniques for the method-of-moments implementation of the magnetic-field integral equation. *Journal of Computational Physics*, 478(??):??, April 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123000542.

Fuster:2024:REI

[FM24] Daniel Fuster and Yassine Mimoh. Regularization errors introduced by the one-fluid formulation in the solution of two-phase elliptic problems. *Journal of Computational Physics*, 514(??):??, October 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124004510.

Fricke:2020:CLA

[FMB20] Mathis Fricke, Tomislav Marić, and Dieter Bothe. Contact line advection using the geometrical volume-of-fluid method. *Journal of Computational Physics*, 407(??):Article 109221, April 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199911930926X.

Franck:2024:AWB

[FMDN24] Emmanuel Franck, Victor Michel-Dansac, and Laurent Navoret. Approximately well-balanced discontinuous Galerkin methods using bases enriched with Physics-Informed Neural networks. *Journal of Computational Physics*, 512(??): ??, September 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124003930.

Freno:2021:MSM

[FMJ21] Brian A. Freno, Neil R. Matula, and William A. Johnson. Manufactured solutions for the method-of-moments implementation of the electric-field integral equation. *Journal of Computational Physics*, 443(??):Article 110538, October 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121004332.

Feuillet:2021:PER

[FML21] Rémi Feuillet, Matthieu Maunoury, and Adrien Loseille. On pixel-exact rendering for high-order mesh and solution. *Journal of Computational Physics*, 424(??):Article 109860, January 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120306343.

Freno:2022:CVT

[FMOJ22] Brian A. Freno, Neil R. Matula, Justin I. Owen, and William A. Johnson. Code-verification techniques for the method-of-moments implementation of the electric-field integral equation. *Journal of Computational Physics*, 451 (??):Article 110891, February 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121007865.

Freno:2024:MSE

[FMP+24] Brian A. Freno, Neil R. Matula, Robert A. Pfeiffer, Evelyn A. Dohme, and Joseph D. Kotulski. Manufactured solutions for an electromagnetic slot model. *Journal of Computational Physics*, 516(??):??, November 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124005916.

Fernandes:2021:NFP

[FMS21] Bruno Ramon Batista Fernandes, Francisco Marcondes, and Kamy Sepehrnoori. A new four-phase adaptive implicit method for compositional reservoir simulation. *Journal of Computational Physics*, 435(??):Article 110263, June 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121001583.

Franc:2023:CSC

[FMT23] J. Franc, O. Møyner, and H. A. Tchelepi. Coupling-strength criteria for sequential implicit formulations. *Journal of Computational Physics*, 492(??):??, November 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123005089.

Fehn:2020:HMM

[FMWK20] Niklas Fehn, Peter Munch, Wolfgang A. Wall, and Martin Kronbichler. Hybrid multigrid methods for high-order discontinuous Galerkin discretizations. *Journal of Computational Physics*, 415(??):Article 109538, August 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120303120.

Filbet:2022:FPM

[FN22] Francis Filbet and Claudia Negulescu. Fokker–Planck multi-species equations in the adiabatic asymptotics. *Journal of Computational Physics*, 471(??):??, December 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122007057.

Franca:2022:MLS

[FO22] Hugo L. França and Cassio M. Oishi. A machine learning strategy for computing interface curvature in Front-

Tracking methods. *Journal of Computational Physics*, 450 (??):Article 110860, February 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121007555.

Fu:2023:HOS

[FOL23] Guosheng Fu, Stanley Osher, and Wuchen Li. High order spatial discretization for variational time implicit schemes: Wasserstein gradient flows and reaction-diffusion systems. *Journal of Computational Physics*, 491(??):??, October 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123004709.

Fu:2024:GOT

[FOPL24] Guosheng Fu, Stanley Osher, Will Pazner, and Wuchen Li. Generalized optimal transport and mean field control problems for reaction-diffusion systems with high-order finite element computation. *Journal of Computational Physics*, 508(??):??, July 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124002432.

Fumagalli:2023:WPV

[FP23] Alessio Fumagalli and Francesco Saverio Patacchini. Well-posedness and variational numerical scheme for an adaptive model in highly heterogeneous porous media. *Journal of Computational Physics*, 475(??):??, February 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912200907X.

Fiolitakis:2024:NAC

[FP24] A. Fiolitakis and M. Pries. A novel approach to the characteristic splitting scheme for mildly compressible flows based on the weighted averaged flux method. *Journal of Computational Physics*, 513(??):??, September 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124004467.

Falcone:2020:MSI

[FPT20] Maurizio Falcone, Giulio Paolucci, and Silvia Tozza. Multidimensional smoothness indicators for first-order Hamilton–Jacobi equations. *Journal of Computational Physics*, 409 (??):Article 109360, May 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120301340.

Fryklund:2023:IEM

[FPT23] Fredrik Fryklund, Sara Pålsson, and Anna-Karin Tornberg. An integral equation method for the advection-diffusion equation on time-dependent domains in the plane. *Journal of Computational Physics*, 475(??):??, February 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122009196.

Feng:2023:ESS

[FQSW23] Xiaoyu Feng, Zhonghua Qiao, Shuyu Sun, and Xiuping Wang. An energy-stable Smoothed Particle Hydrodynamics discretization of the Navier–Stokes–Cahn–Hilliard model for incompressible two-phase flows. *Journal of Computational Physics*, 479(??):??, April 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912300092X.

Fang:2024:NDE

[FQZ+24] Zhu Fang, Xiaoyu Qian, Yiyang Zhang, Wenwei Liu, and Shuiqing Li. A new discrete element method for small adhesive non-spherical particles. *Journal of Computational Physics*, 513(??):??, September 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912400442X.

Filbet:2023:APP

[FR23] Francis Filbet and Luis Miguel Rodrigues. Asymptotically preserving particle methods for strongly magnetized plasmas in a torus. *Journal of Computational Physics*, 480(??):??, May 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print),

1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123001109.

Fischer:2024:MDS

[FRW+24] Hendrik Fischer, Julian Roth, Thomas Wick, Ludovic Chamoin, and Amelie Fau. MORe DWR: Space-time goal-oriented error control for incremental POD-based ROM for time-averaged goal functionals. *Journal of Computational Physics*, 504(??):??, May 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124001128.

Fumagalli:2021:MMT

[FS21] Alessio Fumagalli and Anna Scotti. A mathematical model for thermal single-phase flow and reactive transport in fractured porous media. *Journal of Computational Physics*, 434(??):Article 110205, June 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121001005.

Falavarjani:2023:MDS

[FS23a] Afsoun Rahnama Falavarjani and David Salac. Modeling droplets with slippery interfaces. *Journal of Computational Physics*, 481(??):??, May 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123001286.

Faucher:2023:QIP

[FS23b] Florian Faucher and Otmar Scherzer. Quantitative inverse problem in visco-acoustic media under attenuation model uncertainty. *Journal of Computational Physics*, 472(??):??, January 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122007483.

Fillo:2020:FLM

[FSB+20] Aaron J. Fillo, Jason Schlup, Guillaume Beardsell, Guillaume Blanquart, and Kyle E. Niemeyer. A fast, low-memory, and stable algorithm for implementing multicomponent transport in direct numerical simulations. *Journal* *of Computational Physics*, 406(??):Article 109185, April 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119308903.

Furfaro:2020:TSC

[FSDB20] Damien Furfaro, Richard Saurel, Lucas David, and François Beauchamp. Towards sodium combustion modeling with liquid water. *Journal of Computational Physics*, 403 (??):Article 109060, February 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199911930765X.

Falabino:2022:CUF

[FSM+22] Matteo Falabino, Daniele Sciannandrone, Emiliano Masiello, Jean-François Vidal, and Igor Zmijarevic. Computation of the uncollided-flux moments with advanced MOC and QP methods. *Journal of Computational Physics*, 460(??):??, July 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122002182.

Funkenbusch:2024:AFB

[FSS24] William T. Funkenbusch, Kevin S. Silmore, and James W. Swan. Approaches for fast Brownian dynamics simulation with constraints. *Journal of Computational Physics*, 509(??):??, July 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124002924.

Fang:2022:CFE

[FSW22] Rui Fang, Christoph P. Schmidt, and Wolfgang A. Wall. A coupled finite element approach to spatially resolved lithium plating and stripping in three-dimensional anode microstructures of lithium-ion cells. *Journal of Computational Physics*, 461(??):??, July 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122002418.

Feng:2022:MOB

[FSWA22] Yiqi Feng, Felix S. Schranner, Josef Winter, and Nikolaus A. Adams. A multi-objective Bayesian optimization environment for systematic design of numerical schemes for compressible flow. *Journal of Computational Physics*, 468(??):??, November 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122005393.

Feng:2023:DRL

[FSWA23] Yiqi Feng, Felix S. Schranner, Josef Winter, and Nikolaus A. Adams. A deep reinforcement learning framework for dynamic optimization of numerical schemes for compressible flow simulations. *Journal of Computational Physics*, 493(??):??, November 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123005314.

Fujiwara:2023:FCP

[FTK23] Yuji Fujiwara, Yoshiharu Tamaki, and Soshi Kawai. Fully conservative and pressure-equilibrium preserving scheme for compressible multi-component flows. *Journal of Computational Physics*, 478(??):??, April 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123000682.

Fagbemi:2020:EMM

[FTP20] Samuel Fagbemi, Pejman Tahmasebi, and Mohammad Piri. Elastocapillarity modeling of multiphase flow-induced solid deformation using volume of fluid method. *Journal of Computational Physics*, 421(??):Article 109641, November 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120304150.

Feng:2023:UTF

[FTPB23] Libo Feng, Ian Turner, Patrick Perré, and Kevin Burrage. The use of a time-fractional transport model for performing computational homogenisation of 2D heterogeneous media exhibiting memory effects. *Journal of Computational Physics*, 480(??):??, May 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123001158.

Fan:2022:ACP

[FTY+22] Yiming Fan, Xiaochuan Tian, Xiu Yang, Xingjie Li, Clayton Webster, and Yue Yu. An asymptotically compatible probabilistic collocation method for randomly heterogeneous nonlocal problems. *Journal of Computational Physics*, 465(??):??, September 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122004387.

Ferrero:2022:RBM

[FTZ22] Andrea Ferrero, Tommaso Taddei, and Lei Zhang. Registration-based model reduction of parameterized two-dimensional conservation laws. *Journal of Computational Physics*, 457 (??):??, May 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122001309.

Fu:2020:DFH

[Fu20] Guosheng Fu. A divergence-free HDG scheme for the Cahn–Hilliard phase-field model for two-phase incompressible flow. *Journal of Computational Physics*, 419(??): Article 109671, October 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120304459.

Fang:2022:PTM

[FVM22] Liang Fang, Stefan Vandewalle, and Johan Meyers. A parallel-in-time multiple shooting algorithm for large-scale PDE-constrained optimal control problems. *Journal of Computational Physics*, 452(??):Article 110926, March 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121008214.

Fang:2023:SBM

[FVM23] Liang Fang, Stefan Vandewalle, and Johan Meyers. An SQP-based multiple shooting algorithm for large-scale PDE-constrained optimal control problems. *Journal of Computational Physics*, 477(??):??, March 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999123000220`.

Fan:2024:HOO

[FW24a] Chuan Fan and Kailiang Wu. High-order oscillation-eliminating Hermite WENO method for hyperbolic conservation laws. *Journal of Computational Physics*, 519(??):??, December 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999124006831`.

Fan:2024:DHN

[FW24b] Xiantao Fan and Jian-Xun Wang. Differentiable hybrid neural modeling for fluid-structure interaction. *Journal of Computational Physics*, 496(??):??, January 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999123006794`.

Feng:2024:GMO

[FWAS24] Yiqi Feng, Josef Winter, Nikolaus A. Adams, and Felix S. Schranner. A general multi-objective Bayesian optimization framework for the design of hybrid schemes towards adaptive complex flow simulations. *Journal of Computational Physics*, 510(??):??, August 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999124003371`.

Freret:2022:EAB

[FWG22] Lucie Freret, Michael Williamschen, and Clinton P. T. Groth. Enhanced anisotropic block-based adaptive mesh refinement for three-dimensional inviscid and viscous compressible flows. *Journal of Computational Physics*, 458(??):??, June 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999122001541`.

Font:2021:DLS

[FWNT21] Bernat Font, Gabriel D. Weymouth, Vinh-Tan Nguyen, and Owen R. Tutty. Deep learning of the spanwise-averaged Navier–Stokes equations. *Journal of Computational Physics*, 434(??):Article 110199, June 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121000942.

Fu:2022:PPP

[FX22] Pei Fu and Yinhua Xia. The positivity preserving property on the high order arbitrary Lagrangian–Eulerian discontinuous Galerkin method for Euler equations. *Journal of Computational Physics*, 470(??):??, December 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122006623.

Fan:2020:SEI

[FY20] Yuwei Fan and Lexing Ying. Solving electrical impedance tomography with deep learning. *Journal of Computational Physics*, 404(??):Article 109119, March 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119308241.

Fu:2022:EDE

[FY22] Zhaohui Fu and Jiang Yang. Energy-decreasing exponential time differencing Runge–Kutta methods for phase-field models. *Journal of Computational Physics*, 454 (??):Article 110943, April 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122000055.

Feng:2020:FBH

[FZ20a] Hongsong Feng and Shan Zhao. FFT-based high order central difference schemes for three-dimensional Poisson's equation with various types of boundary conditions. *Journal of Computational Physics*, 410(??):Article 109391, June 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120301650.

Feng:2020:FOF

[FZ20b] Hongsong Feng and Shan Zhao. A fourth order finite difference method for solving elliptic interface problems with the FFT acceleration. *Journal of Computational Physics*, 419(??):Article 109677, October 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120304514.

Fu:2021:AGM

[FZ21] Shubin Fu and Zhidong Zhang. Application of the generalized multiscale finite element method in an inverse random source problem. *Journal of Computational Physics*, 429(??):Article 110032, March 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120308068.

Frachon:2023:CFE

[FZ23] Thomas Frachon and Sara Zahedi. A cut finite element method for two-phase flows with insoluble surfactants. *Journal of Computational Physics*, 473(??):??, January 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122007975.

Fambri:2023:WBE

[FZB+23] F. Fambri, E. Zampa, S. Busto, L. Río-Martín, F. Hindenlang, E. Sonnendrücker, and M. Dumbser. A well-balanced and exactly divergence-free staggered semi-implicit hybrid finite volume/finite element scheme for the incompressible MHD equations. *Journal of Computational Physics*, 493(??):??, November 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123005880.

Fei:2020:USP

[FZLL20] Fei Fei, Jun Zhang, Jing Li, and ZhaoHui Liu. A unified stochastic particle bhatnagar-Gross-Krook method for multiscale gas flows. *Journal of Computational Physics*, 400(??):Article 108972, January 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

URL http://www.sciencedirect.com/science/article/pii/S0021999119306771.

Fan:2021:PPH

[FZQ21] Chuan Fan, Xiangxiong Zhang, and Jianxian Qiu. Positivity-preserving high order finite volume hybrid Hermite WENO schemes for compressible Navier–Stokes equations. *Journal of Computational Physics*, 445(??):Article 110596, November 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121004915.

Fan:2022:PPH

[FZQ22a] Chuan Fan, Xiangxiong Zhang, and Jianxian Qiu. Positivity-preserving high order finite difference WENO schemes for compressible Navier–Stokes equations. *Journal of Computational Physics*, 467(??):??, October 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122005083.

Fu:2022:ESE

[FZQ22b] Yichen Fu, Xin Zhang, and Hong Qin. An explicitly solvable energy-conserving algorithm for pitch-angle scattering in magnetized plasmas. *Journal of Computational Physics*, 449(??):Article 110767, January 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121006628.

Fang:2021:EMD

[FZS+21] Hong Fang, He Zhang, Fanli Shan, Ming Tie, Xing Zhang, and Jinghua Sun. Efficient mesh deformation using radial basis functions with a grouping-circular-based greedy algorithm. *Journal of Computational Physics*, 433(??):Article 110200, May 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121000954.

Ghassemi:2020:MQM

[GA20] Pedram Ghassemi and Dmitriy Y. Anistratov. Multilevel quasidiffusion method with mixed-order time discretization for multigroup thermal radiative transfer problems. *Journal of Computational Physics*, 409(??):Article 109315, May 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120300899.

Gujjula:2024:AIF

[GA24] Vaishnavi Gujjula and Sivaram Ambikasaran. Algebraic inverse fast multipole method: a fast direct solver that is better than HODLR based fast direct solver. *Journal of Computational Physics*, 497(??):??, January 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123007222.

Giuliani:2022:WSR

[GAB+22a] A. Giuliani, A. S. Almgren, J. B. Bell, M. J. Berger, M. T. Henry de Frahan, and D. Rangarajan. A weighted state redistribution algorithm for embedded boundary grids. *Journal of Computational Physics*, 464(??):??, September 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122003679.

Gulizzi:2022:CDG

[GAB22b] Vincenzo Gulizzi, Ann S. Almgren, and John B. Bell. A coupled discontinuous Galerkin-Finite Volume framework for solving gas dynamics over embedded geometries. *Journal of Computational Physics*, 450(??):Article 110861, February 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121007567.

Guo:2020:WAD

[GAC20] Kaihang Guo, Sebastian Acosta, and Jesse Chan. A weight-adjusted discontinuous Galerkin method for wave propagation in coupled elastic-acoustic media. *Journal of Computational Physics*, 418(??):Article 109632, October 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912030406X.

Goldshlager:2024:KIA

[GAL24] Gil Goldshlager, Nilin Abrahamsen, and Lin Lin. A Kaczmarz-inspired approach to accelerate the optimization of neural network wavefunctions. *Journal of Computational Physics*, 516(??):??, November 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124005990.

Gao:2022:SMI

[Gao22] Junhui Gao. A sliding-mesh interface method for three dimensional high order spectral difference solver. *Journal of Computational Physics*, 454(??):Article 110988, April 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912200050X.

Gao:2024:ACD

[Gao24] Jing Gao. Asymptotic computation without derivatives for the multivariate highly oscillatory integral. *Journal of Computational Physics*, 501(??):??, March 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912400038X.

Garcia:2020:NSS

[Gar20] R. D. M. Garcia. A numerically stable spherical harmonics solution for the neutron transport equation in a spherical shell. *Journal of Computational Physics*, 405 (??):Article 109139, March 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119308447.

Garcia:2021:ASH

[Gar21] R. D. M. Garcia. Accurate spherical harmonics solutions for neutron transport problems in multi-region spherical geometry. *Journal of Computational Physics*, 424 (??):Article 109856, January 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120306306.

Goulding:2024:SCD

[GASS24] Jason Goulding, Mehrnaz Ayazi, Tamar Shinar, and Craig Schroeder. Simplified conservative discretization of the Cahn–Hilliard–Navier–Stokes equations. *Journal of Computational Physics*, 519(??):??, December 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999124006302`.

Ghosh:2022:SQF

[GB22a] Swarnava Ghosh and Kaushik Bhattacharya. Spectral quadrature for the first principles study of crystal defects: Application to magnesium. *Journal of Computational Physics*, 456(??):??, May 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999122000973`.

Gillard:2022:FGF

[GB22b] Mike Gillard and Tommaso Benacchio. `FT-GCR`: a fault-tolerant generalized conjugate residual elliptic solver. *Journal of Computational Physics*, 455(??):??, April 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999122000596`.

Gaburro:2020:HOD

[GBC+20] Elena Gaburro, Walter Boscheri, Simone Chiocchetti, Christian Klingenberg, Volker Springel, and Michael Dumbser. High order direct arbitrary-Lagrangian–Eulerian schemes on moving Voronoi meshes with topology changes. *Journal of Computational Physics*, 407(??):Article 109167, April 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999119308721`.

Gruninger:2024:BIB

[GBF+24] Cole Gruninger, Aaron Barrett, Fuhui Fang, M. Gregory Forest, and Boyce E. Griffith. Benchmarking the immersed boundary method for viscoelastic flows. *Journal of Computational Physics*, 506(??):??, June 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

URL http://www.sciencedirect.com/science/article/pii/S0021999124001372.

Ghitti:2020:FWB

[GBLT20] Beatrice Ghitti, Christophe Berthon, Minh Hoang Le, and Eleuterio F. Toro. A fully well-balanced scheme for the 1D blood flow equations with friction source term. *Journal of Computational Physics*, 421(??):Article 109750, November 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120305246.

Gao:2020:NMB

[GC20a] Yali Gao and Yongyong Cai. Numerical methods for Bogoliubov-de Gennes excitations of Bose–Einstein condensates. *Journal of Computational Physics*, 403(??): Article 109058, February 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119307636.

Guo:2020:BBW

[GC20b] Kaihang Guo and Jesse Chan. Bernstein–Bézier weight-adjusted discontinuous Galerkin methods for wave propagation in heterogeneous media. *Journal of Computational Physics*, 400(??):Article 108971, January 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199911930676X.

Gutleb:2023:SMS

[GC23] Timon S. Gutleb and José A. Carrillo. A static memory sparse spectral method for time-fractional PDEs. *Journal of Computational Physics*, 494(??):??, December 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123006174.

Garg:2024:NIN

[GC24] Shailesh Garg and Souvik Chakraborty. Neuroscience inspired neural operator for partial differential equations. *Journal of Computational Physics*, 515(??):??, October 15, 2024.

CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912400514X.

Gonzalez:2021:LNM

[GCC21] David González, Francisco Chinesta, and Elías Cueto. Learning non-Markovian physics from data. *Journal of Computational Physics*, 428(??):Article 109982, March 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120307567.

Gowers:2020:DAD

[GCD20] Richard J. Gowers, Paola Carbone, and Nicodemo Di Pasquale. A different approach to dual-scale models. *Journal of Computational Physics*, 413(??):Article 109465, July 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120302394.

Gaudreault:2022:HON

[GCDT22] Stéphane Gaudreault, Martin Charron, Valentin Dallerit, and Mayya Tokman. High-order numerical solutions to the shallow-water equations on the rotated cubed-sphere grid. *Journal of Computational Physics*, 449(??): Article 110792, January 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121006872.

Guo:2022:SOA

[GCL+22] Zhenlin Guo, Qing Cheng, Ping Lin, Chun Liu, and John Lowengrub. Second order approximation for a quasi-incompressible Navier–Stokes Cahn–Hilliard system of two-phase flows with variable density. *Journal of Computational Physics*, 448(??):Article 110727, January 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121006227.

Gallice:2022:ESP

[GCLM22] Gérard Gallice, Agnes Chan, Raphaël Loubère, and Pierre-Henri Maire. Entropy stable and positivity preserving

Godunov-type schemes for multidimensional hyperbolic systems on unstructured grid. *Journal of Computational Physics*, 468(??):??, November 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122005551.

Gambarini:2023:ROC

[GCMV23] Marco Gambarini, Gabriele Ciaramella, Edie Miglio, and Tommaso Vanzan. Robust optimization of control parameters for WEC arrays using stochastic methods. *Journal of Computational Physics*, 493(??):??, November 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123005739.

Gravenkamp:2024:SFE

[GCP24] Hauke Gravenkamp, Ramon Codina, and Javier Principe. A stabilized finite element method for modeling dispersed multiphase flows using orthogonal subgrid scales. *Journal of Computational Physics*, 501(??):??, March 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124000032.

Guan:2022:SPT

[GCSH22] Yifei Guan, Ashesh Chattopadhyay, Adam Subel, and Pedram Hassanzadeh. Stable *a posteriori* LES of 2D turbulence using convolutional neural networks: Backscattering analysis and generalization to higher *Re* via transfer learning. *Journal of Computational Physics*, 458(??):??, June 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122001528.

Girault:2022:CMC

[GCV22] Ivan Girault, Mohamed-Amine Chadil, and Stéphane Vincent. Comparison of methods computing the distance between two ellipsoids. *Journal of Computational Physics*, 458(??):??, June 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122001620.

Galassi:2022:ATI

[GCVI22] Riccardo Malpica Galassi, Pietro Paolo Ciottoli, Mauro Valorani, and Hong G. Im. An adaptive time-integration scheme for stiff chemistry based on computational singular perturbation and artificial neural networks. *Journal of Computational Physics*, 451(??):Article 110875, February 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121007701.

Garon:2020:MAB

[GD20] André Garon and Michel C. Delfour. Mesh adaptation based on transfinite mean value interpolation. *Journal of Computational Physics*, 407(??):Article 109248, April 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912030022X.

Gumerov:2021:LGF

[GD21] Nail A. Gumerov and Ramani Duraiswami. Laplace Green's functions for infinite ground planes with local roughness. *Journal of Computational Physics*, 447(??): Article 110673, December 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121005684.

Geoffroy-Donders:2020:DTO

[GDAP20] Perle Geoffroy-Donders, Grégoire Allaire, and Olivier Pantz. 3-d topology optimization of modulated and oriented periodic microstructures by the homogenization method. *Journal of Computational Physics*, 401(??):Article 108994, January 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119306990.

Gomez:2023:JFN

[GDB23] Alfredo Duarte Gomez, Nicholas Deak, and Fabrizio Bisetti. Jacobian-free Newton–Krylov method for the simulation of non-thermal plasma discharges with high-order time integration and physics-based preconditioning. *Journal of Computational Physics*, 480(??):??, May 1, 2023. CODEN

JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912300102X.

Guisset:2024:CCI

[GDB24] S. Guisset, G. Damour, and J. Breil. Cell-centered indirect arbitrary Lagrangian–Eulerian numerical strategy for solving 3D gas dynamics equations. *Journal of Computational Physics*, 505(??):??, May 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124001529.

Giraldo:2024:PSH

[GdBAK+24] Francis X. Giraldo, Felipe A. V. de Bragança Alves, James F. Kelly, Soonpil Kang, and P. Alex Reinecke. A performance study of horizontally explicit vertically implicit (HEVI) time-integrators for non-hydrostatic atmospheric models. *Journal of Computational Physics*, 515(??):??, October 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124005230.

Garres-Diaz:2020:MMS

[GDBFN+20] J. Garres-Díaz, F. Bouchut, E. D. Fernández-Nieto, A. Mangeney, and G. Narbona-Reina. Multilayer models for shallow two-phase debris flows with dilatancy effects. *Journal of Computational Physics*, 419(??):Article 109699, October 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120304733.

Glyn-Davies:2024:DPI

[GDDAG24] Alex Glyn-Davies, Connor Duffin, O. Deniz Akyildiz, and Mark Girolami. Φ-DVAE: Physics-informed dynamical variational autoencoders for unstructured data assimilation. *Journal of Computational Physics*, 515(??):??, October 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124005412.

Gsell:2021:LBS

[GDF21] Simon Gsell, Umberto D'Ortona, and Julien Favier. Lattice-Boltzmann simulation of creeping generalized Newtonian flows: Theory and guidelines. *Journal of Computational Physics*, 429(??):Article 109943, March 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120307178.

Gatti:2024:SWB

[GdFP+24] Federico Gatti, Carlo de Falco, Simona Perotto, Luca Formaggia, and Manuel Pastor. A scalable well-balanced numerical scheme for the modeling of two-phase shallow granular landslide consolidation. *Journal of Computational Physics*, 501(??):??, March 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124000470.

Gao:2024:FEI

[GDJ24] Rui Gao, Indu Kant Deo, and Rajeev K. Jaiman. A finite element-inspired hypergraph neural network: Application to fluid dynamics simulations. *Journal of Computational Physics*, 504(??):??, May 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124001153.

Grubas:2023:NES

[GDL23] Serafim Grubas, Anton Duchkov, and Georgy Loginov. Neural eikonal solver: Improving accuracy of physics-informed neural networks for solving eikonal equation in case of caustics. *Journal of Computational Physics*, 474(??):??, February 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912200852X.

Gao:2022:RRE

[GDLL22] Liyao Gao, Yifan Du, Hongshan Li, and Guang Lin. RotEqNet: Rotation-equivariant network for fluid systems with symmetric high-order tensors. *Journal of Computational Physics*, 461(??):??, July 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

URL http://www.sciencedirect.com/science/article/pii/S0021999122002674.

Gorges:2022:RVS

[GEvWD22] Christian Gorges, Fabien Evrard, Berend van Wachem, and Fabian Denner. Reducing volume and shape errors in front tracking by divergence-preserving velocity interpolation and parabolic fit vertex positioning. *Journal of Computational Physics*, 457(??):??, May 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122001346.

Gsell:2021:DFI

[GF21] Simon Gsell and Julien Favier. Direct-forcing immersed-boundary method: a simple correction preventing boundary slip error. *Journal of Computational Physics*, 435 (??):Article 110265, June 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121001601.

Gunderman:2020:TSS

[GFF20] David Gunderman, Natasha Flyer, and Bengt Fornberg. Transport schemes in spherical geometries using spline-based RBF-FD with polynomials. *Journal of Computational Physics*, 408(??):Article 109256, May 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120300309.

Gopinath:2022:AIE

[GFG22] Venkatesh Gopinath, Alexandre Fournier, and Thomas Gastine. An assessment of implicit–explicit time integrators for the pseudo-spectral approximation of Boussinesq thermal convection in an annulus. *Journal of Computational Physics*, 460(??):??, July 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122000274.

Guo:2020:ELB

[GFJ+20] S. Guo, Y. Feng, J. Jacob, F. Renard, and P. Sagaut. An efficient lattice Boltzmann method for compressible aerodynamics on D3Q19 lattice. *Journal of Computational Physics*, 418(??):Article 109570, October 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999120303442`.

Garcia:2022:SED

[GFPO22] Constantino A. García, Paulo Félix, Jesús M. Presedo, and Abraham Otero. Stochastic embeddings of dynamical phenomena through variational autoencoders. *Journal of Computational Physics*, 454(??):Article 110970, April 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999122000328`.

Grimberg:2020:SPB

[GFY20] Sebastian Grimberg, Charbel Farhat, and Noah Youkilis. On the stability of projection-based model order reduction for convection-dominated laminar and turbulent flows. *Journal of Computational Physics*, 419(??):Article 109681, October 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999120304551`.

Gawlik:2020:CFE

[GGB20] Evan S. Gawlik and François Gay-Balmaz. A conservative finite element method for the incompressible Euler equations with variable density. *Journal of Computational Physics*, 412(??):Article 109439, July 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999120302138`.

Gawlik:2022:FEM

[GGB22] Evan S. Gawlik and François Gay-Balmaz. A finite element method for MHD that preserves energy, cross-helicity, magnetic helicity, incompressibility, and div$B = 0$. *Journal of Computational Physics*, 450(??):Article 110847, February 1,

2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121007427.

Gabbard:2022:IIM

[GGCvR22] James Gabbard, Thomas Gillis, Philippe Chatelain, and Wim M. van Rees. An immersed interface method for the 2D vorticity-velocity Navier–Stokes equations with multiple bodies. *Journal of Computational Physics*, 464(??):??, September 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122004016.

Gorodetsky:2020:GAC

[GGEJ20] Alex A. Gorodetsky, Gianluca Geraci, Michael S. Eldred, and John D. Jakeman. A generalized approximate control variate framework for multifidelity uncertainty quantification. *Journal of Computational Physics*, 408(??):Article 109257, May 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120300310.

Gu:2023:HOW

[GGH+23] Yaguang Gu, Zhen Gao, Guanghui Hu, Peng Li, and Qingcheng Fu. High order well-balanced positivity-preserving scale-invariant AWENO scheme for Euler systems with gravitational field. *Journal of Computational Physics*, 488(??):??, September 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123002851.

Giunzioni:2023:CPS

[GGM+23] Viviana Giunzioni, John E. Ortiz G., Adrien Merlini, Simon B. Adrian, and Francesco P. Andriulli. On a Calderón preconditioner for the symmetric formulation of the electroencephalography forward problem without barycentric refinements. *Journal of Computational Physics*, 491(??):??, October 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123004692.

Grandits:2020:IEM

[GGN+20] Thomas Grandits, Karli Gillette, Aurel Neic, Jason Bayer, Edward Vigmond, Thomas Pock, and Gernot Plank. An inverse eikonal method for identifying ventricular activation sequences from epicardial activation maps. *Journal of Computational Physics*, 419(??):Article 109700, October 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120304745.

Goodrich:2023:VFV

[GH23] Austin Goodrich and Marcus Herrmann. A volume-of-fluid vortex sheet method for multiphase flows. *Journal of Computational Physics*, 491(??):??, October 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123004837.

Gargari:2024:UML

[GHD24] Saeb Faraji Gargari, Ziyang Huang, and Sadegh Dabiri. An upwind moving least squares approximation to solve convection-dominated problems: an application in mixed discrete least squares meshfree method. *Journal of Computational Physics*, 506(??):??, June 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124001803.

Gorges:2023:ERV

[GHE+23] Christian Gorges, Azur Hodžić, Fabien Evrard, Berend van Wachem, Clara M. Velte, and Fabian Denner. Efficient reduction of vertex clustering using front tracking with surface normal propagation restriction. *Journal of Computational Physics*, 491(??):??, October 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123005016.

Gibbs:2024:NEO

[GHH24] A. Gibbs, D. P. Hewett, and D. Huybrechs. Numerical evaluation of oscillatory integrals via automated steepest descent contour deformation. *Journal of Computa-

tional Physics, 501(??):??, March 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124000366.

Gao:2022:USN

[GHHR22] Yali Gao, Daozhi Han, Xiaoming He, and Ulrich Rüde. Unconditionally stable numerical methods for Cahn–Hilliard–Navier–Stokes–Darcy system with different densities and viscosities. *Journal of Computational Physics*, 454(??): Article 110968, April 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122000304.

Grigori:2021:RMB

[GHNS21] Laura Grigori, Sever A. Hirstoaga, Van-Thanh Nguyen, and Julien Salomon. Reduced model-based parareal simulations of oscillatory singularly perturbed ordinary differential equations. *Journal of Computational Physics*, 436(??):Article 110282, July 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121001777.

Golse:2023:RTV

[GHP+23] F. Golse, F. Hecht, O. Pironneau, D. Smets, and P.-H. Tournier. Radiative transfer for variable three-dimensional atmospheres. *Journal of Computational Physics*, 475(??):??, February 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122009275.

Gu:2022:HPC

[GHS22] Anjiao Gu, Yang He, and Yajuan Sun. Hamiltonian Particle-in-Cell methods for Vlasov–Poisson equations. *Journal of Computational Physics*, 467(??):??, October 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122005344.

Guo:2021:ASG

[GHTC21] Wei Guo, Juntao Huang, Zhanjing Tao, and Yingda Cheng. An adaptive sparse grid local discontinuous Galerkin method for Hamilton–Jacobi equations in high dimensions. *Journal of Computational Physics*, 436(??):Article 110294, July 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121001893.

Gao:2024:SOM

[GHW24] Yali Gao, Daozhi Han, and Xiaoming Wang. A second-order, mass-conservative, unconditionally stable and bound-preserving finite element method for the quasi-incompressible Cahn–Hilliard–Darcy system. *Journal of Computational Physics*, 518(??):??, December 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124005886.

Gao:2022:OSS

[GHY22a] Yanni Gao, Xudeng Hang, and Guangwei Yuan. An optimized sweeping solution method for the three-dimensional Sn equations of neutron transport on hexahedral meshes. *Journal of Computational Physics*, 455(??):??, April 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122000262.

Gaylo:2022:ELA

[GHY22b] Declan B. Gaylo, Kelli Hendrickson, and Dick K. P. Yue. An Eulerian label advection method for conservative volume-based tracking of bubbles/droplets. *Journal of Computational Physics*, 470(??):??, December 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122006222.

Ginzburg:2021:SIB

[Gin21] Irina Ginzburg. Spurious interface and boundary behaviour beyond physical solutions in lattice Boltzmann schemes. *Journal of Computational Physics*, 431(??):Article 109986, April 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print),

1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120307609.

Givoli:2023:DBM

[Giv23] Dan Givoli. Dahlquist's barriers and much beyond. *Journal of Computational Physics*, 475(??):??, February 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122008993.

Geng:2020:CML

[GJF20] Zhenglin Geng, Daniel Johnson, and Ronald Fedkiw. Coercing machine learning to output physically accurate results. *Journal of Computational Physics*, 406(??):Article 109099, April 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119308046.

Gimbutas:2020:EAF

[GJL20] Zydrunas Gimbutas, Shidong Jiang, and Li-Shi Luo. Evaluation of Abramowitz functions in the right half of the complex plane. *Journal of Computational Physics*, 405(??):Article 109169, March 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119308745.

Gao:2020:STA

[GJLD20] Huadong Gao, Lili Ju, Xiao Li, and Ravindra Duddu. A space-time adaptive finite element method with exponential time integrator for the phase field model of pitting corrosion. *Journal of Computational Physics*, 406(??):Article 109191, April 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119308964.

Guan:2024:RCM

[GJW24] Xiaofei Guan, Lijian Jiang, and Yajun Wang. Regularized coupling multiscale method for thermomechanical coupled problems. *Journal of Computational Physics*, 499(??):??, February 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL

http://www.sciencedirect.com/science/article/pii/S0021999123008331.

Guo:2024:CMV

[GJXZ24] Xu Guo, Shidong Jiang, Yunfeng Xiong, and Jiwei Zhang. Compressing the memory variables in constant-Q viscoelastic wave propagation via an improved sum-of-exponentials approximation. *Journal of Computational Physics*, 518(??):??, December 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124005746.

Giuliani:2020:MLD

[GK20] Andrew Giuliani and Lilia Krivodonova. A moment limiter for the discontinuous Galerkin method on unstructured tetrahedral meshes. *Journal of Computational Physics*, 404(??):Article 109106, March 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119308113.

Gross:2022:FPT

[GKA22] B. J. Gross, P. Kuberry, and P. J. Atzberger. First-passage time statistics on surfaces of general shape: Surface PDE solvers using Generalized Moving Least Squares (GMLS). *Journal of Computational Physics*, 453(??):Article 110932, March 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121008275.

Gumerov:2023:RCM

[GKD23] Nail A. Gumerov, Shoken Kaneko, and Ramani Duraiswami. Recursive computation of the multipole expansions of layer potential integrals over simplices for efficient fast multipole accelerated boundary elements. *Journal of Computational Physics*, 486(??):??, August 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123002139.

Gidituri:2024:MFS

[GKEU24] Harinadha Gidituri, Gökberk Kabacaoglu, Marco Ellero, and Florencio Balboa Usabiaga. Mapping flagellated swimmers to surface-slip driven swimmers. *Journal of Computational Physics*, 510(??):??, August 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124003309.

Garg:2021:SDC

[GKL21] Naveen Kumar Garg, Alexander Kurganov, and Yongle Liu. Semi-discrete central-upwind Rankine–Hugoniot schemes for hyperbolic systems of conservation laws. *Journal of Computational Physics*, 428(??):Article 110078, March 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120308524.

Glaubitz:2023:MDS

[GKNÖ23] Jan Glaubitz, Simon-Christian Klein, Jan Nordström, and Philipp Öffner. Multi-dimensional summation-by-parts operators for general function spaces: Theory and construction. *Journal of Computational Physics*, 491(??):??, October 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123004655.

Glaubitz:2024:SPO

[GKNÖ24] Jan Glaubitz, Simon-Christian Klein, Jan Nordström, and Philipp Öffner. Summation-by-parts operators for general function spaces: the second derivative. *Journal of Computational Physics*, 504(??):??, May 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124001384.

Guermond:2022:HRT

[GKPT22] Jean-Luc Guermond, Chris Kees, Bojan Popov, and Eric Tovar. Hyperbolic relaxation technique for solving the dispersive Serre–Green–Naghdi equations with topography. *Journal of Computational Physics*, 450(??):Article 110809, February 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912100704X.

Garritano:2022:EEA

[GKRS22] James Garritano, Yuval Kluger, Vladimir Rokhlin, and Kirill Serkh. On the efficient evaluation of the azimuthal Fourier components of the Green's function for Helmholtz's equation in cylindrical coordinates. *Journal of Computational Physics*, 471(??):??, December 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122006477.

Guo:2020:IFE

[GL20] Ruchi Guo and Tao Lin. An immersed finite element method for elliptic interface problems in three dimensions. *Journal of Computational Physics*, 414(??):Article 109478, August 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120302527.

Glaubitz:2021:SHO

[Gla21] Jan Glaubitz. Stable high-order cubature formulas for experimental data. *Journal of Computational Physics*, 447 (??):Article 110693, December 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912100588X.

Gu:2023:HOP

[GLCS23] Xiaolu Gu, Yue Li, Juan Cheng, and Chi-Wang Shu. A high order positivity-preserving conservative WENO remapping method based on a moving mesh solver. *Journal of Computational Physics*, 473(??):??, January 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122008178.

Gao:2023:NSP

[GLF23] Tianrun Gao, Tian Liang, and Lin Fu. A new smoothed particle hydrodynamics method based on high-order moving-least-square targeted essentially non-oscillatory scheme for compressible flows. *Journal of Computational Physics*, 489(??):??, September 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL

http://www.sciencedirect.com/science/article/pii/S0021999123003650.

Glowinski:2020:CTB

[GLJB20] Roland Glowinski, Jorge López, Héctor Juárez, and Yehuda Braiman. On the controllability of transitions between equilibrium states in small inductively coupled arrays of Josephson junctions: a computational approach. *Journal of Computational Physics*, 403(??):Article 109023, February 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119307296.

Grosheintz-Laval:2020:WBF

[GLK20] L. Grosheintz-Laval and R. Käppeli. Well-balanced finite volume schemes for nearly steady adiabatic flows. *Journal of Computational Physics*, 423(??):Article 109805, December 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120305799.

Giovanis:2024:PCE

[GLKS24] Dimitris G. Giovanis, Dimitrios Loukrezis, Ioannis G. Kevrekidis, and Michael D. Shields. Polynomial chaos expansions on principal geodesic Grassmannian submanifolds for surrogate modeling and uncertainty quantification. *Journal of Computational Physics*, 519(??):??, December 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124006910.

Guo:2020:REI

[GLL20] Ruchi Guo, Tao Lin, and Yanping Lin. Recovering elastic inclusions by shape optimization methods with immersed finite elements. *Journal of Computational Physics*, 404(??):Article 109123, March 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119308289.

Grogan:2020:DDM

[GLLB20] Francesca Grogan, Huan Lei, Xiantao Li, and Nathan A. Baker. Data-driven molecular modeling with the generalized Langevin equation. *Journal of Computational Physics*, 418(??):Article 109633, October 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120304071.

Guo:2022:ECT

[GLLM22] Shimin Guo, Can Li, Xiaoli Li, and Liquan Mei. Energy-conserving and time-stepping-varying ESAV-Hermite-Galerkin spectral scheme for nonlocal Klein–Gordon–Schrödinger system with fractional Laplacian in unbounded domains. *Journal of Computational Physics*, 458(??):??, June 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122001589.

Gao:2022:ROM

[GLSZ22] Zhen Gao, Yifan Lin, Xiang Sun, and Xueying Zeng. A reduced order method for nonlinear parameterized partial differential equations using dynamic mode decomposition coupled with k-nearest-neighbors regression. *Journal of Computational Physics*, 452(??):Article 110907, March 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121008020.

Guillot:2020:PFB

[GLT+20] Louis Guillot, Arnaud Lazarus, Olivier Thomas, Christophe Vergez, and Bruno Cochelin. A purely frequency based Floquet–Hill formulation for the efficient stability computation of periodic solutions of ordinary differential systems. *Journal of Computational Physics*, 416(??):Article 109477, September 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120302515.

Gunzburger:2022:MCW

[GLWY22] Max Gunzburger, Buyang Li, Jilu Wang, and Zongze Yang. A mass conservative, well balanced, tangency preserving and energy decaying method for the shallow water equations on a sphere. *Journal of Computational Physics*, 457(??):??, May 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122001292.

Gao:2022:ANN

[GLWZ22] Yu Gao, Hongyu Liu, Xianchao Wang, and Kai Zhang. On an artificial neural network for inverse scattering problems. *Journal of Computational Physics*, 448(??):Article 110771, January 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999121006665`.

Guo:2020:HOB

[GLY20] Hui Guo, Xinyuan Liu, and Yang Yang. High-order bound-preserving finite difference methods for miscible displacements in porous media. *Journal of Computational Physics*, 406(??):Article 109219, April 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999119309246`.

Guo:2022:PCB

[GLY22] Hui Guo, Xueting Liang, and Yang Yang. Provable convergence of blow-up time of numerical approximations for a class of convection–diffusion equations. *Journal of Computational Physics*, 466(??):??, October 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999122004831`.

Galis:2023:MMM

[GM23a] Petr Gális and Jirí Mikyska. Mathematical modeling of the multicomponent flow in porous media using higher-order methods. *Journal of Computational Physics*, 493(??):??, November 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999123005636`.

Gander:2023:WFM

[GM23b] Martin J. Gander and Véronique Martin. Why Fourier mode analysis in time is different when studying Schwarz Waveform Relaxation. *Journal of Computational Physics*, 491(??):??, October 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999123004114`.

Goswami:2023:ILS

[GMA23] Shubham K. Goswami, Vinod J. Matthew, and Konduri Aditya. Implementation of low-storage Runge–Kutta time integration schemes in scalable asynchronous partial differential equation solvers. *Journal of Computational Physics*, 477(??):??, March 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123000177.

Gao:2022:AGF

[GMB+22] Yijin Gao, Jay Mayfield, Gang Bao, Di Liu, and Songting Luo. An asymptotic Green's function method for time-dependent Schrödinger equations with application to Kohn–Sham equations. *Journal of Computational Physics*, 463(??):??, August 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122003345.

Gouasmi:2022:ESS

[GMD22] Ayoub Gouasmi, Scott M. Murman, and Karthik Duraisamy. Entropy-stable schemes in the low-Mach-number regime: Flux-preconditioning, entropy breakdowns, and entropy transfers. *Journal of Computational Physics*, 456(??):??, May 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122000985.

Guo:2024:EHG

[GMJ24] Shimin Guo, Liquan Mei, and Yao-Lin Jiang. An efficient Hermite–Galerkin spectral scheme for three-dimensional incompressible Hall-magnetohydrodynamic system on infinite domain. *Journal of Computational Physics*, 498(??):??, February 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123007817.

Goloviznin:2022:VLD

[GMMS22] V. M. Goloviznin, Pavel A. Maiorov, Petr A. Maiorov, and A. V. Solovjev. Validation of the low dissipation computational algorithm CABARET-MFSH for multilayer hydrostatic flows with a free surface on the lock-release experiments. *Journal of Computational Physics*, 463(??):??, August 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122003011.

Guan:2023:TOR

[GMNY23] Kaiwen Guan, Kei Matsushima, Yuki Noguchi, and Takayuki Yamada. Topology optimization for rarefied gas flow problems using density method and adjoint IP-DSMC. *Journal of Computational Physics*, 474(??):??, February 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122008518.

Garg:2020:UJF

[GMRS20] Naveen Kumar Garg, N. H. Maruthi, S. V. Raghurama Rao, and M. Sekhar. Use of Jordan forms for convection-pressure split Euler solvers. *Journal of Computational Physics*, 407(??):Article 109258, April 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120300322.

Gomez-Molina:2024:SCL

[GMSLC24] Pedro Gómez-Molina, Luis Sanz-Lorenzo, and Jaime Carpio. A stable conservative Lagrange–Galerkin scheme to pure convection equations with mesh intersection. *Journal of Computational Physics*, 497(??):??, January 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123007209.

Ghosh:2024:RCF

[GMSS24] Souvik Ghosh, Vincent Mons, Denis Sipp, and Peter J. Schmid. A robust computational framework for variational data assimilation of mean flows with sparse measurements corrupted by strong outliers. *Journal of Computational Physics*, 508(??):??, July 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124002572.

Guo:2024:DMF

[GMYZ24] Jinyan Guo, Chenchen Mou, Xianjin Yang, and Chao Zhou. Decoding mean field games from population and environment observations by Gaussian processes. *Journal of Computational Physics*, 508(??):??, July 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999124002274`.

Ghasemi:2020:CDC

[GN20] Fatemeh Ghasemi and Jan Nordström. On conservation and dual consistency for summation-by-parts based approximations of parabolic problems. *Journal of Computational Physics*, 410(??):Article 109282, June 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999120300565`.

Gao:2022:WGA

[GN22] Yihang Gao and Michael K. Ng. Wasserstein generative adversarial uncertainty quantification in physics-informed neural networks. *Journal of Computational Physics*, 463(??):??, August 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999122003321`.

Ganesh:2023:GBO

[GN23a] Sundar Ganesh and Fabio Nobile. Gradient-based optimisation of the conditional-value-at-risk using the multilevel Monte Carlo method. *Journal of Computational Physics*, 495(??):??, December 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999123006186`.

Gu:2023:QRB

[GN23b] Yiqi Gu and Michael K. Ng. Quadrature rule based discovery of dynamics by data-driven denoising. *Journal of Computational Physics*, 486(??):??, August 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999123001973`.

Guo:2023:CFB

[GN23c] Yongfan Guo and SeonHong Na. A computational framework based on explicit local chemical equilibrium for coupled chemo-hydro-mechanical effects on fluid-infiltrating porous media. *Journal of Computational Physics*, 488(??): ??, September 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123002917.

Ghosh:2022:TFI

[GNF22] Supriyo Ghosh, Christopher K. Newman, and Marianne M. Francois. Tusas: a fully implicit parallel approach for coupled phase-field equations. *Journal of Computational Physics*, 448(??):Article 110734, January 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912100629X.

Gavrilyuk:2024:CEH

[GNS24] Sergey Gavrilyuk, Boniface Nkonga, and Keh-Ming Shyue. The conduit equation: Hyperbolic approximation and generalized Riemann problem. *Journal of Computational Physics*, 514(??):??, October 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124004819.

Gormezano:2022:CIV

[GNW22] Cem Gormezano, Jean-Christophe Nave, and Andy T. S. Wan. Conservative integrators for vortex blob methods on the plane. *Journal of Computational Physics*, 469(??):??, November 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122004193.

Garcke:2023:SPD

[GNZ23] Harald Garcke, Robert Nürnberg, and Quan Zhao. Structure-preserving discretizations of two-phase Navier–Stokes flow using fitted and unfitted approaches. *Journal of Computational Physics*, 489(??):??, September 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

URL http://www.sciencedirect.com/science/article/pii/S0021999123003716.

Goncharuk:2023:IBM

[GOF23] Kirill Goncharuk, Oz Oshri, and Yuri Feldman. The immersed boundary method: a SIMPLE approach. *Journal of Computational Physics*, 487(??):??, August 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123002437.

Gonoskov:2024:EEC

[Gon24] Arkady Gonoskov. Explicit energy-conserving modification of relativistic PIC method. *Journal of Computational Physics*, 502(??):??, April 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912400069X.

Gomez:2023:MCM

[GP23] Christophe Gomez and Olivier Pinaud. A Monte Carlo method for 3D radiative transfer equations with multifractional singular kernels. *Journal of Computational Physics*, 489(??):??, September 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123003741.

Gonzalez-Pinto:2022:UFS

[GPHAPR+22] Severiano González-Pinto, Domingo Hernández-Abreu, Maria S. Pérez-Rodríguez, Arash Sarshar, Steven Roberts, and Adrian Sandu. A unified formulation of splitting-based implicit time integration schemes. *Journal of Computational Physics*, 448(??):Article 110766, January 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121006616.

Gagliardi:2022:CAM

[GPL22] Luca Gagliardi and Olivier Pierre-Louis. Controlling anisotropy in 2D microscopic models of growth. *Journal of Computational Physics*, 452(??):Article 110936, March 1,

2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121008317.

Guermond:2020:SOI

[GPS20] Jean-Luc Guermond, Bojan Popov, and Laura Saavedra. Second-order invariant domain preserving ALE approximation of hyperbolic systems. *Journal of Computational Physics*, 401(??):Article 108927, January 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119306321.

Giussani:2020:TPV

[GPSMH20] F. Giussani, F. Piscaglia, G. Saez-Mischlich, and J. Hèlie. A three-phase VOF solver for the simulation of in-nozzle cavitation effects on liquid atomization. *Journal of Computational Physics*, 406(??):Article 109068, April 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119307739.

Guo:2022:LRT

[GQ22] Wei Guo and Jing-Mei Qiu. A low rank tensor representation of linear transport and nonlinear Vlasov solutions and their associated flow maps. *Journal of Computational Physics*, 458(??):??, June 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122001516.

Gao:2023:MLA

[GQF23] Tianrun Gao, Huihe Qiu, and Lin Fu. Multi-level adaptive particle refinement method with large refinement scale ratio and new free-surface detection algorithm for complex fluid-structure interaction problems. *Journal of Computational Physics*, 473(??):??, January 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122008257.

Gao:2024:SML

[GQF24] Tianrun Gao, Huihe Qiu, and Lin Fu. A semi-meshless Lagrangian finite-volume framework based on Voronoi diagram for general elastoplastic Reissner–Mindlin shell. *Journal of Computational Physics*, 501(??):??, March 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124000512.

Girfoglio:2021:PGR

[GQR21] Michele Girfoglio, Annalisa Quaini, and Gianluigi Rozza. A POD–Galerkin reduced order model for a LES filtering approach. *Journal of Computational Physics*, 436 (??):Article 110260, July 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121001558.

Girfoglio:2023:HPD

[GQR23] Michele Girfoglio, Annalisa Quaini, and Gianluigi Rozza. A hybrid projection/data-driven reduced order model for the Navier–Stokes equations with nonlinear filtering stabilization. *Journal of Computational Physics*, 486(??):??, August 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912300222X.

Ghilani:2020:PPF

[GQS20] Mustapha Ghilani, El Houssaine Quenjel, and Mazen Saad. Positivity-preserving finite volume scheme for compressible two-phase flows in anisotropic porous media: the densities are depending on the physical pressures. *Journal of Computational Physics*, 407(??):Article 109233, April 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120300073.

Gradinaru:2021:HWS

[GR21] Vasile Gradinaru and Oliver Rietmann. Hagedorn wavepackets and Schrödinger equation with time-dependent, homogeneous magnetic field. *Journal of Computational Physics*, 445(??):Article 110581, November 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

URL http://www.sciencedirect.com/science/article/pii/S0021999121004769.

Givoli:2024:SDN

[GR24a] Dan Givoli and Daniel Rabinovich. Sequential Dirichlet-to-Neumann coupling for the mixed-dimensional wave equation. *Journal of Computational Physics*, 499(??):??, February 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123008045.

Gradinaru:2024:SSW

[GR24b] Vasile Gradinaru and Oliver Rietmann. Spawning semiclassical wavepackets. *Journal of Computational Physics*, 509 (??):??, July 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912400278X.

Giacomin:2022:GCS

[GRC+22] M. Giacomin, P. Ricci, A. Coroado, G. Fourestey, D. Galassi, E. Lanti, D. Mancini, N. Richart, L. N. Stenger, and N. Varini. The GBS code for the self-consistent simulation of plasma turbulence and kinetic neutral dynamics in the tokamak boundary. *Journal of Computational Physics*, 463(??):??, August 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122003564.

Grigoriu:2020:DBI

[Gri20] M. Grigoriu. Data-based importance sampling estimates for extreme events. *Journal of Computational Physics*, 412(??):Article 109429, July 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120302035.

Gaudreault:2018:KFA

[GRT18] Stéphane Gaudreault, Greg Rainwater, and Mayya Tokman. KIOPS: a fast adaptive Krylov subspace solver for exponential integrators. *Journal of Computational Physics*, 372(??):236–255, November 1, 2018. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

URL http://www.sciencedirect.com/science/article/pii/S0021999118304042. See corrigendum [GRT21].

Gaudreault:2021:CKF

[GRT21] Stéphane Gaudreault, Greg Rainwater, and Mayya Tokman. Corrigendum to “KIOPS: a fast adaptive Krylov subspace solver for exponential integrators” [J. Comput. Phys. **372** (2018) 236–255]. *Journal of Computational Physics*, 441(??):Article 110443, September 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121003387. See [GRT18].

Gu:2020:BPE

[GS20] Yiqi Gu and Jie Shen. Bound preserving and energy dissipative schemes for porous medium equation. *Journal of Computational Physics*, 410(??):Article 109378, June 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120301522.

Goyman:2021:HAS

[GS21] Gordey S. Goyman and Vladimir V. Shashkin. Horizontal approximation schemes for the staggered reduced latitude–longitude grid. *Journal of Computational Physics*, 434(??):Article 110234, June 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121001297.

Gjesteland:2022:ESC

[GS22] Anita Gjesteland and Magnus Svärd. Entropy stability for the compressible Navier–Stokes equations with strong imposition of the no-slip boundary condition. *Journal of Computational Physics*, 470(??):??, December 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122006349.

Gerster:2023:SCH

[GS23] Stephan Gerster and Matteo Semplice. Semi-conservative high order scheme with numerical entropy indicator for intrusive formulations of hyperbolic systems. *Journal of Com-*

putational Physics, 489(??):??, September 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123003492.

Glaser:2022:CCV

[GSFH22] Dennis Gläser, Martin Schneider, Bernd Flemisch, and Rainer Helmig. Comparison of cell- and vertex-centered finite-volume schemes for flow in fractured porous media. *Journal of Computational Physics*, 448(??):Article 110715, January 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121006100.

Gejadze:2023:BVC

[GSOM23] I. Gejadze, V. Shutyaev, H. Oubanas, and P.-O. Malaterre. A Bayesian-variational cyclic method for solving estimation problems characterized by non-uniqueness (equifinality). *Journal of Computational Physics*, 488(??):??, September 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123003340.

Gao:2021:PPI

[GSW21] Han Gao, Luning Sun, and Jian-Xun Wang. PhyGeoNet: Physics-informed geometry-adaptive convolutional neural networks for solving parameterized steady-state PDEs on irregular domain. *Journal of Computational Physics*, 428(??):Article 110079, March 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120308536.

Goff:2024:PAC

[GSWT24] J. M. Goff, C. Sievers, M. A. Wood, and A. P. Thompson. Permutation-adapted complete and independent basis for atomic cluster expansion descriptors. *Journal of Computational Physics*, 510(??):??, August 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912400322X.

Gorji:2021:EFP

[GT21] M. Hossein Gorji and Manuel Torrilhon. Entropic Fokker–Planck kinetic model. *Journal of Computational Physics*, 430(??):Article 110034, April 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120308081.

Gorbunov:2023:ASS

[GT23] Evgeny A. Gorbunov and Bogdan Teaca. ALLIANCE: Spectral solver for kinetic plasma turbulence. *Journal of Computational Physics*, 495(??):??, December 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123006459.

Gatsonis:2022:HNO

[GTDB22] Nikolaos A. Gatsonis, Xin Tian, Michael A. Demetriou, and John A. Burns. A heterogeneous non-overlapping domain decomposition explicit finite volume method for a real-time hybrid process-state estimator of 3D unsteady advection-diffusion fields. *Journal of Computational Physics*, 464(??):??, September 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122003199.

Gross:2020:MMM

[GTKA20] B. J. Gross, N. Trask, P. Kuberry, and P. J. Atzberger. Meshfree methods on manifolds for hydrodynamic flows on curved surfaces: a Generalized Moving Least-Squares (GMLS) approach. *Journal of Computational Physics*, 409(??):Article 109340, May 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120301145.

Geng:2024:DLM

[GTWJ24] Yuwei Geng, Yuankai Teng, Zhu Wang, and Lili Ju. A deep learning method for the dynamics of classic and conservative Allen–Cahn equations based on fully-discrete operators. *Journal of Computational Physics*, 496(??):??, January 1,

2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123006848.

Giga:2020:NCS

[GU20] Yoshikazu Giga and Yuki Ueda. Numerical computations of split Bregman method for fourth order total variation flow. *Journal of Computational Physics*, 405(??):Article 109114, March 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119308198.

Gabbard:2024:HOF

[GvR24] James Gabbard and Wim M. van Rees. A high-order finite difference method for moving immersed domain boundaries and material interfaces. *Journal of Computational Physics*, 507(??):??, June 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124002286.

Gu:2020:PTI

[GW20] Xian-Ming Gu and Shu-Lin Wu. A parallel-in-time iterative algorithm for Volterra partial integro-differential problems with weakly singular kernel. *Journal of Computational Physics*, 417(??):Article 109576, September 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120303508.

Gao:2023:ALB

[GW23] Wenhan Gao and Chunmei Wang. Active learning based sampling for high-dimensional nonlinear partial differential equations. *Journal of Computational Physics*, 475(??):??, February 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122009111.

Giuliani:2022:SSG

[GWC+22] Andrew Giuliani, Florian Wechsung, Antoine Cerfon, Georg Stadler, and Matt Landreman. Single-stage gradient-based stellarator coil design: Optimization for near-axis quasi-symmetry. *Journal of Computational Physics*, 459(??):??, June 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122002091.

Guo:2024:IUI

[GWW+24] Ling Guo, Hao Wu, Yan Wang, Wenwen Zhou, and Tao Zhou. IB-UQ: Information bottleneck based uncertainty quantification for neural function regression and neural operator learning. *Journal of Computational Physics*, 510(??):??, August 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124003383.

Gu:2021:SPN

[GWY21] Yiqi Gu, Chunmei Wang, and Haizhao Yang. Structure probing neural network deflation. *Journal of Computational Physics*, 434(??):Article 110231, June 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121001261.

Guo:2022:NFF

[GWZ22] Ling Guo, Hao Wu, and Tao Zhou. Normalizing field flows: Solving forward and inverse stochastic differential equations using physics-informed flow models. *Journal of Computational Physics*, 461(??):??, July 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122002649.

Gu:2024:IES

[GXY24] Hao Gu, Xiang Xu, and Liang Yan. Inverse elastic scattering by random periodic structures. *Journal of Computational Physics*, 501(??):??, March 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124000342.

Guan:2024:TOR

[GY24] Kaiwen Guan and Takayuki Yamada. Topology optimization of rarefied gas flows using an adjoint discrete velocity method. *Journal of Computational Physics*, 511(??):??, August 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print),

1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124003607.

Guan:2023:DAP

[GYC+23] Weilong Guan, Kaihan Yang, Yinsheng Chen, Shaolin Liao, and Zhong Guan. A dimension-augmented physics-informed neural network (DaPINN) with high level accuracy and efficiency. *Journal of Computational Physics*, 491(??):??, October 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123004552.

Guo:2023:PTS

[GYWG23] Jiawei Guo, Yanzhong Yao, Han Wang, and Tongxiang Gu. Pre-training strategy for solving evolution equations based on physics-informed neural networks. *Journal of Computational Physics*, 489(??):??, September 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123003534.

Gao:2020:FVE

[GYWH20] Yanni Gao, Guangwei Yuan, Shuai Wang, and Xudeng Hang. A finite volume element scheme with a monotonicity correction for anisotropic diffusion problems on general quadrilateral meshes. *Journal of Computational Physics*, 407(??):Article 109143, April 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119308484.

Gu:2021:SSP

[GYZ21] Yiqi Gu, Haizhao Yang, and Chao Zhou. SelectNet: Self-paced learning for high-dimensional partial differential equations. *Journal of Computational Physics*, 441 (??):Article 110444, September 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121003399.

Geneva:2020:MDP

[GZ20] Nicholas Geneva and Nicholas Zabaras. Modeling the dynamics of PDE systems with physics-constrained deep autoregressive networks. *Journal of Computational Physics*, 403 (??):Article 109056, February 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119307612.

Guo:2021:STD

[GZ21] Ruchi Guo and Xu Zhang. Solving three-dimensional interface problems with immersed finite elements: A-priori error analysis. *Journal of Computational Physics*, 441 (??):Article 110445, September 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121003405.

Guo:2024:SIS

[GZQL24] Chaoyang Guo, Huashan Zhang, Zhihao Qian, and Moubin Liu. Smoothed-interface SPH model for multiphase fluid-structure interaction. *Journal of Computational Physics*, 518(??):??, December 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124005849.

Ge:2020:IUE

[GZW20a] Liang Ge, A-Man Zhang, and Shi-Ping Wang. Investigation of underwater explosion near composite structures using a combined RKDG-FEM approach. *Journal of Computational Physics*, 404(??):Article 109113, March 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119308186.

Gong:2020:AHO

[GZW20b] Yuezheng Gong, Jia Zhao, and Qi Wang. Arbitrarily high-order linear energy stable schemes for gradient flow models. *Journal of Computational Physics*, 419 (??):Article 109610, October 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120303843.

Hoagland:2021:HAA

[HA21] Dylan S. Hoagland and Yousry Y. Azmy. Hybrid approaches for accelerated convergence of block-Jacobi iterative methods for solution of the neutron transport equation. *Journal of Computational Physics*, 439(??):Article 110382, August 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999121002771`.

Huang:2024:EPI

[HA24] Xinquan Huang and Tariq Alkhalifah. Efficient physics-informed neural networks using hash encoding. *Journal of Computational Physics*, 501(??):??, March 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999124000093`.

Huang:2023:CGS

[HABG23] Kun Huang, Michael Abdelmalik, Boris Breizman, and Irene M. Gamba. A conservative Galerkin solver for the quasilinear diffusion model in magnetized plasmas. *Journal of Computational Physics*, 488(??):??, September 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999123003157`.

Hackemack:2021:DGS

[Hac21] Michael W. Hackemack. Discontinuous Galerkin solutions for elliptic problems on polygonal grids using arbitrary-order Bernstein–Bézier functions. *Journal of Computational Physics*, 437(??):Article 110293, July 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999121001881`.

Huang:2021:SES

[HB21] Zhishen Huang and Stephen Becker. Spectral estimation from simulations via sketching. *Journal of Computational Physics*, 447(??):Article 110686, December 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999121005817`.

Hao:2024:IFT

[HB24] Kairui Hao and Ilias Bilionis. An information field theory approach to Bayesian state and parameter estimation in dynamical systems. *Journal of Computational Physics*, 512(??):??, September 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124003887.

Hirschvogel:2024:FRS

[HBBN24] Marc Hirschvogel, Maximilian Balmus, Mia Bonini, and David Nordsletten. Fluid-reduced-solid interaction (FrSI): Physics- and projection-based model reduction for cardiovascular applications. *Journal of Computational Physics*, 506(??):??, June 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124001700.

Heldmann:2023:PTU

[HBEK23] Fabian Heldmann, Sarah Berkhahn, Matthias Ehrhardt, and Kathrin Klamroth. PINN training using biobjective optimization: the trade-off between data loss and residual loss. *Journal of Computational Physics*, 488(??):??, September 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123003066.

Hyde:2021:OSS

[HBF21] David A. B. Hyde, Michael Bao, and Ronald Fedkiw. On obtaining sparse semantic solutions for inverse problems, control, and neural network training. *Journal of Computational Physics*, 443(??):Article 110498, October 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121003934.

Hertel:2022:CLM

[HBF22] Tobias Hertel, Nicolas Besse, and Uriel Frisch. The Cauchy–Lagrange method for 3D-axisymmetric wall-bounded and potentially singular incompressible Euler flows. *Journal of Computational Physics*, 449(??):Article 110758, January 15,

2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121006537.

Haas:2020:TSA

[HBFB20] Anthony P. Haas, Oliver M. F. Browne, Hermann F. Fasel, and Christoph Brehm. A time-spectral approximate Jacobian based linearized compressible Navier–Stokes solver for high-speed boundary-layer receptivity and stability. *Journal of Computational Physics*, 405(??):Article 108978, March 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119306837.

Hernandez:2021:SPN

[HBG+21] Quercus Hernández, Alberto Badías, David González, Francisco Chinesta, and Elías Cueto. Structure-preserving neural networks. *Journal of Computational Physics*, 426 (??):Article 109950, February 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120307245.

Hou:2024:ALG

[HC24] Wei Hou and Tim Colonius. An adaptive lattice Green's function method for external flows with two unbounded and one homogeneous directions. *Journal of Computational Physics*, 519(??):??, December 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124006181.

Huang:2022:MLM

[HCCR22] Juntao Huang, Yingda Cheng, Andrew J. Christlieb, and Luke F. Roberts. Machine learning moment closure models for the radiative transfer equation I: Directly learning a gradient based closure. *Journal of Computational Physics*, 453(??):Article 110941, March 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122000031.

Han:2024:CTS

[HCD24] Austin Han, Robert Chiodi, and Olivier Desjardins. Capturing thin structures in VOF simulations with two-plane reconstruction. *Journal of Computational Physics*, 519(??):??, December 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124007010.

Hope-Collins:2023:ADC

[HCdM23] Joshua Hope-Collins and Luca di Mare. Artificial diffusion for convective and acoustic low Mach number flows I: Analysis of the modified equations, and application to Roe-type schemes. *Journal of Computational Physics*, 475(??):??, February 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122009214.

He:2023:GPP

[HCF+23] Xiaolong He, Youngsoo Choi, William D. Fries, Jonathan L. Belof, and Jiun-Shyan Chen. gLaSDI: Parametric physics-informed greedy latent space dynamics identification. *Journal of Computational Physics*, 489(??):??, September 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123003625.

Hoffmann:2024:CGB

[HCF24] Natan Hoffmann, Amareshwara Sainadh Chamarthi, and Steven H. Frankel. Centralized gradient-based reconstruction for wall modeled large eddy simulations of hypersonic boundary layer transition. *Journal of Computational Physics*, 512(??):??, September 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124003772.

Huang:2020:DAB

[HCL20] Yunqing Huang, Min Chen, and Jichun Li. Development and analysis of both finite element and fourth-order in space finite difference methods for an equivalent Berenger's PML model. *Journal of Computational Physics*, 405(??):Article 109154, March 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119308599.

Henri:2022:GLS

[HCL22] Félix Henri, Mathieu Coquerelle, and Pierre Lubin. Geometrical level set reinitialization using closest point method and kink detection for thin filaments, topology changes and two-phase flows. *Journal of Computational Physics*, 448(??):Article 110704, January 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121005994.

Huang:2023:PRO

[HD23] Cheng Huang and Karthik Duraisamy. Predictive reduced order modeling of chaotic multi-scale problems using adaptively sampled projections. *Journal of Computational Physics*, 491(??):??, October 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123004515.

Hageman:2020:SGM

[HdB20] Tim Hageman and René de Borst. Sub-grid models for multiphase fluid flow inside fractures in poroelastic media. *Journal of Computational Physics*, 414(??):Article 109481, August 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120302552.

Hageman:2021:RTS

[HdB21] Tim Hageman and René de Borst. A refined two-scale model for Newtonian and non-Newtonian fluids in fractured poroelastic media. *Journal of Computational Physics*, 441(??):Article 110424, September 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121003193.

Harnish:2023:AWM

[HDML23] Cale Harnish, Luke Dalessandro, Karel Matous, and Daniel Livescu. An adaptive wavelet method for nonlinear partial differential equations with applications to dynamic damage modeling. *Journal of Computational Physics*, 479(??):??, April 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123000979.

He:2022:MFS

[He22] Tao He. Modeling fluid-structure interaction with the edge-based smoothed finite element method. *Journal of Computational Physics*, 460(??):??, July 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122002339.

Han:2023:HOS

[HEG23] Saem Han, Selim Esedoğlu, and Krishna Garikipati. High order schemes for gradient flow with respect to a metric. *Journal of Computational Physics*, 494(??):??, December 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123006113.

Heumann:2021:GMW

[Heu21] Holger Heumann. A Galerkin method for the weak formulation of current diffusion and force balance in tokamak plasmas. *Journal of Computational Physics*, 442 (??):Article 110483, October 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121003788.

Hausmann:2024:PCI

[HEvW24] Max Hausmann, Hani Elmestikawy, and Berend van Wachem. Physically consistent immersed boundary method: a framework for predicting hydrodynamic forces on particles with coarse meshes. *Journal of Computational Physics*, 519(??):??, December 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912400696X.

Ho:2023:AOL

[HF23] Jonathan Ho and Charbel Farhat. Aerodynamic optimization with large shape and topology changes using a differentiable embedded boundary method. *Journal of Computational Physics*, 488(??):??, September 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123002863.

Hong:2024:ISW

[HG24] Andrew Y. K. Hong and Michael A. Gallis. An improved stochastic weighted particle method for boundary driven flows. *Journal of Computational Physics*, 517(??):??, November 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124006016.

Holst:2020:ETE

[HGB20] Kevin R. Holst, Ryan S. Glasby, and Ryan B. Bond. On the effect of temporal error in high-order simulations of unsteady flows. *Journal of Computational Physics*, 402 (??):Article 108989, February 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119306941.

Hepp:2020:MEA

[HGH20] Christian Hepp, Martin Grabe, and Klaus Hannemann. Master equation approach for modeling diatomic gas flows with a kinetic Fokker–Planck algorithm. *Journal of Computational Physics*, 418(??):Article 109638, October 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120304125.

Ho:2024:ACE

[HGO24] Cheuk Hin Ho, Timon S. Gutleb, and Christoph Ortner. Atomic cluster expansion without self-interaction. *Journal of Computational Physics*, 515(??):??, October 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124005199.

Hassanaly:2022:ASU

[HGSK22] Malik Hassanaly, Andrew Glaws, Karen Stengel, and Ryan N. King. Adversarial sampling of unknown and high-dimensional conditional distributions. *Journal of Computational Physics*, 450(??):Article 110853, February 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121007488.

Hachem:2021:DRL

[HGV+21] E. Hachem, H. Ghraieb, J. Viquerat, A. Larcher, and P. Meliga. Deep reinforcement learning for the control of conjugate heat transfer. *Journal of Computational Physics*, 436(??):Article 110317, July 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121002126.

Hong:2023:TCH

[HGZ23] Qi Hong, Yuezheng Gong, and Jia Zhao. Thermodynamically consistent hydrodynamic phase-field computational modeling for fluid-structure interaction with moving contact lines. *Journal of Computational Physics*, 492(??):??, November 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123005041.

Haghani-Hassan-Abadi:2021:PCM

[HHAFR21] Reza Haghani-Hassan-Abadi, Abbas Fakhari, and Mohammad-Hassan Rahimian. Phase-change modeling based on a novel conservative phase-field method. *Journal of Computational Physics*, 432(??):Article 110111, May 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121000036.

Haack:2023:NSM

[HHK+23] Jeffrey Haack, Cory D. Hauck, Christian F. Klingenberg, Marlies Pirner, and Sandra Warnecke. Numerical schemes for a multi-species BGK model with velocity-dependent collision frequency. *Journal of Computational Physics*, 473(??):??, January 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122007926.

Higginson:2020:CMC

[HHL20] Drew Pitney Higginson, Ihor Holod, and Anthony Link. A corrected method for Coulomb scattering in arbitrarily weighted particle-in-cell plasma simulations. *Journal of Computational Physics*, 413(??):Article 109450, July 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120302242.

Hong:2022:TKN

[HHLS22] Jialin Hong, Baohui Hou, Qiang Li, and Liying Sun. Three kinds of novel multi-symplectic methods for stochastic Hamiltonian partial differential equations. *Journal of Computational Physics*, 467(??):??, October 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122005150.

Herty:2021:ADH

[HHN+21] Michael Herty, Jonathan Hüser, Uwe Naumann, Thomas Schilden, and Wolfgang Schröder. Algorithmic differentiation of hyperbolic flow problems. *Journal of Computational Physics*, 430(??):Article 110110, April 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121000024.

Hosseininia:2019:CWM

[HHRA19] M. Hosseininia, M. H. Heydari, R. Roohi, and Z. Avazzadeh. A computational wavelet method for variable-order fractional model of dual phase lag bioheat equation. *Journal of Computational Physics*, 395(??):1–18, October 15, 2019. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL https://www.sciencedirect.com/science/article/pii/S0021999119304322. See comment [Pan20b].

Hong:2022:EPF

[HHS22] Jialin Hong, Baohui Hou, and Liying Sun. Energy-preserving fully-discrete schemes for nonlinear stochastic wave equations with multiplicative noise. *Journal of Computational Physics*, 451(??):Article 110829, February 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

URL http://www.sciencedirect.com/science/article/pii/S0021999121007245.

Hong:2024:NSP

[HHSZ24] Jialin Hong, Baohui Hou, Liying Sun, and Xiaojing Zhang. Novel structure-preserving schemes for stochastic Klein–Gordon–Schrödinger equations with additive noise. *Journal of Computational Physics*, 500(??):??, March 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123008367.

Hitz:2020:CMM

[HHVM20] Timon Hitz, Matthias Heinen, Jadran Vrabec, and Claus-Dieter Munz. Comparison of macro- and microscopic solutions of the Riemann problem I. Supercritical shock tube and expansion into vacuum. *Journal of Computational Physics*, 402(??):Article 109077, February 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199911930782X.

Honshuku:2024:BBF

[HI24] Yuta Honshuku and Hiroshi Isakari. BEM-based fast frequency sweep for acoustic scattering by periodic slab. *Journal of Computational Physics*, 509(??):??, July 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912400295X.

Higdon:2020:DGM

[Hig20] Robert L. Higdon. Discontinuous Galerkin methods for multi-layer ocean modeling: Viscosity and thin layers. *Journal of Computational Physics*, 401(??):Article 109018, January 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119307247.

Higdon:2022:AWB

[Hig22] Robert L. Higdon. An automatically well-balanced formulation of pressure forcing for discontinuous Galerkin methods for the shallow water equations. *Journal of Computational Physics*, 458(??):??, June 1, 2022. CODEN

JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122001644.

Helsing:2022:SFS

[HJ22] Johan Helsing and Shidong Jiang. Solving Fredholm second-kind integral equations with singular right-hand sides on non-smooth boundaries. *Journal of Computational Physics*, 448(??):Article 110714, January 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121006094.

Huang:2023:CCP

[HJ23] Ziyang Huang and Eric Johnsen. A consistent and conservative phase-field method for compressible multiphase flows with shocks. *Journal of Computational Physics*, 488(??):??, September 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123002905.

Huang:2024:CCP

[HJ24a] Ziyang Huang and Eric Johnsen. A consistent and conservative phase-field method for compressible N-phase flows: *Consistent limiter* and *multiphase reduction-consistent formulation*. *Journal of Computational Physics*, 501(??):??, March 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124000500.

Hwang:2024:RPF

[HJ24b] Hanul Hwang and Suhas S. Jain. A robust phase-field method for two-phase flows on unstructured grids. *Journal of Computational Physics*, 507(??):??, June 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124002213.

Hitz:2021:CMM

[HJH+21] Timon Hitz, Steven Jöns, Matthias Heinen, Jadran Vrabec, and Claus-Dieter Munz. Comparison of macro- and microscopic solutions of the Riemann problem II. two-phase shock tube. *Journal of Computational Physics*, 429(??):Article 110027, March 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120308019.

Hwang:2020:TEK

[HJJL20] Hyung Ju Hwang, Jin Woo Jang, Hyeontae Jo, and Jae Yong Lee. Trend to equilibrium for the kinetic Fokker–Planck equation via the neural network approach. *Journal of Computational Physics*, 419(??):Article 109665, October 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120304393.

Hartung:2021:LML

[HJK+21] Tobias Hartung, Karl Jansen, Frances Y. Kuo, Hernan Leövey, Dirk Nuyens, and Ian H. Sloan. Lattice meets lattice: Application of lattice cubature to models in lattice gauge theory. *Journal of Computational Physics*, 443(??):Article 110527, October 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121004228.

Harlim:2021:MLP

[HJLY21] John Harlim, Shixiao W. Jiang, Senwei Liang, and Haizhao Yang. Machine learning for prediction with missing dynamics. *Journal of Computational Physics*, 428(??):Article 109922, March 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120306963.

Hu:2023:MMC

[HJLZ23] Junpeng Hu, Shi Jin, Jinglai Li, and Lei Zhang. On multilevel Monte Carlo methods for deterministic and uncertain hyperbolic systems. *Journal of Computational Physics*, 475(??):??, February 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912200910X.

Huang:2023:HOP

[HJQ+23] Lintao Huang, Zhenhua Jiang, Xueyu Qin, Xin Zhang, and Chao Yan. High-order positivity-preserving method in the flux reconstruction framework for the simulation of two-medium flow. *Journal of Computational Physics*, 486(??):??, August 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999123002103`.

Hariharan:2021:WCU

[HKJ21] Gokul Hariharan, Satish Kumar, and Mihailo R. Jovanović. Well-conditioned ultraspherical and spectral integration methods for resolvent analysis of channel flows of Newtonian and viscoelastic fluids. *Journal of Computational Physics*, 439(??):Article 110241, August 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999121001364`.

Heidel:2021:TPM

[HKKS21] Gennadij Heidel, Venera Khoromskaia, Boris N. Khoromskij, and Volker Schulz. Tensor product method for fast solution of optimal control problems with fractional multidimensional Laplacian in constraints. *Journal of Computational Physics*, 424(??):Article 109865, January 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999120306392`.

He:2023:GPS

[HKL+23] Yuchen He, Sung Ha Kang, Wenjing Liao, Hao Liu, and Yingjie Liu. Group Projected subspace pursuit for IDENTification of variable coefficient differential equations (GP-IDENT). *Journal of Computational Physics*, 494(??):??, December 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999123006216`.

Hitz:2020:PRM

[HKMR20] Timon Hitz, Jens Keim, Claus-Dieter Munz, and Christian Rohde. A parabolic relaxation model for the Navier–Stokes–Korteweg equations. *Journal of Computational Physics*, 421

(??):Article 109714, November 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120304885.

Hoskins:2023:FHO

[HKRS23] Jeremy G. Hoskins, Jason Kaye, Manas Rachh, and John C. Schotland. A fast, high-order numerical method for the simulation of single-excitation states in quantum optics. *Journal of Computational Physics*, 473(??):??, January 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122007860.

Hennessey:2020:HTR

[HKS20] M. Hennessey, A. K. Kapila, and D. W. Schwendeman. An HLLC-type Riemann solver and high-resolution Godunov method for a two-phase model of reactive flow with general equations of state. *Journal of Computational Physics*, 405(??):Article 109180, March 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199911930885X.

Heydari:2024:FCT

[HKW24] Shahin Heydari, Petr Knobloch, and Thomas Wick. Flux-corrected transport stabilization of an evolutionary cross-diffusion cancer invasion model. *Journal of Computational Physics*, 499(??):??, February 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123008069.

Hou:2020:EPT

[HL20a] Baohui Hou and Dong Liang. Energy-preserving time high-order AVF compact finite difference schemes for nonlinear wave equations with variable coefficients. *Journal of Computational Physics*, 421(??):Article 109738, November 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912030512X.

Hu:2020:HTF

[HL20b] Jiuhua Hu and Guanglian Li. Homogenization of time-fractional diffusion equations with periodic coefficients. *Journal of Computational Physics*, 408(??):Article 109231, May 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912030005X.

Hu:2020:RUD

[HL20c] Tianli Hu and Shijun Liao. On the risks of using double precision in numerical simulations of spatio-temporal chaos. *Journal of Computational Physics*, 418(??):Article 109629, October 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120304034.

Herbst:2022:REL

[HL22a] Michael F. Herbst and Antoine Levitt. A robust and efficient line search for self-consistent field iterations. *Journal of Computational Physics*, 459(??):??, June 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122001899.

Higginson:2022:CDL

[HL22b] Drew P. Higginson and Anthony J. Link. A Cartesian-diffusion Langevin method for hybrid kinetic-fluid Coulomb scattering in particle-in-cell plasma simulations. *Journal of Computational Physics*, 457(??):??, May 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121008305.

Han:2024:SAE

[HL24a] Jihun Han and Yoonsang Lee. A stochastic approach for elliptic problems in perforated domains. *Journal of Computational Physics*, 519(??):??, December 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124006740.

Huo:2024:ISN

[HL24b] Xiaokai Huo and Hailiang Liu. Inf-sup neural networks for high-dimensional elliptic PDE problems. *Journal of Computational Physics*, 514(??):??, October 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124004376.

Han:2020:ELL

[HLA20a] Dong Han, G. R. Liu, and Shaaban Abdallah. An Eulerian–Lagrangian-Lagrangian method for solving fluid-structure interaction problems with bulk solids. *Journal of Computational Physics*, 405(??):Article 109164, March 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119308691.

Huang:2020:CCS

[HLA20b] Ziyang Huang, Guang Lin, and Arezoo M. Ardekani. Consistent and conservative scheme for incompressible two-phase flows using the conservative Allen–Cahn model. *Journal of Computational Physics*, 420(??):Article 109718, November 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120304927.

Huang:2020:CEC

[HLA20c] Ziyang Huang, Guang Lin, and Arezoo M. Ardekani. Consistent, essentially conservative and balanced-force phase-field method to model incompressible two-phase flows. *Journal of Computational Physics*, 406(??):Article 109192, April 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119308976.

Huang:2021:CCM

[HLA21] Ziyang Huang, Guang Lin, and Arezoo M. Ardekani. A consistent and conservative model and its scheme for N-phase-M-component incompressible flows. *Journal of Computational Physics*, 434(??):Article 110229, June 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121001248.

Huang:2022:CCP

[HLA22a] Ziyang Huang, Guang Lin, and Arezoo M. Ardekani. A consistent and conservative Phase-Field model for thermo-gas-liquid-solid flows including liquid-solid phase change. *Journal of Computational Physics*, 449(??):Article 110795, January 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999121006902`.

Huang:2022:ICA

[HLA22b] Ziyang Huang, Guang Lin, and Arezoo M. Ardekani. Implementing contact angle boundary conditions for second-order phase-field models of wall-bounded multiphase flows. *Journal of Computational Physics*, 471(??):??, December 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999122006829`.

Hao:2020:DCS

[HLB20] Bingjie Hao, Kok-Meng Lee, and Kun Bai. Distributed current source modeling method for 3D eddy current problem in magnetic conductor with discrete state-space J–ϕ formulation. *Journal of Computational Physics*, 401 (??):Article 109027, January 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999119307338`.

Huang:2021:TDF

[HLH21] Yunqing Huang, Jichun Li, and Bin He. A time-domain finite element scheme and its analysis for nonlinear Maxwell's equations in Kerr media. *Journal of Computational Physics*, 435(??):Article 110259, June 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999121001546`.

Hu:2022:DCS

[HLL22] Wei-Fan Hu, Te-Sheng Lin, and Ming-Chih Lai. A discontinuity capturing shallow neural network for elliptic interface problems. *Journal of Computational Physics*, 469(??):??, November 15, 2022. CODEN JCTPAH.

ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122006386.

He:2023:GFE

[HLL23] Zhiwei He, Huipo Liu, and Li Li. Generic five-equation model for compressible multi-material flows and its corresponding high-fidelity numerical algorithms. *Journal of Computational Physics*, 487(??):??, August 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123002498.

Harizanov:2020:ANM

[HLM+20] Stanislav Harizanov, Raytcho Lazarov, Svetozar Margenov, Pencho Marinov, and Joseph Pasciak. Analysis of numerical methods for spectral fractional elliptic equations based on the best uniform rational approximation. *Journal of Computational Physics*, 408(??):Article 109285, May 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120300590.

Hergibo:2024:QBA

[HLPX24] Philippe Hergibo, Qiuhua Liang, Timothy N. Phillips, and Zhihua Xie. A quadtree-based adaptive moment-of-fluid method for interface reconstruction with filaments. *Journal of Computational Physics*, 499(??):??, February 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123008148.

Huang:2023:WBM

[HLQZ23] Weizhang Huang, Ruo Li, Jianxian Qiu, and Min Zhang. A well-balanced moving mesh discontinuous Galerkin method for the Ripa model on triangular meshes. *Journal of Computational Physics*, 487(??):??, August 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123002425.

Hu:2021:HCF

[HLX21] Kaibo Hu, Young-Ju Lee, and Jinchao Xu. Helicity-conservative finite element discretization for incompressible MHD systems. *Journal of Computational Physics*, 436(??):Article 110284, July 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121001790.

Hu:2021:SPN

[HLXZ21] Jingwei Hu, Jian-Guo Liu, Yantong Xie, and Zhennan Zhou. A structure preserving numerical scheme for Fokker–Planck equations of neuron networks: Numerical analysis and exploration. *Journal of Computational Physics*, 433(??):Article 110195, May 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121000905.

Huang:2020:HOS

[HLY20] Hongying Huang, Jin Li, and Jue Yan. High order symmetric direct discontinuous Galerkin method for elliptic interface problems with fitted mesh. *Journal of Computational Physics*, 409(??):Article 109301, May 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120300759.

Han:2020:SHD

[HLZ20] Jiequn Han, Jianfeng Lu, and Mo Zhou. Solving high-dimensional eigenvalue problems using deep neural networks: a diffusion Monte Carlo like approach. *Journal of Computational Physics*, 423(??):Article 109792, December 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120305660.

Harbrecht:2021:FDS

[HM21a] Helmut Harbrecht and Michael Multerer. A fast direct solver for nonlocal operators in wavelet coordinates. *Journal of Computational Physics*, 428(??):Article 110056, March 1,

2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120308305.

Horne:2021:HAU

[HM21b] Wyatt James Horne and Krishnan Mahesh. A hardware accelerated unstructured overset method to simulate turbulent fluid flow. *Journal of Computational Physics*, 444 (??):Article 110574, November 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121004691.

Harbrecht:2022:SCS

[HM22] Helmut Harbrecht and Michael Multerer. Samplets: Construction and scattered data compression. *Journal of Computational Physics*, 471(??):??, December 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122006799.

Holzer:2024:DCM

[HMLR24] Markus Holzer, Travis R. Mitchell, Christopher R. Leonardi, and Ulrich Rüde. Development of a central-moment phase-field lattice Boltzmann model for thermocapillary flows: Droplet capture and computational performance. *Journal of Computational Physics*, 518(??):??, December 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124005850.

Hahnel:2020:UDL

[HMMO20] Philipp Hähnel, Jakub Marecek, Julien Monteil, and Fearghal O'Donncha. Using deep learning to extend the range of air pollution monitoring and forecasting. *Journal of Computational Physics*, 408(??):Article 109278, May 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120300528.

Hokpunna:2020:FSD

[HMO+20] Arpiruk Hokpunna, Takashi Misaka, Shigeru Obayashi, Somchai Wongwises, and Michael Manhart. Finite surface discretization for incompressible Navier–Stokes equations and coupled conservation laws. *Journal of Computational Physics*, 423(??):Article 109790, December 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120305647.

Haidar:2022:PFV

[HMV22] Ali Haidar, Fabien Marche, and Francois Vilar. *A posteriori* Finite-Volume local subcell correction of high-order discontinuous Galerkin schemes for the nonlinear shallow-water equations. *Journal of Computational Physics*, 452 (??):Article 110902, March 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912100797X.

Hong:2023:EIM

[HMXC23] Qingguo Hong, Limin Ma, Jinchao Xu, and Longqing Chen. An efficient iterative method for dynamical Ginzburg–Landau equations. *Journal of Computational Physics*, 474(??):??, February 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122008579.

Hu:2021:ARH

[HNF+21] Xiaoyan Hu, Guoxi Ni, Zhengfeng Fan, Jianfa Gu, and Zhensheng Dai. Algorithm of radiation hydrodynamics with nonorthogonal mesh for 3D implosion problem. *Journal of Computational Physics*, 437(??):Article 110309, July 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121002047.

Henderson:2023:CMG

[HNR23] Iain Henderson, Pascal Noble, and Olivier Roustant. Covariance models and Gaussian process regression for the wave equation. Application to related inverse problems. *Journal of Computational Physics*, 494(??):??, December 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123006149.

Han:2020:DFM

[HNS20] Jihun Han, Mihai Nica, and Adam R. Stinchcombe. A derivative-free method for solving elliptic partial differential equations with deep neural networks. *Journal of Computational Physics*, 419(??):Article 109672, October 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120304460.

Hou:2023:ERL

[HNZ23a] Dianming Hou, Yuexin Ning, and Chao Zhang. An efficient and robust Lagrange multiplier approach with a penalty term for phase-field models. *Journal of Computational Physics*, 488(??):??, September 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123003315.

Huang:2023:HOI

[HNZ23b] Tianci Huang, Charles J. Naudet, and Matthew J. Zahr. High-order implicit shock tracking boundary conditions for flows with parametrized shocks. *Journal of Computational Physics*, 495(??):??, December 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123006125.

Holmes:2021:NPI

[HP21a] David W. Holmes and Peter Pivonka. Novel pressure inlet and outlet boundary conditions for Smoothed Particle Hydrodynamics, applied to real problems in porous media flow. *Journal of Computational Physics*, 429(??):Article 110029, March 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120308032.

Hume:2021:VVM

[HP21b] Laurène Hume and Philippe Poncet. A velocity-vorticity method for highly viscous 3D flows with application to digital rock physics. *Journal of Computational Physics*, 425(??):Article 109910, January 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

URL http://www.sciencedirect.com/science/article/pii/S0021999120306847.

Holderied:2022:MHE

[HP22a] Florian Holderied and Stefan Possanner. Magnetohydrodynamic eigenvalue solver for axisymmetric equilibria based on smooth polar splines. *Journal of Computational Physics*, 464(??):??, September 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122003916.

Hua:2022:ANS

[HP22b] Mengjian Hua and Charles S. Peskin. An analysis of the numerical stability of the immersed boundary method. *Journal of Computational Physics*, 467(??):??, October 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122004971.

Hayat:2023:ESI

[HP23] Imran Hayat and George Ilhwan Park. Efficient spectral implementation of ODE wall model and the extension of integral wall model to unstructured LES solvers. *Journal of Computational Physics*, 487(??):??, August 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912300270X.

Hild:2024:MSM

[HP24] F. Hild and M. Pfeiffer. Multi-species modeling in the particle-based ellipsoidal statistical Bhatnagar–Gross–Krook method including internal degrees of freedom. *Journal of Computational Physics*, 514(??):??, October 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124004753.

Hammer:2022:CSC

[HPA22] René Hammer, Walter Pötz, and Anton Arnold. Corrigendum to “Single-cone real-space finite difference scheme for the time-dependent Dirac equation” [J. Comput. Phys. **265** (2014) 50–70]. *Journal of Computational Physics*, 457(??):??, May 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122001802.

He:2023:HDN

[HPH+23] QiZhi He, Mauro Perego, Amanda A. Howard, George Em Karniadakis, and Panos Stinis. A hybrid deep neural operator/finite element method for ice-sheet modeling. *Journal of Computational Physics*, 492(??):??, November 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123005235.

Howard:2023:MDO

[HPKS23] Amanda A. Howard, Mauro Perego, George Em Karniadakis, and Panos Stinis. Multifidelity deep operator networks for data-driven and physics-informed problems. *Journal of Computational Physics*, 493(??):??, November 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123005570.

Hwang:2024:AEP

[HPLK24] Geonho Hwang, Yesom Park, Yueun Lee, and Myungjoo Kang. Analysis of efficient preconditioner for solving Poisson equation with Dirichlet boundary condition in irregular three-dimensional domains. *Journal of Computational Physics*, 519(??):??, December 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124006661.

Huang:2020:HOP

[HPPZ20] Daniel Z. Huang, Will Pazner, Per-Olof Persson, and Matthew J. Zahr. High-order partitioned spectral deferred correction solvers for multiphysics problems. *Journal of Computational Physics*, 412(??):Article 109441, July 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120302151.

Holderied:2020:SPV

[HPRW20] Florian Holderied, Stefan Possanner, Ahmed Ratnani, and Xin Wang. Structure-preserving vs. standard particle-in-cell methods: the case of an electron hybrid model. *Journal of Computational Physics*, 402(??):Article 109108, February 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999119308137`.

Hossain:2023:SSH

[HPS23] M. Alamgir Hossain, Sam Pimentel, and John M. Stockie. Simulating surface height and terminus position for marine outlet glaciers using a level set method with data assimilation. *Journal of Computational Physics*, 474(??):??, February 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999122008294`.

Hajabdollahi:2021:CML

[HPW21a] Farzaneh Hajabdollahi, Kannan N. Premnath, and Samuel W. J. Welch. Central moment lattice Boltzmann method using a pressure-based formulation for multiphase flows at high density ratios and including effects of surface tension and Marangoni stresses. *Journal of Computational Physics*, 425(??):Article 109893, January 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999120306677`.

Holderied:2021:MKH

[HPW21b] Florian Holderied, Stefan Possanner, and Xin Wang. MHD-kinetic hybrid code based on structure-preserving finite elements with particles-in-cell. *Journal of Computational Physics*, 433(??):Article 110143, May 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999121000358`.

Hergibo:2023:MFM

[HPX23] Philippe Hergibo, Timothy N. Phillips, and Zhihua Xie. A moment-of-fluid method for resolving filamentary structures using a symmetric multi-material approach. *Journal of Computational Physics*, 491(??):??, October 15, 2023. CODEN

JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123004965.

Hu:2020:FFS

[HQ20] Jingwei Hu and Kunlun Qi. A fast Fourier spectral method for the homogeneous Boltzmann equation with non-cutoff collision kernels. *Journal of Computational Physics*, 423 (??):Article 109806, December 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120305805.

Hong:2022:GEL

[HQ22] Xue Hong and Jing-Mei Qiu. A generalized Eulerian–Lagrangian discontinuous Galerkin method for transport problems. *Journal of Computational Physics*, 464(??): ??, September 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122002224.

Horvath:2020:EMC

[HR20] Tamás L. Horváth and Sander Rhebergen. An exactly mass conserving space-time embedded-hybridized discontinuous Galerkin method for the Navier–Stokes equations on moving domains. *Journal of Computational Physics*, 417 (??):Article 109577, September 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912030351X.

Harris:2022:SCS

[HR22] I. Harris and J. D. Rezac. A sparsity-constrained sampling method with applications to communications and inverse scattering. *Journal of Computational Physics*, 451 (??):Article 110890, February 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121007853.

Halvic:2023:NIM

[HR23] Ian Halvic and Jean C. Ragusa. Non-intrusive model order reduction for parametric radiation transport simulations.

Journal of Computational Physics, 492(??):??, November 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123004801.

Hu:2020:UHM

[HRG20] Xiaozhe Hu, Carmen Rodrigo, and Francisco J. Gaspar. Using hierarchical matrices in the solution of the time-fractional heat equation by multigrid waveform relaxation. *Journal of Computational Physics*, 416(??):Article 109540, September 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120303144.

Hajisharifi:2023:NID

[HRG+23] Arash Hajisharifi, Francesco Romanò, Michele Girfoglio, Andrea Beccari, Domenico Bonanni, and Gianluigi Rozza. A non-intrusive data-driven reduced order model for parametrized CFD–DEM numerical simulations. *Journal of Computational Physics*, 491(??):??, October 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123004503.

Hateley:2020:DLS

[HRMY20] James C. Hateley, Jay Roberts, Kyle Mylonakis, and Xu Yang. Deep learning seismic substructure detection using the Frozen Gaussian approximation. *Journal of Computational Physics*, 409(??):Article 109313, May 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120300875.

Hashemi:2021:TDM

[HRR21] Mohammad R. Hashemi, Pavel B. Ryzhakov, and Riccardo Rossi. Three dimensional modeling of liquid droplet spreading on solid surface: an enriched finite element/level-set approach. *Journal of Computational Physics*, 442(??):Article 110480, October 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121003752.

Hennemann:2021:PES

[HRRHG21] Sebastian Hennemann, Andrés M. Rueda-Ramírez, Florian J. Hindenlang, and Gregor J. Gassner. A provably entropy stable subcell shock capturing approach for high order split form DG for the compressible Euler equations. *Journal of Computational Physics*, 426(??):Article 109935, February 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120307099.

Huang:2022:HOC

[HRWP22] Qian-Min Huang, Yu-Xin Ren, Qian Wang, and Jian-Hua Pan. High-order compact finite volume schemes for solving the Reynolds averaged Navier–Stokes equations on the unstructured mixed grids with a large aspect ratio. *Journal of Computational Physics*, 467(??):??, October 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122005204.

He:2022:SAS

[HRY+22] Zhiwei He, Yucang Ruan, Yaqun Yu, Baolin Tian, and Feng Xiao. Self-adjusting steepness-based schemes that preserve discontinuous structures in compressible flows. *Journal of Computational Physics*, 463(??):??, August 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122003308.

Huang:2023:BPP

[HS23] Xueling Huang and Jie Shen. Bound/positivity preserving SAV schemes for the Patlak–Keller–Segel–Navier–Stokes system. *Journal of Computational Physics*, 480(??):??, May 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123001298.

Horsten:2020:HFK

[HSB20] Niels Horsten, Giovanni Samaey, and Martine Baelmans. A hybrid fluid-kinetic model for hydrogenic atoms in the plasma edge of tokamaks based on a micro-macro decomposition of the kinetic equation. *Journal of Computational*

Physics, 409(??):Article 109308, May 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120300826.

Hyman:2022:FTT

[HSG+22] Jeffrey D. Hyman, Matthew R. Sweeney, Carl W. Gable, Daniil Svyatsky, Konstantin Lipnikov, and J. David Moulton. Flow and transport in three-dimensional discrete fracture matrix models using mimetic finite difference on a conforming multi-dimensional mesh. *Journal of Computational Physics*, 466(??):??, October 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122004582.

Han:2020:IWM

[HSH20] Shao-Qiang Han, Wen-Ping Song, and Zhong-Hua Han. An improved WENO method based on Gauss-kriging reconstruction with an optimized hyper-parameter. *Journal of Computational Physics*, 422(??):Article 109742, December 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120305167.

Halpern:2021:SPF

[HSK+21] Federico D. Halpern, Igor Sfiligoi, Mark Kostuk, Ryan Stefan, and Ronald E. Waltz. Simulations of plasmas and fluids using anti-symmetric models. *Journal of Computational Physics*, 445(??):Article 110631, November 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912100526X.

Hamon:2020:PTM

[HSM20] François P. Hamon, Martin Schreiber, and Michael L. Minion. Parallel-in-time multi-level integration of the shallow-water equations on the rotating sphere. *Journal of Computational Physics*, 407(??):Article 109210, April 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119309155.

Shih:2023:REP

[hSMLS23] Yu hsuan Shih, Carolin Mehlmann, Martin Losch, and Georg Stadler. Robust and efficient primal-dual Newton–Krylov solvers for viscous-plastic sea-ice models. *Journal of Computational Physics*, 474(??):??, February 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999122008658`.

Hijazi:2020:DDP

[HSMR20] Saddam Hijazi, Giovanni Stabile, Andrea Mola, and Gianluigi Rozza. Data-driven POD–Galerkin reduced order model for turbulent flows. *Journal of Computational Physics*, 416(??):Article 109513, September 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999120302874`.

Huang:2021:SAS

[HSS21] Jinzi Mac Huang, Michael J. Shelley, and David B. Stein. A stable and accurate scheme for solving the Stefan problem coupled with natural convection using the Immersed Boundary Smooth Extension method. *Journal of Computational Physics*, 432(??):Article 110162, May 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999121000541`.

Huang:2022:IKM

[HSS22] Daniel Zhengyu Huang, Tapio Schneider, and Andrew M. Stuart. Iterated Kalman methodology for inverse problems. *Journal of Computational Physics*, 463(??):??, August 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999122003242`.

Heydari:2022:CFV

[HST22a] A. Ali Heydari, Suzanne S. Sindi, and Maxime Theillard. Conservative finite volume method on deforming geometries: the case of protein aggregation in dividing yeast cells. *Journal of Computational Physics*, 448(??):Article 110755, January 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print),

1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121006501.

Hoel:2022:MIE

[HST22b] Håkon Hoel, Gaukhar Shaimerdenova, and Raúl Tempone. Multi-index ensemble Kalman filtering. *Journal of Computational Physics*, 470(??):??, December 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122006234.

Heid:2021:GFF

[HSW21] Pascal Heid, Benjamin Stamm, and Thomas P. Wihler. Gradient flow finite element discretizations with energy-based adaptivity for the Gross–Pitaevskii equation. *Journal of Computational Physics*, 436(??):Article 110165, July 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121000577.

Huang:2022:BPP

[HSW22] Fukeng Huang, Jie Shen, and Ke Wu. Bound/positivity preserving and unconditionally stable schemes for a class of fourth order nonlinear equations. *Journal of Computational Physics*, 460(??):??, July 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912200239X.

Hao:2021:MMA

[HSXZ21] Wenrui Hao, Pengtao Sun, Jinchao Xu, and Lian Zhang. Multiscale and monolithic arbitrary Lagrangian–Eulerian finite element method for a hemodynamic fluid-structure interaction problem involving aneurysms. *Journal of Computational Physics*, 433(??):Article 110181, May 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121000760.

Howard:2020:NLM

[HT20] Amanda A. Howard and Alexandre M. Tartakovsky. Non-local model for surface tension in fluid-fluid simulations. *Journal of Computational Physics*, 421(??):

Article 109732, November 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120305064.

Hamfeldt:2021:CFD

[HT21a] Brittany Froese Hamfeldt and Axel G. R. Turnquist. A convergent finite difference method for optimal transport on the sphere. *Journal of Computational Physics*, 445 (??):Article 110621, November 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121005167.

Howard:2021:CLS

[HT21b] Amanda A. Howard and Alexandre M. Tartakovsky. A conservative level set method for N-phase flows with a free-energy-based surface tension model. *Journal of Computational Physics*, 426(??):Article 109955, February 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120307294.

He:2024:IPC

[HT24] Zhiwei He and Shuang Tan. On immiscibility preservation conditions of material interfaces in the generic five-equation model. *Journal of Computational Physics*, 513(??):??, September 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124004418.

Husson:2024:CFR

[HTDL24] J. Husson, M. Terracol, S. Deck, and T. Le Garrec. A comprehensive framework for robust hybrid RANS/LES simulations of wall-bounded flows in LBM. *Journal of Computational Physics*, 502(??):??, April 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124000639.

Hall:2021:GGI

[HTKT21] Eric J. Hall, Søren Taverniers, Markos A. Katsoulakis, and Daniel M. Tartakovsky. GINNs: Graph-informed neural networks for multiscale physics. *Journal of Computational Physics*, 433(??):Article 110192, May 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121000875.

Hennink:2021:PBS

[HTL21] Aldo Hennink, Marco Tiberga, and Danny Lathouwers. A pressure-based solver for low-Mach number flow using a discontinuous Galerkin method. *Journal of Computational Physics*, 425(??):Article 109877, January 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120306513.

Hu:2023:ARE

[HTLY23] Lijun Hu, Shide Tan, Long Li, and Haizhuan Yuan. An accurate, robust and efficient convection-pressure flux splitting scheme for compressible Euler flows. *Journal of Computational Physics*, 493(??):??, November 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123006009.

Huhn:2023:PDM

[HTRC23] Quincy A. Huhn, Mauricio E. Tano, Jean C. Ragusa, and Youngsoo Choi. Parametric dynamic mode decomposition for reduced order modeling. *Journal of Computational Physics*, 475(??):??, February 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122009159.

Horstmann:2022:CTS

[HTV+22] Tobias Horstmann, Hatem Touil, Lucien Vienne, Denis Ricot, and Emmanuel Lévêque. Consistent time-step optimization in the lattice Boltzmann method. *Journal of Computational Physics*, 462(??):??, August 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122002868.

Huang:2021:TDL

[Hua21] Yichen Huang. Two-dimensional local Hamiltonian problem with area laws is QMA-complete. *Journal of Computational Physics*, 443(??):Article 110534, October 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121004290.

He:2020:ERS

[HV20] Xin He and Cornelis Vuik. Efficient and robust Schur complement approximations in the augmented Lagrangian preconditioner for the incompressible laminar flows. *Journal of Computational Physics*, 408(??):Article 109286, May 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120300607.

Hester:2021:IAV

[HVB21] Eric W. Hester, Geoffrey M. Vasil, and Keaton J. Burns. Improving accuracy of volume penalised fluid-solid interactions. *Journal of Computational Physics*, 430(??):Article 110043, April 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120308172.

He:2023:TGL

[HVD23] Lishen He, Albert J. Valocchi, and C. A. Duarte. A transient global-local generalized FEM for parabolic and hyperbolic PDEs with multi-space/time scales. *Journal of Computational Physics*, 488(??):??, September 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123002747.

Hollbacher:2020:GCE

[HW20a] Susanne Höllbacher and Gabriel Wittum. Gradient-consistent enrichment of finite element spaces for the DNS of fluid-particle interaction. *Journal of Computational Physics*, 401(??):Article 109003, January 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119307089.

Huang:2020:AMQ

[HW20b] Weizhang Huang and Yanqiu Wang. Anisotropic mesh quality measures and adaptation for polygonal meshes. *Journal of Computational Physics*, 410(??):Article 109368, June 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912030142X.

Huet:2023:COA

[HW23] Damien P. Huet and Anthony Wachs. A Cartesian-octree adaptive front-tracking solver for immersed biological capsules in large complex domains. *Journal of Computational Physics*, 492(??):??, November 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123005193.

Hong:2024:TCH

[HW24a] Qi Hong and Qi Wang. Thermodynamically consistent hybrid computational models for fluid-particle interactions. *Journal of Computational Physics*, 513(??):??, September 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124003966.

Hou:2024:EAT

[HW24b] Shutong Hou and Haibing Wang. An efficient algorithm for time-domain acoustic scattering in three dimensions by layer potentials. *Journal of Computational Physics*, 514(??):??, October 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124005060.

Huang:2022:MRM

[HWDM22] Cheng Huang, Christopher R. Wentland, Karthik Duraisamy, and Charles Merkle. Model reduction for multiscale transport problems using model-form preserving least-squares projections with variable transformation. *Journal of Computational Physics*, 448(??):Article 110742, January 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121006379.

Huang:2020:IDD

[HWY20] Jianguo Huang, Haoqin Wang, and Haizhao Yang. Int-deep: a deep learning initialized iterative method for nonlinear problems. *Journal of Computational Physics*, 419 (??):Article 109675, October 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120304496.

Hu:2024:MMB

[HWZ24] Zheng Hu, Hongqiao Wang, and Qingping Zhou. A MCMC method based on surrogate model and Gaussian process parameterization for infinite Bayesian PDE inversion. *Journal of Computational Physics*, 507(??):??, June 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124002195.

Hou:2021:RSS

[HX21] Dianming Hou and Chuanju Xu. Robust and stable schemes for time fractional molecular beam epitaxial growth model using SAV approach. *Journal of Computational Physics*, 445(??):Article 110628, November 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121005234.

Huang:2023:GBF

[HX23] Yichen Huang and Bin Xie. A generic balanced-force algorithm for finite volume method on polyhedral unstructured grids with non-orthogonality. *Journal of Computational Physics*, 479(??):??, April 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123001055.

Huang:2020:LCR

[HXFD20] Daniel Z. Huang, Kailai Xu, Charbel Farhat, and Eric Darve. Learning constitutive relations from indirect observations using deep neural networks. *Journal of Computational Physics*, 416(??):Article 109491, September 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

URL http://www.sciencedirect.com/science/article/pii/S0021999120302655.

Huang:2023:SFS

[HXQL23] Ying H. Huang, Zheng Xu, Cheng Qian, and Li Liu. Solving free-surface problems for non-shallow water using boundary and initial conditions-free physics-informed neural network (bif-PINN). *Journal of Computational Physics*, 479(??):??, April 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123000980.

Huang:2022:HOW

[HXX22] Guanlan Huang, Yulong Xing, and Tao Xiong. High order well-balanced asymptotic preserving finite difference WENO schemes for the shallow water equations in all Froude numbers. *Journal of Computational Physics*, 463(??):??, August 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122003175.

Hu:2023:AMC

[HXX23] Guanghui Hu, Hehu Xie, and Fei Xu. On accelerating a multilevel correction adaptive finite element method for Kohn–Sham equation. *Journal of Computational Physics*, 472(??):??, January 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122007379.

Hao:2024:LES

[HXX24] Jiangxu Hao, Feng Xiao, and Bin Xie. Large-eddy simulation of wall-bounded incompressible turbulent flows based on multi-moment finite volume formulation. *Journal of Computational Physics*, 513(??):??, September 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124004339.

Huang:2023:EFG

[HXZ23] Zhen Huang, Limin Xu, and Zhennan Zhou. Efficient Frozen Gaussian Sampling algorithms for nonadiabatic quantum dynamics at metal surfaces. *Journal of Computational Physics*, 474(??):??, February 1, 2023. CODEN

JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122008348.

Huang:2023:BMF

[HYCL23] Han Huang, Jiajia Yu, Jie Chen, and Rongjie Lai. Bridging mean-field games and normalizing flows with trajectory regularization. *Journal of Computational Physics*, 487(??):??, August 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123002504.

Huang:2024:UHO

[HYH24] Jiandong Huang, Dinghui Yang, and Xijun He. A unified higher-order unsplit CFS-PML technique for solving second-order seismic equations using discontinuous Galerkin method. *Journal of Computational Physics*, 500(??):??, March 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124000251.

Hong:2020:MFF

[HYM20] Zheng Hong, Zhengyin Ye, and Xianzong Meng. A mapping-function-free WENO-M scheme with low computational cost. *Journal of Computational Physics*, 405(??):Article 109145, March 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119308502.

Hu:2024:GCW

[HYP24] Xiaohan Hu, Xiang Yang, and George Ilhwan Park. On the grid convergence of wall-modeled large-eddy simulation. *Journal of Computational Physics*, 504(??):??, May 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124001335.

He:2020:DDA

[HYQ20] Xijun He, Dinghui Yang, and Chujun Qiu. Dispersion-dissipation analysis of triangular numerical-flux-based discontinuous Galerkin method for elastic wave equations. *Journal of Computational Physics*, 418(??):Article 109630, October 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print),

1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120304046.

He:2022:NSI

[HYSS22] Sida He, Zixuan Yang, Fotis Sotiropoulos, and Lian Shen. Numerical simulation of interaction between multiphase flows and thin flexible structures. *Journal of Computational Physics*, 448(??):Article 110691, January 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121005866.

Hu:2022:SSH

[HYZ22] Lijun Hu, Haizhuan Yuan, and Kunlei Zhao. A shock-stable HLLEM scheme with improved contact resolving capability for compressible Euler flows. *Journal of Computational Physics*, 453(??):Article 110947, March 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122000092.

Hu:2022:RHD

[HYZH22] Pipi Hu, Wuyue Yang, Yi Zhu, and Liu Hong. Revealing hidden dynamics from time-series data by ODENet. *Journal of Computational Physics*, 461(??):??, July 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122002650.

Hu:2022:MCC

[HZ22a] Jia-Wei Hu and Wei-Wei Zhang. Mesh-Conv: Convolution operator with mesh resolution independence for flow field modeling. *Journal of Computational Physics*, 452(??):Article 110896, March 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121007919.

Huang:2022:RHO

[HZ22b] Tianci Huang and Matthew J. Zahr. A robust, high-order implicit shock tracking method for simulation of complex, high-speed flows. *Journal of Computational Physics*, 454(??):Article 110981, April 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122000432.

Han:2021:AIA

[HZB+21] Changnian Han, Peng Zhang, Danny Bluestein, Guojing Cong, and Yuefan Deng. Artificial intelligence for accelerating time integrations in multiscale modeling. *Journal of Computational Physics*, 427(??):Article 110053, February 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120308275.

Hao:2021:FCD

[HZD21] Zhaopeng Hao, Zhongqiang Zhang, and Rui Du. Fractional centered difference scheme for high-dimensional integral fractional Laplacian. *Journal of Computational Physics*, 424(??):Article 109851, January 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120306252.

He:2022:SSM

[HZHL22] Fang He, Huashan Zhang, Can Huang, and Moubin Liu. A stable SPH model with large CFL numbers for multi-phase flows with large density ratios. *Journal of Computational Physics*, 453(??):Article 110944, March 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122000067.

Huang:2024:GPP

[HZRW24] Qian-Min Huang, Hanyu Zhou, Yu-Xin Ren, and Qian Wang. A general positivity-preserving algorithm for implicit high-order finite volume schemes solving the Euler and Navier–Stokes equations. *Journal of Computational Physics*, 508(??):??, July 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124002481.

Han:2021:CPH

[HZTN21] Tian-Yang Han, Jie Zhang, Hua Tan, and Ming-Jiu Ni. A consistent and parallelized height function based scheme for applying contact angle to 3D volume-of-fluid simulations. *Journal of Computational Physics*, 433(??):Article 110190, May 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121000851.

Han:2023:ENO

[HZX23] Jiequn Han, Xu-Hui Zhou, and Heng Xiao. An equivariant neural operator for developing nonlocal tensorial constitutive models. *Journal of Computational Physics*, 488(??):??, September 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123003388.

Huang:2022:DDD

[HZY22] Juntao Huang, Yizhou Zhou, and Wen-An Yong. Data-driven discovery of multiscale chemical reactions governed by the law of mass action. *Journal of Computational Physics*, 448(??):Article 110743, January 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121006380.

Ianniello:2020:AME

[Ian20] Sandro Ianniello. The K-Algorithm and the modeling of the emission surface from supersonically rotating bodies. *Journal of Computational Physics*, 408(??):Article 109305, May 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120300796.

Idesman:2020:NPS

[ID20] A. Idesman and B. Dey. New 25-point stencils with optimal accuracy for 2-D heat transfer problems. comparison with the quadratic isogeometric elements. *Journal of Computational Physics*, 418(??):Article 109640, October 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120304149.

Iijima:2021:ECF

[Iij21] Haruhisa Iijima. Energy-consistent finite difference schemes for compressible hydrodynamics and magnetohydrodynamics using nonlinear filtering. *Journal of Computational Physics*, 435(??):Article 110232, June 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999121001273`.

Issan:2023:PSW

[IK23a] Opal Issan and Boris Kramer. Predicting solar wind streams from the inner-heliosphere to Earth via shifted operator inference. *Journal of Computational Physics*, 473(??):??, January 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999122007525`.

Izsak:2023:ISA

[IK23b] Marian G. S. Izsak and Hans-Jakob Kaltenbach. Improvement of the stability and accuracy of solid-wall immersed boundary schemes for the linearized Euler equations using boundary constraints. *Journal of Computational Physics*, 473(??):??, January 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999122007914`.

Issan:2024:ASP

[IKH+24] Opal Issan, Oleksandr Koshkarov, Federico D. Halpern, Boris Kramer, and Gian Luca Delzanno. Anti-symmetric and positivity preserving formulation of a spectral method for Vlasov–Poisson equations. *Journal of Computational Physics*, 514(??):??, October 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999124005114`.

Inguva:2022:FTM

[IKP22] Venkatesh Inguva, Eugeny Y. Kenig, and J. Blair Perot. A front-tracking method for two-phase flow simulation with no spurious currents. *Journal of Computational Physics*, 456(??):??, May 1, 2022. CODEN JCTPAH.

ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122000687.

Iwasaki:2023:ODI

[IL23] Yunona Iwasaki and Ching-Yao Lai. One-dimensional ice shelf hardness inversion: Clustering behavior and collocation resampling in physics-informed neural networks. *Journal of Computational Physics*, 492(??):??, November 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123005302.

Isakov:2022:LIC

[ILX22] Victor Isakov, Shuai Lu, and Boxi Xu. A linearised inverse conductivity problem for the Maxwell system at a high frequency. *Journal of Computational Physics*, 455(??):??, April 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122000651.

Ilangakoon:2020:HOA

[IMJ20] Niran A. Ilangakoon, Arnaud G. Malan, and Bevan W. S. Jones. A higher-order accurate surface tension modelling volume-of-fluid scheme for 2D curvilinear meshes. *Journal of Computational Physics*, 420(??):Article 109717, November 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120304915.

Izzo:2022:CTR

[IRT22] Federico Izzo, Olof Runborg, and Richard Tsai. Corrected trapezoidal rules for singular implicit boundary integrals. *Journal of Computational Physics*, 461(??):??, July 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122002558.

Ishikawa:2022:LTB

[Ish22] Takuji Ishikawa. Lubrication theory and boundary element hybrid method for calculating hydrodynamic forces between particles in near contact. *Journal of Computational Physics*, 452(??):Article 110913, March 1, 2022. CODEN

JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121008081.

Ivagnes:2023:PDD

[ISM+23] Anna Ivagnes, Giovanni Stabile, Andrea Mola, Traian Iliescu, and Gianluigi Rozza. Pressure data-driven variational multiscale reduced order models. *Journal of Computational Physics*, 476(??):??, March 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122009676.

Iollo:2022:MCS

[IT22] Angelo Iollo and Tommaso Taddei. Mapping of coherent structures in parameterized flows by learning optimal transportation with Gaussian models. *Journal of Computational Physics*, 471(??):??, December 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122007343.

Ida:2024:TLN

[ITK24] Ryosuke Ida, Yoshiharu Tamaki, and Soshi Kawai. Theoretical link in numerical shock thickness and shock-capturing dissipation. *Journal of Computational Physics*, 505(??):??, May 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124001505.

Ims:2023:CTE

[IW23] Jeremy Ims and Z. J. Wang. A comparison of three error indicators for adaptive high-order large eddy simulation. *Journal of Computational Physics*, 490(??):??, October 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123004072.

Jacquier:2021:NIR

[JADS21] Pierre Jacquier, Azzedine Abdedou, Vincent Delmas, and Azzeddine Soulaïmani. Non-intrusive reduced-order modeling using uncertainty-aware Deep Neural Networks and Proper Orthogonal Decomposition: Application to flood modeling. *Journal of Computational Physics*, 424(??): Article 109854, January 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120306288.

Jain:2022:ACP

[Jai22a] Suhas S. Jain. Accurate conservative phase-field method for simulation of two-phase flows. *Journal of Computational Physics*, 469(??):??, November 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122005915.

Jaiswal:2022:ESS

[Jai22b] Shashank Jaiswal. An entropy stable scheme for the non-linear Boltzmann equation. *Journal of Computational Physics*, 463(??):??, August 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122003515.

Jaiswal:2022:NLB

[Jai22c] Shashank Jaiswal. Non-linear Boltzmann equation on hybrid-unstructured non-conforming multi-domains. *Journal of Computational Physics*, 450(??):Article 110687, February 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121005829.

Jain:2024:MTI

[Jai24] Suhas S. Jain. A model for transport of interface-confined scalars and insoluble surfactants in two-phase flows. *Journal of Computational Physics*, 515(??):??, October 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124005254.

Jain:2023:ADI

[JAW+23] Suhas S. Jain, Michael C. Adler, Jacob R. West, Ali Mani, Parviz Moin, and Sanjiva K. Lele. Assessment of diffuse-interface methods for compressible multiphase fluid flows and elastic-plastic deformation in solids. *Journal of Computational Physics*, 475(??):??, February 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122009299.

Jolivet:2021:DRT

[JBF21] P. Jolivet, M. A. Badri, and Y. Favennec. Deterministic radiative transfer equation solver on unstructured tetrahedral meshes: Efficient assembly and preconditioning. *Journal of Computational Physics*, 437(??):Article 110313, July 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121002084.

Jin:2021:NNS

[JCLK21] Xiaowei Jin, Shengze Cai, Hui Li, and George Em Karniadakis. NSFnets (navier–Stokes flow nets): Physics-informed neural networks for the incompressible Navier–Stokes equations. *Journal of Computational Physics*, 426 (??):Article 109951, February 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120307257.

Jimenez:2024:ICE

[JCM24] Pedro Jiménez, Luis Chacón, and Mario Merino. An implicit, conservative electrostatic particle-in-cell algorithm for paraxial magnetic nozzles. *Journal of Computational Physics*, 502(??):??, April 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124000755.

Jiang:2023:UMT

[JD23] Su Jiang and Louis J. Durlofsky. Use of multifidelity training data and transfer learning for efficient construction of subsurface flow surrogate models. *Journal of Computational Physics*, 474(??):??, February 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122008634.

Joachim:2023:PAN

[JDB+23] Jeanne Joachim, Carole-Anne Daunais, Valérie Bibeau, Luca Heltai, and Bruno Blais. A parallel and adaptative Nitsche immersed boundary method to simulate viscous mixing. *Journal of Computational Physics*, 488(??):??, September 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912300284X.

Jenny:2020:TAC

[Jen20] Patrick Jenny. Time adaptive conservative finite volume method. *Journal of Computational Physics*, 403 (??):Article 109067, February 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119307727.

Jabbarzadeh:2020:NMI

[JF20] Mehdi Jabbarzadeh and Henry C. Fu. A numerical method for inextensible elastic filaments in viscous fluids. *Journal of Computational Physics*, 418(??):Article 109643, October 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120304174.

Johnson:2024:ADR

[JF24] Daniel Johnson and Ronald Fedkiw. Addressing discontinuous root-finding for subsequent differentiability in machine learning, inverse problems, and control. *Journal of Computational Physics*, 497(??):??, January 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123007192.

Jettestuen:2021:LCM

[JFH21] Espen Jettestuen, Helmer André Friis, and Johan Olav Helland. A locally conservative multiphase level set method for capillary-controlled displacements in porous media. *Journal of Computational Physics*, 428(??):Article 109965, March 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120307397.

Jost:2021:DFI

[JG21] Antoine Michael Diego Jost and Stéphane Glockner. Direct forcing immersed boundary methods: Improvements to the ghost-cell method. *Journal of Computational Physics*, 438(??):Article 110371, August 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121002667.

Jallepalli:2024:NUK

[JGHK24] Ashok Jallepalli, Marshall Galbraith, Robert Haimes, and Robert M. Kirby. Non-uniform knot (NUK) SIAC post-processing of flow fields produced through unstructured grid adaptation and optimization. *Journal of Computational Physics*, 514(??):??, October 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124004856.

Janodet:2022:MPA

[JGM+22] Romain Janodet, Carlos Guillamón, Vincent Moureau, Renaud Mercier, Ghislain Lartigue, Pierre Bénard, Thibaut Ménard, and Alain Berlemont. A massively parallel accurate conservative level set algorithm for simulating turbulent atomization on adaptive unstructured grids. *Journal of Computational Physics*, 458(??):??, June 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122001371.

Joshaghani:2022:VST

[JGR22] M. S. Joshaghani, V. Girault, and B. Riviere. A vertex scheme for two-phase flow in heterogeneous media. *Journal of Computational Physics*, 449(??):Article 110778, January 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121006732.

Ji:2023:SIM

[JGvR23] Xinjie Ji, James Gabbard, and Wim M. van Rees. A sharp immersed method for 2D flow-body interactions using the vorticity-velocity Navier–Stokes equations. *Journal of Computational Physics*, 494(??):??, December 1, 2023. CODEN

JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123006083.

Jung:2023:PCP

[JH23] Jaeyoung Jung and Jin Hwan Hwang. Path-conservative positivity-preserving well-balanced finite volume WENO method for porous shallow water equations. *Journal of Computational Physics*, 490(??):??, October 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123004163.

Jagannathan:2020:SVM

[JHJ20] Rangesh Jagannathan, W. Schuyler Hinman, and Craig T. Johansen. Solution verification of multiphase flows with one-way coupling. *Journal of Computational Physics*, 402 (??):Article 109033, February 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119307399.

Jenny:2023:TCH

[JHT23] Patrick Jenny, Rasim Hasanzade, and Hamdi Tchelepi. Tightly coupled hyperbolic treatment of buoyant two-phase flow and transport in porous media. *Journal of Computational Physics*, 489(??):??, September 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123003005.

Jiang:2024:FRB

[JHXZ24] Xinyu Jiang, Weixi Huang, Chunxiao Xu, and Lihao Zhao. A flow-reconstruction based approach for the computation of hydrodynamic stresses on immersed body surface. *Journal of Computational Physics*, 508(??):??, July 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124002742.

Jeong:2021:IIM

[JHY21] Jaeyong Jeong, Sanghyun Ha, and Donghyun You. An immersed interface method for acoustic wave equations with discontinuous coefficients in complex geometries. *Journal of Computational Physics*, 426(??):Article 109932, February 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120307063.

Johnson:2021:SOC

[JJ21] Philip E. Johnson and Eric Johnsen. A simple, optimally convergent, parameter-free discretization of diffusive terms with the discontinuous Galerkin method. *Journal of Computational Physics*, 445(??):Article 110595, November 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121004903.

Johnson:2020:CDG

[JK20] Ryan F. Johnson and Andrew D. Kercher. A conservative discontinuous Galerkin discretization for the chemically reacting Navier–Stokes equations. *Journal of Computational Physics*, 423(??):Article 109826, December 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120306008.

Johnson:2020:ARA

[JKJ20] Philip E. Johnson, Loc H. Khieu, and Eric Johnsen. Analysis of recovery-assisted discontinuous Galerkin methods for the compressible Navier–Stokes equations. *Journal of Computational Physics*, 423(??):Article 109813, December 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120305878.

Jagtap:2020:AAF

[JKK20] Ameya D. Jagtap, Kenji Kawaguchi, and George Em Karniadakis. Adaptive activation functions accelerate convergence in deep and physics-informed neural networks. *Journal of Computational Physics*, 404(??):Article 109136, March 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119308411.

Jung:2024:SSP

[JKP+24] Min Ki Jung, Hakhyeon Kim, Su-San Park, Eung Soo Kim, Yong-Su Na, and Sang June Hahn. SPRAY: a smoothed particle radiation hydrodynamics code for modeling high intensity laser-plasma interactions. *Journal of Computational Physics*, 508(??):??, July 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124002493.

Jandaghian:2021:EWC

[JKZS21] Mojtaba Jandaghian, Abdelkader Krimi, Amir Reza Zarrati, and Ahmad Shakibaeinia. Enhanced weakly-compressible MPS method for violent free-surface flows: Role of particle regularization techniques. *Journal of Computational Physics*, 434(??):Article 110202, June 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121000978.

Jacobs:2021:NSP

[JL21a] Matthew Jacobs and Songting Luo. Numerical solutions for point-source high frequency Helmholtz equation through efficient time propagators for Schrödinger equation. *Journal of Computational Physics*, 438(??):Article 110357, August 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121002527.

Jiang:2021:PDA

[JL21b] Wei Jiang and Buyang Li. A perimeter-decreasing and area-conserving algorithm for surface diffusion flow of curves. *Journal of Computational Physics*, 443(??):Article 110531, October 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121004265.

Jiang:2022:CND

[JL22] Lijian Jiang and Ningxin Liu. Correcting noisy dynamic mode decomposition with Kalman filters. *Journal of Computational Physics*, 461(??):??, July 15, 2022. CODEN

JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122002376.

Jin:2023:SSO

[JL23] Xiaowei Jin and Hui Li. SONets: Sub-operator learning enhanced neural networks for solving parametric partial differential equations. *Journal of Computational Physics*, 495(??):??, December 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123006319.

Jin:2021:CAS

[JLC21] Yao Jin, Fei Liao, and Jinsheng Cai. Convergence acceleration for subiterative DDADI/D3ADI using multiblock implicit boundary condition. *Journal of Computational Physics*, 429(??):Article 110009, March 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912030783X.

Jiang:2022:CLM

[JLCT22] Fei Jiang, Haihu Liu, Xian Chen, and Takeshi Tsuji. A coupled LBM–DEM method for simulating the multiphase fluid-solid interaction problem. *Journal of Computational Physics*, 454(??):Article 110963, April 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122000250.

Jin:2020:RBM

[JLL20] Shi Jin, Lei Li, and Jian-Guo Liu. Random Batch Methods (RBM) for interacting particle systems. *Journal of Computational Physics*, 400(??):Article 108877, January 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119305741.

Ji:2022:TDD

[JLL22] Yu Ji, Chuandong Lin, and Kai H. Luo. A three-dimensional discrete Boltzmann model for steady and unsteady detonation. *Journal of Computational Physics*, 455(??):??, April

15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912200064X.

Jin:2024:QSP

[JLLY24] Shi Jin, Xiantao Li, Nana Liu, and Yue Yu. Quantum simulation for partial differential equations with physical boundary or interface conditions. *Journal of Computational Physics*, 498(??):??, February 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123008021.

Ju:2021:MBP

[JLQY21] Lili Ju, Xiao Li, Zhonghua Qiao, and Jiang Yang. Maximum bound principle preserving integrating factor Runge–Kutta methods for semilinear parabolic equations. *Journal of Computational Physics*, 439(??):Article 110405, August 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121003004.

Janssen:2024:CLF

[JLR+24] T. J. A. Janssen, C. García Llamas, D. R. Rieder, J. A. M. Kuipers, and M. W. Baltussen. A coupled local front reconstruction and immersed boundary method for simulating 3D multiphase flows with contact line dynamics in complex geometries. *Journal of Computational Physics*, 519(??):??, December 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124006971.

Jin:2020:GWP

[JLRZ20] Shi Jin, Liu Liu, Giovanni Russo, and Zhennan Zhou. Gaussian wave packet transform based numerical scheme for the semi-classical Schrödinger equation with random inputs. *Journal of Computational Physics*, 401(??): Article 109015, January 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119307211.

Jin:2024:APF

[JLXZ24] Bangti Jin, Jing Li, Yifeng Xu, and Shengfeng Zhu. An adaptive phase-field method for structural topology optimization. *Journal of Computational Physics*, 506(??):??, June 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124001815.

Jin:2022:TCA

[JLY22] Shi Jin, Nana Liu, and Yue Yu. Time complexity analysis of quantum difference methods for linear high dimensional and multiscale partial differential equations. *Journal of Computational Physics*, 471(??):??, December 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122007045.

Jin:2023:TCA

[JLY23] Shi Jin, Nana Liu, and Yue Yu. Time complexity analysis of quantum algorithms via linear representations for nonlinear ordinary and partial differential equations. *Journal of Computational Physics*, 487(??):??, August 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123002449.

Jiang:2024:GFD

[JLYH24] Shixiao Willing Jiang, Rongji Li, Qile Yan, and John Harlim. Generalized finite difference method on unknown manifolds. *Journal of Computational Physics*, 502(??):??, April 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124000615.

Jain:2022:KEE

[JM22] Suhas S. Jain and Parviz Moin. A kinetic energy-and entropy-preserving scheme for compressible two-phase flows. *Journal of Computational Physics*, 464(??):??, September 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122003692.

Jain:2023:CMT

[JM23] Suhas S. Jain and Ali Mani. A computational model for transport of immiscible scalars in two-phase flows. *Journal of Computational Physics*, 476(??):??, March 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999122009068`.

Jagtap:2022:PIN

[JMAK22] Ameya D. Jagtap, Zhiping Mao, Nikolaus Adams, and George Em Karniadakis. Physics-informed neural networks for inverse problems in supersonic flows. *Journal of Computational Physics*, 466(??):??, October 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999122004648`.

Jain:2020:CDI

[JMM20] Suhas S. Jain, Ali Mani, and Parviz Moin. A conservative diffuse-interface method for compressible two-phase flows. *Journal of Computational Physics*, 418(??):Article 109606, October 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999120303806`.

Jackson:2020:UEF

[JN20] Haran Jackson and Nikos Nikiforakis. A unified Eulerian framework for multimaterial continuum mechanics. *Journal of Computational Physics*, 401(??):Article 109022, January 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999119307284`.

Jha:2022:GOP

[JO22] Prashant K. Jha and J. Tinsley Oden. Goal-oriented a-posteriori estimation of model error as an aid to parameter estimation. *Journal of Computational Physics*, 470(??):??, December 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999122006374`.

Jung:2022:SLM

[JP22] Jonathan Jung and Vincent Perrier. Steady low Mach number flows: Identification of the spurious mode and filtering method. *Journal of Computational Physics*, 468(??): ??, November 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122005241.

Jiang:2023:EDB

[JP23] Jiamin Jiang and Huanquan Pan. Efficient dissipation-based nonlinear solver for multiphase flow in discrete fractured media. *Journal of Computational Physics*, 479(??):??, April 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123001018.

Jung:2024:CPF

[JP24] Jonathan Jung and Vincent Perrier. A curl preserving finite volume scheme by space velocity enrichment. Application to the low Mach number accuracy problem. *Journal of Computational Physics*, 515(??):??, October 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912400500X.

Ji:2021:ABC

[JPAZ21] Songsong Ji, Gang Pang, Xavier Antoine, and Jiwei Zhang. Artificial boundary conditions for the semi-discretized one-dimensional nonlocal Schrödinger equation. *Journal of Computational Physics*, 444(??):Article 110575, November 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121004708.

Jisha:2022:NNV

[JRD22] C. R. Jisha, T. K. Riyasudheen, and Ritesh Kumar Dubey. A novel numerical viscosity for fourth order hybrid entropy stable shock capturing schemes for convection diffusion equation. *Journal of Computational Physics*, 470(??):??, December 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122006489.

Jiang:2020:LSP

[JRY+20] Tao Jiang, Jinlian Ren, Jinyun Yuan, Wen Zhou, and Deng-Shan Wang. A least-squares particle model with other techniques for 2D viscoelastic fluid/free surface flow. *Journal of Computational Physics*, 407(??):Article 109255, April 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120300292.

Jiang:2024:SOA

[JS24] Han Jiang and Craig Schroeder. Second order accurate particle-in-cell discretization of the Navier–Stokes equations. *Journal of Computational Physics*, 518(??):??, December 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124005503.

Jiang:2024:SOT

[JSZ24] Wei Jiang, Chunmei Su, and Ganghui Zhang. A second-order in time, BGN-based parametric finite element method for geometric flows of curves. *Journal of Computational Physics*, 514(??):??, October 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124004698.

Ji:2022:IFD

[JTK22] Kaihua Ji, Amirhossein Molavi Tabrizi, and Alain Karma. Isotropic finite-difference approximations for phase-field simulations of polycrystalline alloy solidification. *Journal of Computational Physics*, 457(??):??, May 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122001310.

Jiang:2023:AND

[JTT23] Jiamin Jiang, Pavel Tomin, and Hamdi Tchelepi. Accelerated nonlinear domain decomposition solver for multi-phase flow and transport in porous media. *Journal of Computational Physics*, 490(??):??, October 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123004230.

Jiang:2022:PPW

[JTW22] Haili Jiang, Huazhong Tang, and Kailiang Wu. Positivity-preserving well-balanced central discontinuous Galerkin schemes for the Euler equations under gravitational fields. *Journal of Computational Physics*, 463(??):??, August 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S002199912200359X`.

Jin:2022:STA

[JTZ22] Shi Jin, Min Tang, and Xiaojiang Zhang. A spatial-temporal asymptotic preserving scheme for radiation magnetohydrodynamics in the equilibrium and non-equilibrium diffusion limit. *Journal of Computational Physics*, 452 (??):Article 110895, March 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999121007907`.

Jiang:2021:SFI

[JW21] Jiamin Jiang and Xian-Huan Wen. Smooth formulation for isothermal compositional simulation with improved nonlinear convergence. *Journal of Computational Physics*, 425 (??):Article 109897, January 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999120306719`.

Jiang:2020:LIE

[JWC20] Chaolong Jiang, Yushun Wang, and Wenjun Cai. A linearly implicit energy-preserving exponential integrator for the nonlinear Klein–Gordon equation. *Journal of Computational Physics*, 419(??):Article 109690, October 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999120304642`.

Jakobsen:2020:CSS

[JWH20] Morten Jakobsen, Ru-Shan Wu, and Xingguo Huang. Convergent scattering series solution of the inhomogeneous Helmholtz equation via renormalization group and homotopy continuation approaches. *Journal of Computational*

Physics, 409(??):Article 109343, May 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120301170.

Ji:2020:AIF

[JWZ20] Haifeng Ji, Zhifeng Weng, and Qian Zhang. An augmented immersed finite element method for variable coefficient elliptic interface problems in two and three dimensions. *Journal of Computational Physics*, 418(??):Article 109631, October 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120304058.

Jeon:2022:DDA

[JYK22] Young Jae Jeon, Hee Jun Yang, and Hyea Hyun Kim. A data-driven approach for a macroscopic conductivity model utilizing finite element approximation. *Journal of Computational Physics*, 466(??):??, October 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122004569.

Jiang:2024:HPA

[JYW+24] Yi Jiang, Zhengzheng Yan, Xinhong Wang, Rongliang Chen, and Xiao-Chuan Cai. A highly parallel algorithm for simulating the elastodynamics of a patient-specific human heart with four chambers using a heterogeneous hyperelastic model. *Journal of Computational Physics*, 508(??):??, July 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124002766.

Jeong:2022:DWS

[JYY22] Byeongseon Jeong, Hyoseon Yang, and Jungho Yoon. Development of a WENO scheme based on radial basis function with an improved convergence order. *Journal of Computational Physics*, 468(??):??, November 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122005642.

Jacobsen:2024:ITC

[JZB+24] Christian Jacobsen, Ivan Zanardi, Sahil Bhola, Karthik Duraisamy, and Marco Panesi. Information theoretic clustering for coarse-grained modeling of non-equilibrium gas dynamics. *Journal of Computational Physics*, 507(??):??, June 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124002262.

Jancic:2024:MIT

[JZK24] Mitja Jancic, Miha Zaloznik, and Gregor Kosec. Meshless interface tracking for the simulation of dendrite envelope growth. *Journal of Computational Physics*, 507(??):??, June 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124002225.

Jiang:2024:HBM

[JZL+24] Dianheng Jiang, Sheng Zhang, Yunpeng Li, Biaosong Chen, and Na Li. A hybrid Bloch mode synthesis method based on the free interface component mode synthesis method. *Journal of Computational Physics*, 496(??):??, January 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123006514.

Ji:2020:HRB

[JZSX20] Xing Ji, Fengxiang Zhao, Wei Shyy, and Kun Xu. A HWENO reconstruction based high-order compact gas-kinetic scheme on unstructured mesh. *Journal of Computational Physics*, 410(??):Article 109367, June 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120301418.

Ji:2024:TSM

[JZSX24] Xing Ji, Fengxiang Zhao, Wei Shyy, and Kun Xu. Two-step multi-resolution reconstruction-based compact gas-kinetic scheme on tetrahedral mesh. *Journal of Computational Physics*, 497(??):??, January 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912300685X.

Jiang:2022:IAC

[JZZ22] Maosheng Jiang, Zengyan Zhang, and Jia Zhao. Improving the accuracy and consistency of the scalar auxiliary variable (SAV) method with relaxation. *Journal of Computational Physics*, 456(??):??, May 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912200016X.

Kaur:2022:AKV

[KAC22] Savneet Kaur, Manuel Athènes, and Jérôme Creuze. Absorption kinetics of vacancies by cavities in aluminum: Numerical characterization of sink strengths and first-passage statistics through Krylov subspace projection and eigenvalue deflation. *Journal of Computational Physics*, 454(??):Article 110987, April 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122000493.

Kantner:2020:GSG

[Kan20] Markus Kantner. Generalized Scharfetter-Gummel schemes for electro-thermal transport in degenerate semiconductors using the Kelvin formula for the Seebeck coefficient. *Journal of Computational Physics*, 402(??):Article 109091, February 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199911930796X.

Katiyar:2020:GPM

[KAO+20] Amit Katiyar, Shivam Agrawal, Hisanao Ouchi, Pablo Seleson, John T. Foster, and Mukul M. Sharma. A general peridynamics model for multiphase transport of non-Newtonian compressible fluids in porous media. *Journal of Computational Physics*, 402(??):Article 109075, February 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119307806.

Karatson:2022:SGT

[Kar22] J. Karátson. Sobolev gradient type iterative solution methods for a nonlinear 4th order elastic plate equation. *Journal* *of Computational Physics*, 463(??):??, August 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122002972.

Krasnov:2023:TPT

[KAZS23] Dmitry Krasnov, Ali Akhtari, Oleg Zikanov, and Jörg Schumacher. Tensor-product-Thomas elliptic solver for liquid-metal magnetohydrodynamics. *Journal of Computational Physics*, 474(??):??, February 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122008476.

Kromer:2022:FBV

[KB22a] Johannes Kromer and Dieter Bothe. Face-based Volume-of-Fluid interface positioning in arbitrary polyhedra. *Journal of Computational Physics*, 449(??):Article 110776, January 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121006719.

Kuzmin:2022:UFE

[KB22b] Dmitri Kuzmin and Jan-Phillip Bäcker. An unfitted finite element method using level set functions for extrapolation into deformable diffuse interfaces. *Journal of Computational Physics*, 461(??):??, July 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122002807.

Kromer:2023:TOA

[KB23] Johannes Kromer and Dieter Bothe. Third-order accurate initialization of volume fractions on unstructured meshes with arbitrary polyhedral cells. *Journal of Computational Physics*, 475(??):??, February 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122009032.

Karam:2024:IBC

[KB24a] Pascal R. Karam and Bassam Bamieh. Implicit boundary conditions in partial differential equations discretizations:

Identifying spurious modes and model reduction. *Journal of Computational Physics*, 500(??):??, March 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123008392.

Karumuri:2024:LSB

[KB24b] Sharmila Karumuri and Ilias Bilionis. Learning to solve Bayesian inverse problems: an amortized variational inference approach using Gaussian and Flow guides. *Journal of Computational Physics*, 511(??):??, August 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124003668.

Krul:2024:CAM

[KB24c] Oleksander Krul and Prosenjit Bagchi. A computational approach to modeling flow-induced large deformation of thin-walled compliant vessels. *Journal of Computational Physics*, 508(??):??, July 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124002754.

Kelley:2020:MIG

[KBB+20] C. T. Kelley, J. Bernholc, E. L. Briggs, Steven Hamilton, Lin Lin, and Chao Yang. Mesh independence of the generalized Davidson algorithm. *Journal of Computational Physics*, 409(??):Article 109322, May 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120300966.

Keita:2021:MCP

[KBB21] Sana Keita, Abdelaziz Beljadid, and Yves Bourgault. Mass-conservative and positivity preserving second-order semi-implicit methods for high-order parabolic equations. *Journal of Computational Physics*, 440(??):Article 110427, September 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121003223.

Kumar:2022:SEL

[KBC22] Yash Kumar, Pranav Bahl, and Souvik Chakraborty. State estimation with limited sensors — a deep learning based approach. *Journal of Computational Physics*, 457(??):??, May 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999122001437`.

Kolahdouz:2020:IIM

[KBCG20] Ebrahim M. Kolahdouz, Amneet Pal Singh Bhalla, Brent A. Craven, and Boyce E. Griffith. An immersed interface method for discrete surfaces. *Journal of Computational Physics*, 400(??):Article 108854, January 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999119305388`.

Kappeli:2020:OGC

[KBCH20] Roger Käppeli, Dinshaw S. Balsara, Praveen Chandrashekar, and Arijit Hazra. Optimal, globally constraint-preserving, $\mathrm{DG(TD)}^2$ schemes for computational electrodynamics based on two-derivative Runge–Kutta timestepping and multidimensional generalized Riemann problem solvers — a von Neumann stability analysis. *Journal of Computational Physics*, 408(??):Article 109238, May 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999120300127`.

Kim:2023:IPM

[KBG23] Keon Ho Kim, Amneet P. S. Bhalla, and Boyce E. Griffith. An immersed peridynamics model of fluid-structure interaction accounting for material damage and failure. *Journal of Computational Physics*, 493(??):??, November 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999123005612`.

Kleanthous:2022:ACP

[KBH+22] Antigoni Kleanthous, Timo Betcke, David P. Hewett, Paul Escapil-Inchauspé, Carlos Jerez-Hanckes, and Anthony J. Baran. Accelerated Calderón preconditioning for Maxwell transmission problems. *Journal of Computational Physics*, 458(??):??, June 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122001619.

Kolluru:2024:NSM

[KBP24] Sai Swetha Venkata Kolluru, Nicolas Besse, and Rahul Pandit. Novel spectral methods for shock capturing and the removal of tygers in computational fluid dynamics. *Journal of Computational Physics*, 519(??):??, December 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124006946.

Kolahdouz:2021:SIL

[KBS+21] E. M. Kolahdouz, A. P. S. Bhalla, L. N. Scotten, B. A. Craven, and B. E. Griffith. A sharp interface Lagrangian–Eulerian method for rigid-body fluid-structure interaction. *Journal of Computational Physics*, 443(??): Article 110442, October 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121003375.

Kassen:2022:IBS

[KBSF22] Andrew Kassen, Aaron Barrett, Varun Shankar, and Aaron L. Fogelson. Immersed boundary simulations of cell-cell interactions in whole blood. *Journal of Computational Physics*, 469(??):??, November 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122005617.

Kasolis:2020:IBM

[KC20a] Fotios Kasolis and Markus Clemens. Information-based model reduction for nonlinear electro-quasistatic problems. *Journal of Computational Physics*, 404(??):Article 109118, March 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199911930823X.

Keniley:2020:DET

[KC20b] Shane Keniley and Davide Curreli. Density estimation techniques for multiscale coupling of kinetic models of the plasma material interface. *Journal of Computational Physics*, 400(??):Article 108965, January 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999119306709`.

Koshkarov:2024:FIA

[KC24] O. Koshkarov and L. Chacón. A fully implicit, asymptotic-preserving, semi-Lagrangian algorithm for the time dependent anisotropic heat transport equation. *Journal of Computational Physics*, 519(??):??, December 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999124006296`.

Krath:2021:EPO

[KCCJ21] Elizabeth H. Krath, Forrest L. Carpenter, Paul G. A. Cizmas, and David A. Johnston. An efficient proper orthogonal decomposition based reduced-order model for compressible flows. *Journal of Computational Physics*, 426 (??):Article 109959, February 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999120307336`.

Koshkarov:2022:FNI

[KCCR22] Oleksandr Koshkarov, Luis Chacón, Guangye Chen, and Lee Forrest Ricketson. Fast nonlinear iterative solver for an implicit, energy-conserving, asymptotic-preserving charged-particle orbit integrator. *Journal of Computational Physics*, 459(??):??, June 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S002199912200208X`.

Kumari:2023:EFD

[KCD+23] Komal Kumari, Emmet Cleary, Swapnil Desai, Diego A. Donzis, Jacqueline H. Chen, and Konduri Aditya. Evaluation of finite difference based asynchronous partial differential equations solver for reacting flows. *Journal of Computational Physics*, 477(??):??, March 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123000013.

Kruk:2021:FVM

[KCK21] Nikita Kruk, José A. Carrillo, and Heinz Koeppl. A finite volume method for continuum limit equations of nonlocally interacting active chiral particles. *Journal of Computational Physics*, 440(??):Article 110275, September 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121001704.

Kulkarni:2020:NCS

[KCP20] Mandar D. Kulkarni, Robert A. Canfield, and Mayuresh J. Patil. Nonintrusive continuum sensitivity analysis for fluid applications. *Journal of Computational Physics*, 403(??):Article 109066, February 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119307715.

Kapidani:2021:AOC

[KCS21] Bernard Kapidani, Lorenzo Codecasa, and Joachim Schöberl. An arbitrary-order cell method with block-diagonal mass-matrices for the time-dependent 2D Maxwell equations. *Journal of Computational Physics*, 433(??):Article 110184, May 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121000796.

Kou:2024:ESP

[KCSS24] Jisheng Kou, Huangxin Chen, Amgad Salama, and Shuyu Sun. An energy stable and positivity-preserving computational method for compressible and immiscible two-phase flow in porous media. *Journal of Computational Physics*, 519(??):??, December 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124006399.

Koshakji:2023:RCF

[KCT+23] Anwar Koshakji, Grégoire Chomette, Jeffrey Turner, Jonathan Jablonski, Aisha Haynes, Donald Carlucci, Bianca Giovanardi, and Raúl A. Radovitzky. A robust computational framework for simulating the dynamics of large assemblies of highly-flexible fibers immersed in viscous flow. *Journal of Computational Physics*, 474(??):??, February 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122008373.

Kim:2022:FAP

[KCWZ22] Youngkyu Kim, Youngsoo Choi, David Widemann, and Tarek Zohdi. A fast and accurate physics-informed neural network reduced order model with shallow masked autoencoder. *Journal of Computational Physics*, 451 (??):Article 110841, February 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121007361.

Kumar:2021:TSM

[KCX+21] Ronit Kumar, Lidong Cheng, Yunong Xiong, Bin Xie, Rémi Abgrall, and Feng Xiao. THINC scaling method that bridges VOF and level set schemes. *Journal of Computational Physics*, 436(??):Article 110323, July 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121002187.

Kumari:2020:DNS

[KD20] Komal Kumari and Diego A. Donzis. Direct numerical simulations of turbulent flows using high-order asynchrony-tolerant schemes: Accuracy and performance. *Journal of Computational Physics*, 419(??):Article 109626, October 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120304009.

Kuhn:2021:AML

[KD21a] Michael B. Kuhn and Olivier Desjardins. An all-Mach, low-dissipation strategy for simulating multiphase flows. *Journal* *of Computational Physics*, 445(??):Article 110602, November 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999121004976`.

Kumari:2021:GNA

[KD21b] Komal Kumari and Diego A. Donzis. A generalized von Neumann analysis for multi-level schemes: Stability and spectral accuracy. *Journal of Computational Physics*, 424 (??):Article 109868, January 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999120306422`.

Kozak:2020:WIL

[KDB+20] Y. Kozak, S. S. Dammati, L. G. Bravo, P. E. Hamlington, and A. Y. Poludnenko. WENO interpolation for Lagrangian particles in highly compressible flow regimes. *Journal of Computational Physics*, 402(??):Article 109054, February 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999119307594`.

Kuzmin:2020:SFL

[KdL20] Dmitri Kuzmin and Manuel Quezada de Luna. Subcell flux limiting for high-order Bernstein finite element discretizations of scalar hyperbolic conservation laws. *Journal of Computational Physics*, 411(??):Article 109411, June 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999120301856`.

Kong:2023:EESa

[KDL23] Lingfa Kong, Yidao Dong, and Wei Liu. Extending EB3 scheme for the differential conservation law from node-centered to cell-centered control volumes I: Basic formula on regular cells. *Journal of Computational Physics*, 474(??):??, February 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999122008543`.

Kou:2022:EAI

[KdMJ+22] Jiaqing Kou, Aurelio Hurtado de Mendoza, Saumitra Joshi, Soledad Le Clainche, and Esteban Ferrer. Eigensolution analysis of immersed boundary method based on volume penalization: Applications to high-order schemes. *Journal of Computational Physics*, 449(??):Article 110817, January 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999121007129`.

Kemm:2023:NIM

[Kem23] Friedemann Kemm. Numerical investigation of Mach number consistent Roe solvers for the Euler equations of gas dynamics. *Journal of Computational Physics*, 477(??):??, March 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999123000426`.

Kemm:2024:NOE

[Kem24] Friedemann Kemm. New options for explicit all Mach number schemes by suitable choice of time integration methods. *Journal of Computational Physics*, 496(??):??, January 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999123006782`.

Koronaki:2024:NDR

[KEML+24] Eleni D. Koronaki, Nikolaos Evangelou, Cristina P. Martin-Linares, Edriss S. Titi, and Ioannis G. Kevrekidis. Nonlinear dimensionality reduction then and now: AIMs for dissipative PDEs in the ML era. *Journal of Computational Physics*, 506(??):??, June 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999124001591`.

Kostorz:2020:SAB

[KEY20] Wawrzyniec Kostorz and Anton Esmail-Yakas. A semi-analytical boundary integral method for radial functions with application to Smoothed Particle Hydrodynamics. *Journal of Computational Physics*, 417(??):Article 109565, September 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print),

1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120303399.

Kou:2023:CVP

[KF23] Jiaqing Kou and Esteban Ferrer. A combined volume penalization/selective frequency damping approach for immersed boundary methods applied to high-order schemes. *Journal of Computational Physics*, 472(??):??, January 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122007410.

Konrad:2022:DDL

[KFP+22] Julia Konrad, Ionuţ-Gabriel Farcaş, Benjamin Peherstorfer, Alessandro Di Siena, Frank Jenko, Tobias Neckel, and Hans-Joachim Bungartz. Data-driven low-fidelity models for multi-fidelity Monte Carlo sampling in plasma microturbulence analysis. *Journal of Computational Physics*, 451 (??):Article 110898, February 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121007932.

Khokhlov:2021:GCM

[KFSM21] Nikolay Khokhlov, Alena Favorskaya, Vladislav Stetsyuk, and Ivan Mitskovets. Grid-characteristic method using Chimera meshes for simulation of elastic waves scattering on geological fractured zones. *Journal of Computational Physics*, 446(??):Article 110637, December 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121005325.

Klahn:2020:AEA

[KG20] Emil Klahn and Holger Grosshans. An accurate and efficient algorithm to model the agglomeration of macroscopic particles. *Journal of Computational Physics*, 407 (??):Article 109232, April 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120300061.

Kang:2020:IHD

[KGBT20] Shinhoo Kang, Francis X. Giraldo, and Tan Bui-Thanh. IMEX HDG-DG: a coupled implicit hybridized discontinuous Galerkin and explicit discontinuous Galerkin approach for shallow water systems. *Journal of Computational Physics*, 401(??):Article 109010, January 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119307168.

Kopriva:2022:TFOb

[KGN22] David A. Kopriva, Gregor J. Gassner, and Jan Nordström. On the theoretical foundation of overset grid methods for hyperbolic problems II: Entropy bounded formulations for nonlinear conservation laws. *Journal of Computational Physics*, 471(??):??, December 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122006830.

Kontolati:2023:IPM

[KGSK23] Katiana Kontolati, Somdatta Goswami, Michael D. Shields, and George Em Karniadakis. On the influence of overparameterization in manifold based surrogates and deep neural operators. *Journal of Computational Physics*, 479(??):??, April 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123001031.

Kolasinski:2020:SMM

[KH20] Avary Kolasinski and Weizhang Huang. A surface moving mesh method based on equidistribution and alignment. *Journal of Computational Physics*, 403(??):Article 109097, February 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119308022.

Khodkar:2021:DDP

[KH21a] M. A. Khodkar and Pedram Hassanzadeh. A data-driven, physics-informed framework for forecasting the spatiotemporal evolution of chaotic dynamics with nonlinearities modeled as exogenous forcings. *Journal of Computational*

Physics, 440(??):Article 110412, September 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121003077.

Kumar:2021:MSI

[KH21b] Kishan Ramesh Kumar and Hadi Hajibeygi. Multiscale simulation of inelastic creep deformation for geological rocks. *Journal of Computational Physics*, 440 (??):Article 110439, September 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912100334X.

Kast:2024:PES

[KH24] Mariella Kast and Jan S. Hesthaven. Positional embeddings for solving PDEs with evolutional deep neural networks. *Journal of Computational Physics*, 508(??):??, July 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124002353.

Krause:2022:MTA

[KHM+22] Cassidy Krause, Weizhang Huang, David B. Mechem, Erik S. Van Vleck, and Min Zhang. A metric tensor approach to data assimilation with adaptive moving meshes. *Journal of Computational Physics*, 466(??):??, October 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122004697.

Krotz:2024:HMC

[KHM24] Johannes Krotz, Cory D. Hauck, and Ryan G. McClarren. A hybrid Monte Carlo, discontinuous Galerkin method for linear kinetic transport equations. *Journal of Computational Physics*, 514(??):??, October 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124005011.

Khoromskij:2020:RST

[Kho20] Boris N. Khoromskij. Range-separated tensor decomposition of the discretized Dirac delta and elliptic operator inverse. *Journal of Computational Physics*, 401 (??):Article 108998, January 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199911930703X.

Koch:2020:NCW

[KHS20] Timo Koch, Rainer Helmig, and Martin Schneider. A new and consistent well model for one-phase flow in anisotropic porous media using a distributed source model. *Journal of Computational Physics*, 410(??):Article 109369, June 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120301431.

Kim:2021:EHR

[KIHB21] Dokyun Kim, Christopher B. Ivey, Frank E. Ham, and Luis G. Bravo. An efficient high-resolution volume-of-fluid method with low numerical diffusion on unstructured grids. *Journal of Computational Physics*, 446(??): Article 110606, December 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121005015.

Kivva:2021:FCT

[Kiv21] Sergii Kivva. Flux-corrected transport for scalar hyperbolic conservation laws and convection-diffusion equations by using linear programming. *Journal of Computational Physics*, 425(??):Article 109874, January 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120306483.

Kulka:2022:TAC

[KJ22] Valérie Kulka and Patrick Jenny. Temporally adaptive conservative scheme for unsteady compressible flow. *Journal of Computational Physics*, 455(??):??, April 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121008135.

Kim:2024:SFP

[KJ24] Sanghun Kim and Eunji Jun. A stochastic Fokker–Planck–Master model for diatomic rarefied gas flows. *Journal of Computational Physics*, 506(??):??, June 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912400189X.

Kim:2024:PPN

[KJB+24] Bohyun Kim, Hangjie Ji, Andrea L. Bertozzi, Abolfazl Sadeghpour, and Y. Sungtaek Ju. A positivity-preserving numerical method for a thin liquid film on a vertical cylindrical fiber. *Journal of Computational Physics*, 496(??):??, January 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123006551.

Kou:2022:IBM

[KJdM+22] Jiaqing Kou, Saumitra Joshi, Aurelio Hurtado de Mendoza, Kunal Puri, Charles Hirsch, and Esteban Ferrer. Immersed boundary method for high-order flux reconstruction based on volume penalization. *Journal of Computational Physics*, 448(??):Article 110721, January 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121006161.

Kaltenbach:2020:IPC

[KK20a] Sebastian Kaltenbach and Phaedon-Stelios Koutsourelakis. Incorporating physical constraints in a deep probabilistic machine learning framework for coarse-graining dynamical systems. *Journal of Computational Physics*, 419 (??):Article 109673, October 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120304472.

Kuzmin:2020:LDC

[KK20b] Dmitri Kuzmin and Nikita Klyushnev. Limiting and divergence cleaning for continuous finite element discretizations of the MHD equations. *Journal of Computational Physics*, 407(??):Article 109230, April 15, 2020. CODEN

JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120300048.

Kuya:2021:HOA

[KK21] Yuichi Kuya and Soshi Kawai. High-order accurate kinetic-energy and entropy preserving (KEEP) schemes on curvilinear grids. *Journal of Computational Physics*, 442 (??):Article 110482, October 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121003776.

Koga:2022:LDF

[KK22a] Kazuki Koga and Takeo Kajishima. Low dissipative finite difference hybrid scheme by discontinuity sensor of detecting shock and material interface in multi-component compressible flows. *Journal of Computational Physics*, 448(??):Article 110757, January 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121006525.

Kuya:2022:MWA

[KK22b] Yuichi Kuya and Soshi Kawai. Modified wavenumber and aliasing errors of split convective forms for compressible flows. *Journal of Computational Physics*, 464(??):??, September 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122003989.

Khan:2024:HDN

[KKA24] Ritesh Khan, V. A. Kandappan, and Sivaram Ambikasaran. HODLRdD: a new black-box fast algorithm for N-body problems in d-dimensions with guaranteed error bounds: Applications to integral equations and support vector machines. *Journal of Computational Physics*, 501(??):??, March 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124000354.

Khatri:2020:CEL

[KKCC20] Shilpa Khatri, Arnold D. Kim, Ricardo Cortez, and Camille Carvalho. Close evaluation of layer potentials in three dimensions. *Journal of Computational Physics*, 423(??): Article 109798, December 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120305726.

Kwon:2021:DBI

[KKJ21] In Kwon, Do Y. Kwak, and Gwanghyun Jo. Discontinuous bubble immersed finite element method for Poisson–Boltzmann–Nernst–Planck model. *Journal of Computational Physics*, 438(??):Article 110370, August 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121002655.

Knobloch:2024:WBC

[KKJ24] Petr Knobloch, Dmitri Kuzmin, and Abhinav Jha. Well-balanced convex limiting for finite element discretizations of steady convection–diffusion–reaction equations. *Journal of Computational Physics*, 518(??):??, December 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124005539.

Kan:2023:PCI

[KKL+23] Yi-Kai Kan, Franz X. Kärtner, Sabine Le Borne, Daniel Ruprecht, and Jens-Peter M. Zemke. Parallel computation of inverse Compton scattering radiation spectra based on Liénard–Wiechert potentials. *Journal of Computational Physics*, 473(??):??, January 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122007872.

Klima:2024:CCL

[KKL24] Matej Klíma, Milan Kucharík, and Richard Liska. Cell-centered Lagrangian Lax–Wendroff HLL hybrid scheme in 3D. *Journal of Computational Physics*, 498(??):??, February 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print),

1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123007702.

Kim:2021:FSM

[KKM21] Albet S. Kim, Hyeon-Ju Kim, and Deok-Soo Moon. A fast and scalable mesh generation method of densely packed hollow fibers for membrane separations: Application to direct contact membrane distillation. *Journal of Computational Physics*, 427(??):Article 110042, February 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120308160.

Kunik:2024:RSS

[KKMT24] Matthias Kunik, Adrian Kolb, Siegfried Müller, and Ferdinand Thein. Radially symmetric solutions of the ultra-relativistic Euler equations in several space dimensions. *Journal of Computational Physics*, 518(??):??, December 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124005783.

Keshavarzzadeh:2020:GNQ

[KKN20] Vahid Keshavarzzadeh, Robert M. Kirby, and Akil Narayan. Generation of nested quadrature rules for generic weight functions via numerical optimization: Application to sparse grids. *Journal of Computational Physics*, 400(??): Article 108979, January 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119306849.

Kaltenbacher:2022:DKL

[KKN+22] Barbara Kaltenbacher, Ustim Khristenko, Vanja Nikolić, Mabel Lizzy Rajendran, and Barbara Wohlmuth. Determining kernels in linear viscoelasticity. *Journal of Computational Physics*, 464(??):??, September 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912200393X.

Kumaran:2024:MDA

[KKP24] S. M. Thamil Kumaran, Rohit Kumar, and B. Premachandran. A multi-directional advection based moment of fluid method for phase change problems. *Journal of Computational Physics*, 508(??):??, July 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999124002602`.

Kim:2020:CES

[KKPB20] Philsu Kim, Dojin Kim, Xiangfan Piao, and Soyoon Bak. A completely explicit scheme of Cauchy problem in BSLM for solving the Navier–Stokes equations. *Journal of Computational Physics*, 401(??):Article 109028, January 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S002199911930734X`.

Kenamond:2021:IDB

[KKS21a] Mack Kenamond, Dmitri Kuzmin, and Mikhail Shashkov. Intersection-distribution-based remapping between arbitrary meshes for staggered multi-material arbitrary Lagrangian–Eulerian hydrodynamics. *Journal of Computational Physics*, 429(??):Article 110014, March 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999120307889`.

Kenamond:2021:PPC

[KKS21b] Mack Kenamond, Dmitri Kuzmin, and Mikhail Shashkov. A positivity-preserving and conservative intersection-distribution-based remapping algorithm for staggered ALE hydrodynamics on arbitrary meshes. *Journal of Computational Physics*, 435(??):Article 110254, June 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999121001492`.

Kuhl:2021:ACV

[KKS+21c] Niklas Kühl, Jörn Kröger, Martin Siebenborn, Michael Hinze, and Thomas Rung. Adjoint complement to the volume-of-fluid method for immiscible flows. *Journal of*

Computational Physics, 440(??):Article 110411, September 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121003065.

Kritsuk:2021:HON

[KKSY21] Alexei G. Kritsuk, Dmitry Kotov, Björn Sjögreen, and H. C. Yee. High order nonlinear filter methods for subsonic turbulence simulation with stochastic forcing. *Journal of Computational Physics*, 431(??):Article 110118, April 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121000103.

Kubo:2021:LSB

[KKY+21] Seiji Kubo, Atsushi Koguchi, Kentaro Yaji, Takayuki Yamada, Kazuhiro Izui, and Shinji Nishiwaki. Level set-based topology optimization for two dimensional turbulent flow using an immersed boundary method. *Journal of Computational Physics*, 446(??):Article 110630, December 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121005258.

Kim:2022:MCM

[KKY22] Sejin Kim, Innyoung Kim, and Donghyun You. Multi-condition multi-objective optimization using deep reinforcement learning. *Journal of Computational Physics*, 462 (??):??, August 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122003254.

Kim:2020:DUL

[KL20] Junhyuk Kim and Changhoon Lee. Deep unsupervised learning of turbulence for inflow generation at various Reynolds numbers. *Journal of Computational Physics*, 406(??):Article 109216, April 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119309210.

King:2022:HOS

[KL22] J. R. C. King and S. J. Lind. High-order simulations of isothermal flows using the local anisotropic basis function method (LABFM). *Journal of Computational Physics*, 449(??):Article 110760, January 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121006550.

Khoo:2024:SSP

[KL24a] Yuehaw Khoo and Michael Lindsey. Scalable semidefinite programming approach to variational embedding for quantum many-body problems. *Journal of Computational Physics*, 510(??):??, August 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124002900.

Kim:2024:UAA

[KL24b] Minsoo Kim and Seungsoo Lee. Unified approach to artificial compressibility and local low Mach number preconditioning. *Journal of Computational Physics*, 508(??):??, July 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912400247X.

Kallinderis:2023:DMI

[KLA23] Yannis Kallinderis, Petros Lazaris, and Panagiotis Antonellis. Detection of multiple interacting features of different strength in compressible flow fields. *Journal of Computational Physics*, 477(??):??, March 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123000438.

Kromer:2023:SOA

[KLB23] Johannes Kromer, Fabio Leotta, and Dieter Bothe. Second-order accurate normal reconstruction from volume fractions on unstructured meshes with arbitrary polyhedral cells. *Journal of Computational Physics*, 491(??):??, October 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123004588.

Kou:2022:DDE

[KLF22] Jiaqing Kou, Soledad Le Clainche, and Esteban Ferrer. Data-driven eigensolution analysis based on a spatio-temporal Koopman decomposition, with applications to high-order methods. *Journal of Computational Physics*, 449(??):Article 110798, January 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121006938.

Kontolati:2022:SUL

[KLG+22] Katiana Kontolati, Dimitrios Loukrezis, Dimitrios G. Giovanis, Lohit Vandanapu, and Michael D. Shields. A survey of unsupervised learning methods for high-dimensional uncertainty quantification in black-box-type problems. *Journal of Computational Physics*, 464(??):??, September 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122003758.

King:2020:HOD

[KLN20] J. R. C. King, S. J. Lind, and A. M. A. Nasar. High order difference schemes using the local anisotropic basis function method. *Journal of Computational Physics*, 415(??):Article 109549, August 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120303235.

Kang:2022:FIS

[KLP22] Sangwoo Kang, Mikyoung Lim, and Won-Kwang Park. Fast identification of short, linear perfectly conducting cracks in a bistatic measurement configuration. *Journal of Computational Physics*, 468(??):??, November 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122005411.

Kumar:2020:FUN

[KLPR20] Kundan Kumar, Florian List, Iuliu Sorin Pop, and Florin Adrian Radu. Formal upscaling and numerical validation of unsaturated flow models in fractured porous media.

Journal of Computational Physics, 407(??):Article 109138, April 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119308435.

Khanwale:2020:STP

[KLS+20] Makrand A. Khanwale, Alec D. Lofquist, Hari Sundar, James A. Rossmanith, and Baskar Ganapathysubramanian. Simulating two-phase flows with thermodynamically consistent energy stable Cahn–Hilliard Navier–Stokes equations on parallel adaptive octree based meshes. *Journal of Computational Physics*, 419(??):Article 109674, October 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120304484.

Klawonn:2024:LAC

[KLW24] Axel Klawonn, Martin Lanser, and Janine Weber. Learning adaptive coarse basis functions of FETI-DP. *Journal of Computational Physics*, 496(??):??, January 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123006824.

Kurganov:2023:WBP

[KLX23] Alexander Kurganov, Yongle Liu, and Ruixiao Xin. Well-balanced path-conservative central-upwind schemes based on flux globalization. *Journal of Computational Physics*, 474(??):??, February 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122008361.

Kurganov:2020:WBC

[KLZ20] Alexander Kurganov, Yongle Liu, and Vladimir Zeitlin. A well-balanced central-upwind scheme for the thermal rotating shallow water equations. *Journal of Computational Physics*, 411(??):Article 109414, June 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120301881.

Klibanov:2023:NSD

[KLZ23] Michael V. Klibanov, Jingzhi Li, and Wenlong Zhang. Numerical solution of the 3-D travel time tomography problem. *Journal of Computational Physics*, 476(??):??, March 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123000050.

Kang:2022:VMI

[KM22a] Soonpil Kang and Arif Masud. Variational multiscale immersed boundary method for incompressible turbulent flows. *Journal of Computational Physics*, 469(??):??, November 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912200585X.

Kashefi:2022:PIP

[KM22b] Ali Kashefi and Tapan Mukerji. Physics-informed PointNet: a deep learning solver for steady-state incompressible flows and thermal fields on multiple sets of irregular geometries. *Journal of Computational Physics*, 468(??):??, November 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122005721.

Kusch:2020:FSG

[KMF20] Jonas Kusch, Ryan G. McClarren, and Martin Frank. Filtered stochastic Galerkin methods for hyperbolic equations. *Journal of Computational Physics*, 403(??):Article 109073, February 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119307788.

Kou:2023:JPS

[KMF23] Jiaqing Kou, Oscar A. Marino, and Esteban Ferrer. Jump penalty stabilization techniques for under-resolved turbulence in discontinuous Galerkin schemes. *Journal of Computational Physics*, 491(??):??, October 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123004941.

Kim:2023:SCA

[KML23] Jeongho Kim, Chohong Min, and Byungjoon Lee. A super-convergence analysis of the Poisson solver with octree grids and irregular domains. *Journal of Computational Physics*, 488(??):??, September 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123003078.

Keim:2023:RMN

[KMR23] Jens Keim, Claus-Dieter Munz, and Christian Rohde. A relaxation model for the non-isothermal Navier–Stokes-Korteweg equations in confined domains. *Journal of Computational Physics*, 474(??):??, February 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122008932.

Katsaounis:2020:BPW

[KMS20] Theodoros Katsaounis, Dimitrios Mitsotakis, and Georges Sadaka. Boussinesq–Peregrine water wave models and their numerical approximation. *Journal of Computational Physics*, 417(??):Article 109579, September 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120303533.

Kopriva:2022:TFOa

[KNG22] David A. Kopriva, Jan Nordström, and Gregor J. Gassner. On the theoretical foundation of overset grid methods for hyperbolic problems: Well-posedness and conservation. *Journal of Computational Physics*, 448(??):Article 110732, January 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121006276.

Kadeethum:2021:EGD

[KNLB21] T. Kadeethum, H. M. Nick, S. Lee, and F. Ballarin. Enriched Galerkin discretization for modeling poroelasticity and permeability alteration in heterogeneous porous media. *Journal of Computational Physics*, 427(??):Article 110030, February

15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120308044.

Krumscheid:2020:QUS

[KNP20] S. Krumscheid, F. Nobile, and M. Pisaroni. Quantifying uncertain system outputs via the multilevel Monte Carlo method — Part I: Central moment estimation. *Journal of Computational Physics*, 414(??):Article 109466, August 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120302400.

Klyuchinskiy:2021:CTR

[KNS21] Dmitriy V. Klyuchinskiy, Nikita S. Novikov, and Maxim A. Shishlenin. CPU-time and RAM memory optimization for solving dynamic inverse problems using gradient-based approach. *Journal of Computational Physics*, 439(??): Article 110374, August 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121002692.

Klibanov:2022:NVS

[KNT22] Michael Klibanov, Loc H. Nguyen, and Hung V. Tran. Numerical viscosity solutions to Hamilton–Jacobi equations via a Carleman estimate and the convexification method. *Journal of Computational Physics*, 451(??):Article 110828, February 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121007233.

Kalinov:2022:DSM

[KOM+22] A. Kalinov, A. I. Osinsky, S. A. Matveev, W. Otieno, and N. V. Brilliantov. Direct simulation Monte Carlo for new regimes in aggregation-fragmentation kinetics. *Journal of Computational Physics*, 467(??):??, October 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122005010.

Kuya:2023:KEE

[KOS23] Yuichi Kuya, Wataru Okumura, and Keisuke Sawada. A kinetic energy and entropy preserving (KEEP) finite volume scheme on unstructured meshes for compressible flows. *Journal of Computational Physics*, 494(??):??, December 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123006162.

Kantarakias:2023:SAC

[KP23a] Kyriakos D. Kantarakias and George Papadakis. Sensitivity analysis of chaotic systems using a frequency-domain shadowing approach. *Journal of Computational Physics*, 474(??):??, February 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122008208.

Kantarakias:2023:SEG

[KP23b] Kyriakos D. Kantarakias and George Papadakis. Sensitivity-enhanced generalized polynomial chaos for efficient uncertainty quantification. *Journal of Computational Physics*, 491(??):??, October 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123004722.

Kajzer:2024:PNC

[KP24] Adam Kajzer and Jacek Pozorski. On the partition noise in chosen particle weighted methods and its consequences for weakly-compressible flow models. *Journal of Computational Physics*, 498(??):??, February 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123007489.

Kuhl:2022:DAM

[KR22] Niklas Kühl and Thomas Rung. Discrete adjoint momentum-weighted interpolation strategies. *Journal of Computational Physics*, 467(??):??, October 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122005368.

Kochi:2023:SCU

[KR23] S. R. Siva Prasad Kochi and M. Ramakrishna. Shock capturing using discontinuous Galerkin method and overset grids for two-dimensional Euler equations. *Journal of Computational Physics*, 488(??):??, September 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912300325X.

Kelly:2023:PBO

[KRG+23] James F. Kelly, Sohail Reddy, Francis X. Giraldo, P. Alex Reinecke, John T. Emmert, McArthur Jones, and Stephen D. Eckermann. A physics-based open atmosphere boundary condition for height-coordinate atmospheric models. *Journal of Computational Physics*, 482(??):??, June 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123001390.

Koliesnikova:2021:UFC

[KRL21] Daria Koliesnikova, Isabelle Ramière, and Frédéric Lebon. A unified framework for the computational comparison of adaptive mesh refinement strategies for all-quadrilateral and all-hexahedral meshes: Locally adaptive multigrid methods versus h-adaptive methods. *Journal of Computational Physics*, 437(??):Article 110310, July 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121002059.

Keaveny:2011:ASK

[KS11] Eric E. Keaveny and Michael J. Shelley. Applying a second-kind boundary integral equation for surface tractions in Stokes flow. *Journal of Computational Physics*, 230(5):2141–2159, March 1, 2011. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999110006741. See comment [PSL20].

Kay:2021:PNM

[KS21a] David Kay and Vanessa Styles. Preconditioning nonlocal multi-phase flow. *Journal of Computational Physics*,

424(??):Article 109715, January 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120304897.

Klein:2021:MDS

[KS21b] Christian Klein and Nikola Stoilov. Multi-domain spectral approach with Sommerfeld condition for the Maxwell equations. *Journal of Computational Physics*, 434(??):Article 110149, June 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121000413.

Kormann:2021:ECT

[KS21c] Katharina Kormann and Eric Sonnendrücker. Energy-conserving time propagation for a structure-preserving particle-in-cell Vlasov–Maxwell solver. *Journal of Computational Physics*, 425(??):Article 109890, January 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120306641.

Kuwata:2021:WML

[KS21d] Y. Kuwata and K. Suga. Wall-modeled large eddy simulation of turbulent heat transfer by the lattice Boltzmann method. *Journal of Computational Physics*, 433(??):Article 110186, May 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121000814.

Kaltenbacher:2022:FTS

[KS22a] Barbara Kaltenbacher and Anna Schlintl. Fractional time stepping and adjoint based gradient computation in an inverse problem for a fractionally damped wave equation. *Journal of Computational Physics*, 449(??):Article 110789, January 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121006847.

Karam:2022:HOPb

[KS22b] Mokbel Karam and Tony Saad. High-order pressure estimates for Navier–Stokes Runge–Kutta solvers using stage pseudo-pressures. *Journal of Computational Physics*, 471(??):??, December 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122006647.

Karam:2022:HOPa

[KS22c] Mokbel Karam and Tony Saad. High-order pressure estimates for projection-based Navier–Stokes solvers. *Journal of Computational Physics*, 452(??):Article 110925, March 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121008202.

Kilgour:2022:IBB

[KS22d] Michael Kilgour and Lena Simine. Inside the black box: a physical basis for the effectiveness of deep generative models of amorphous materials. *Journal of Computational Physics*, 452(??):Article 110885, March 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121007804.

Karam:2023:TFP

[KS23] Mokbel Karam and Tony Saad. On the theory of fast projection methods for high-order Navier–Stokes solvers. *Journal of Computational Physics*, 495(??):??, December 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123006526.

Klein:2024:ECH

[KS24a] R. B. Klein and B. Sanderse. Energy-conserving hyper-reduction and temporal localization for reduced order models of the incompressible Navier–Stokes equations. *Journal of Computational Physics*, 499(??):??, February 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123007921.

Kuan:2024:EIL

[KS24b] Tzuo Wei It Kuan and Joanna Szmelter. Explicit and implicit large eddy simulations of variable-density low-speed flows. *Journal of Computational Physics*, 499(??):??, February 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123008100.

Krais:2020:SFA

[KSBG20] Nico Krais, Gero Schnücke, Thomas Bolemann, and Gregor J. Gassner. Split form ALE discontinuous Galerkin methods with applications to under-resolved turbulent low-Mach number flows. *Journal of Computational Physics*, 421 (??):Article 109726, November 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120305003.

Kingora:2022:NIF

[KSH22] Kamau Kingora and Hamid Sadat-Hosseini. A novel interpolation-free sharp-interface immersed boundary method. *Journal of Computational Physics*, 453(??):Article 110933, March 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121008287.

Kuang:2024:TCA

[KSH24] Yang Kuang, Yedan Shen, and Guanghui Hu. Towards chemical accuracy using a multi-mesh adaptive finite element method in all-electron density functional theory. *Journal of Computational Physics*, 518(??):??, December 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124005606.

Koch:2020:MTP

[KSHJ20] Timo Koch, Martin Schneider, Rainer Helmig, and Patrick Jenny. Modeling tissue perfusion in terms of 1d-3d embedded mixed-dimension coupled problems with distributed sources. *Journal of Computational Physics*, 410(??):Article 109370, June 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120301443.

Khanwale:2023:PBS

[KSI+23] Makrand A. Khanwale, Kumar Saurabh, Masado Ishii, Hari Sundar, James A. Rossmanith, and Baskar Ganapathysubramanian. A projection-based, semi-implicit time-stepping approach for the Cahn–Hilliard Navier–Stokes equations on adaptive octree meshes. *Journal of Computational Physics*, 475(??):??, February 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122009378.

Kulesza:2021:DOA

[KSK21] Joel A. Kulesza, Clell J. Solomon, and Brian C. Kiedrowski. Discrete ordinates analysis of the forced-flight variance reduction technique in Monte Carlo neutral particle transport simulations. *Journal of Computational Physics*, 429 (??):Article 109997, March 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120307713.

Kim:2024:DNS

[KSK+24] Sungu Kim, Kumar Saurabh, Makrand A. Khanwale, Ali Mani, Robbyn K. Anand, and Baskar Ganapathysubramanian. Direct numerical simulation of electrokinetic transport phenomena in fluids: Variational multi-scale stabilization and octree-based mesh refinement. *Journal of Computational Physics*, 500(??):??, March 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123008434.

Karam:2021:LCR

[KSS21] Mokbel Karam, James C. Sutherland, and Tony Saad. Low-cost Runge–Kutta integrators for incompressible flow simulations. *Journal of Computational Physics*, 443(??): Article 110518, October 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121004137.

Kucherova:2021:CMP

[KSST21] Anna Kucherova, Selma Strango, Shahar Sukenik, and Maxime Theillard. Computational modeling of protein conformational changes — application to the opening SARS-CoV-2 spike. *Journal of Computational Physics*, 444 (??):Article 110591, November 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121004861.

Kahana:2022:HOC

[KSTT22] Adar Kahana, Fouche Smith, Eli Turkel, and Semyon Tsynkov. A high order compact time/space finite difference scheme for the 2D and 3D wave equation with a damping layer. *Journal of Computational Physics*, 460(??):??, July 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122002236.

Khimin:2022:STF

[KSW22] D. Khimin, M. C. Steinbach, and T. Wick. Space-time formulation, discretization, and computational performance studies for phase-field fracture optimal control problems. *Journal of Computational Physics*, 470(??):??, December 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122006167.

Kwon:2020:MIB

[KT20] Chunsong Kwon and Daniel M. Tartakovsky. Modified immersed boundary method for flows over randomly rough surfaces. *Journal of Computational Physics*, 406 (??):Article 109195, April 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119309003.

Kumar:2024:AMG

[KT24] Kishan Ramesh Kumar and Matei Tene. Algebraic multiscale grid coarsening using unsupervised machine learning for subsurface flow simulation. *Journal of Computational Physics*, 496(??):??, January 1, 2024. CODEN

JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123006654.

Karumuri:2020:SFS

[KTBP20] Sharmila Karumuri, Rohit Tripathy, Ilias Bilionis, and Jitesh Panchal. Simulator-free solution of high-dimensional stochastic elliptic partial differential equations using deep neural networks. *Journal of Computational Physics*, 404 (??):Article 109120, March 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119308253.

Kahana:2020:OSB

[KTDG20] Adar Kahana, Eli Turkel, Shai Dekel, and Dan Givoli. Obstacle segmentation based on the wave equation and deep learning. *Journal of Computational Physics*, 413 (??):Article 109458, July 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120302321.

Kahana:2022:PID

[KTDG22] Adar Kahana, Eli Turkel, Shai Dekel, and Dan Givoli. A physically-informed deep-learning model using time-reversal for locating a source from sparse and highly noisy sensors data. *Journal of Computational Physics*, 470(??):??, December 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122006544.

Katrutsa:2023:EDM

[KUO23] Aleksandr Katrutsa, Sergey Utyuzhnikov, and Ivan Oseledets. Extension of Dynamic Mode Decomposition for dynamic systems with incomplete information based on t-model of optimal prediction. *Journal of Computational Physics*, 476(??):??, March 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123000086.

Kushch:2020:NAM

[Kus20] Volodymyr I. Kushch. Numerical algorithm of multipole expansion method for conductivity of ellipsoidal particle composite. *Journal of Computational Physics*, 418 (??):Article 109642, October 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999120304162`.

Katsoulakis:2020:DDV

[KV20] Markos A. Katsoulakis and Pedro Vilanova. Data-driven, variational model reduction of high-dimensional reaction networks. *Journal of Computational Physics*, 401(??): Article 108997, January 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999119307028`.

Kapidani:2023:HOG

[KV23a] Bernard Kapidani and Rafael Vázquez. High order geometric methods with splines: Fast solution with explicit time-stepping for Maxwell equations. *Journal of Computational Physics*, 493(??):??, November 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999123005351`.

Koellermeier:2023:HMM

[KV23b] Julian Koellermeier and Hannes Vandecasteele. Hierarchical micro-macro acceleration for moment models of kinetic equations. *Journal of Computational Physics*, 488(??):??, September 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999123002899`.

Krause:2023:NAF

[KV23c] Veit Krause and Axel Voigt. A numerical approach for fluid deformable surfaces with conserved enclosed volume. *Journal of Computational Physics*, 486(??):??, August 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999123001924`.

Kuzmin:2023:DBW

[KV23d] Dmitri Kuzmin and Joshua Vedral. Dissipation-based WENO stabilization of high-order finite element methods for scalar conservation laws. *Journal of Computational Physics*, 487(??):??, August 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999123002486`.

Khalloufi:2020:AEF

[KVH20] Mehdi Khalloufi, Rudy Valette, and Elie Hachem. Adaptive Eulerian framework for boiling and evaporation. *Journal of Computational Physics*, 401(??):Article 109030, January 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999119307363`.

Kumar:2021:CLD

[KVQE21] S. S. Prasanna Kumar, A. Vázquez-Quesada, and M. Ellero. A conservative lubrication dynamics method for the simulation of dense non-colloidal suspensions with particle spin. *Journal of Computational Physics*, 427(??): Article 110001, February 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999120307750`.

Kou:2023:EBP

[KWCS23] Jisheng Kou, Xiuhua Wang, Huangxin Chen, and Shuyu Sun. An efficient bound-preserving and energy stable algorithm for compressible gas flow in porous media. *Journal of Computational Physics*, 473(??):??, January 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999122008142`.

Kou:2022:ESL

[KWDS22] Jisheng Kou, Xiuhua Wang, Shigui Du, and Shuyu Sun. An energy stable linear numerical method for thermodynamically consistent modeling of two-phase incompressible flow in porous media. *Journal of Computational Physics*, 451(??):Article 110854, February 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

URL http://www.sciencedirect.com/science/article/pii/S002199912100749X.

Kusch:2020:IAS

[KWF20] Jonas Kusch, Jannick Wolters, and Martin Frank. Intrusive acceleration strategies for uncertainty quantification for hyperbolic systems of conservation laws. *Journal of Computational Physics*, 419(??):Article 109698, October 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120304721.

Kusch:2022:LRP

[KWMF22] Jonas Kusch, Benjamin Whewell, Ryan McClarren, and Martin Frank. A low-rank power iteration scheme for neutron transport criticality problems. *Journal of Computational Physics*, 470(??):??, December 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122006490.

Kolahdouz:2023:SIL

[KWR+23] Ebrahim M. Kolahdouz, David R. Wells, Simone Rossi, Kenneth I. Aycock, Brent A. Craven, and Boyce E. Griffith. A sharp interface Lagrangian–Eulerian method for flexible-body fluid-structure interaction. *Journal of Computational Physics*, 488(??):??, September 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123002693.

Koch:2022:NMD

[KWS22] Timo Koch, Hanchuan Wu, and Martin Schneider. Nonlinear mixed-dimension model for embedded tubular networks with application to root water uptake. *Journal of Computational Physics*, 450(??):Article 110823, February 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912100718X.

Kang:2024:OFI

[KXY24] Yue Kang, Tao Xiong, and Yang Yang. Oscillation-free implicit pressure explicit concentration discontinuous

Galerkin methods for compressible miscible displacements with applications in viscous fingering. *Journal of Computational Physics*, 516(??):??, November 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124005965.

Kim:2024:SCP

[KYK24] Juhyun Kim, Hojun You, and Chongam Kim. Shock-capturing PID controller for high-order methods with data-driven gain optimization. *Journal of Computational Physics*, 508(??):??, July 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912400264X.

Kuldinow:2024:TMF

[KYMH24] Derek A. Kuldinow, Yusuke Yamashita, Adnan R. Mansour, and Kentaro Hara. Ten-moment fluid model with heat flux closure for gasdynamic flows. *Journal of Computational Physics*, 508(??):??, July 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124002791.

Kawai:2022:GRM

[KYO22] Shigetaka Kawai, Wataru Yamazaki, and Akira Oyama. Gegenbauer reconstruction method with edge detection for multi-dimensional uncertainty propagation. *Journal of Computational Physics*, 468(??):??, November 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122005678.

Kong:2023:EESb

[KZC23] Linghua Kong, Peng Zhang, and Meng Chen. Efficient energy structure-preserving schemes for three-dimensional Maxwell's equations. *Journal of Computational Physics*, 491(??):??, October 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123004527.

Kong:2024:ELR

[KZDF24] Lingzheng Kong, Liyan Zhu, Youjun Deng, and Xiaoping Fang. Enlargement of the localized resonant band gap by using multi-layer structures. *Journal of Computational Physics*, 518(??):??, December 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124005564.

Lozano:2021:IFS

[LA21] Eduardo Lozano and Tariq D. Aslam. Implicit fast sweeping method for hyperbolic systems of conservation laws. *Journal of Computational Physics*, 430(??):Article 110039, April 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120308135.

Lakoba:2020:SIF

[Lak20] T. I. Lakoba. Study of instability of the Fourier split-step method for the massive Gross–Neveu model. *Journal of Computational Physics*, 402(??):Article 109100, February 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119308058.

Lohner:2024:ABE

[LAMC24] Rainald Löhner, Harbir Antil, Fernando Mut, and Juan Cebral. Adjoint-based estimation of sensitivity of clinical measures to boundary conditions for arteries. *Journal of Computational Physics*, 497(??):??, January 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123007143.

Luo:2021:MDG

[LAN21] Hong Luo, Gianni Absillis, and Robert Nourgaliev. A moving discontinuous Galerkin finite element method with interface condition enforcement for compressible flows. *Journal of Computational Physics*, 445(??):Article 110618, November 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121005131.

Lucor:2022:SCS

[LAS22] Didier Lucor, Atul Agrawal, and Anne Sergent. Simple computational strategies for more effective physics-informed neural networks modeling of turbulent natural convection. *Journal of Computational Physics*, 456(??):??, May 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122000845.

Li:2022:IPG

[LAT+22] Fei Li, Weiming An, Frank S. Tsung, Viktor K. Decyk, and Warren B. Mori. Integrating a ponderomotive guiding center algorithm into a quasi-static particle-in-cell code based on azimuthal mode decomposition. *Journal of Computational Physics*, 470(??):??, December 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122006611.

Li:2021:ESP

[LB21] Yifei Li and Weizhu Bao. An energy-stable parametric finite element method for anisotropic surface diffusion. *Journal of Computational Physics*, 446(??):Article 110658, December 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121005532.

Law:2024:CCE

[LB24] Timothy R. Law and Philip T. Barton. A cell-centred Eulerian volume-of-fluid method for compressible multi-material flows. *Journal of Computational Physics*, 497(??):??, January 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123006873.

Labanda:2023:EPM

[LBC23] Nicolás A. Labanda, Pouria Behnoudfar, and Victor M. Calo. An explicit predictor/multicorrector time marching with automatic adaptivity for finite-strain elastodynamics. *Journal of Computational Physics*, 472(??):??, January 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122007598.

Linga:2020:TEF

[LBM20] Gaute Linga, Asger Bolet, and Joachim Mathiesen. Transient electrohydrodynamic flow with concentration-dependent fluid properties: Modelling and energy-stable numerical schemes. *Journal of Computational Physics*, 412 (??):Article 109430, July 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120302047.

Lucca:2023:SIF

[LBM+23] A. Lucca, S. Busto, L. O. Müller, E. F. Toro, and M. Dumbser. A semi-implicit finite volume scheme for blood flow in elastic and viscoelastic vessels. *Journal of Computational Physics*, 495(??):??, December 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123006253.

Laurent:2021:RGC

[LBN21] C. Laurent, A. Badhe, and F. Nicoud. Representing the geometrical complexity of liners and boundaries in low-order modeling for thermoacoustic instabilities. *Journal of Computational Physics*, 428(??):Article 110077, March 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120308512.

Lahiri:2020:SSA

[LBSR20] Saptarshi Kumar Lahiri, Kanishka Bhattacharya, Amit Shaw, and L. S. Ramachandra. A stable SPH with adaptive B-spline kernel. *Journal of Computational Physics*, 422(??):Article 109761, December 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120305350.

Linot:2023:SNO

[LBT+23] Alec J. Linot, Joshua W. Burby, Qi Tang, Prasanna Balaprakash, Michael D. Graham, and Romit Maulik. Stabilized neural ordinary differential equations for long-time forecasting of dynamical systems. *Journal of Computational Physics*, 474(??):??, February 1, 2023. CODEN

JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122009019.

Liu:2024:OBL

[LBZ24] Chen Liu, Gregery T. Buzzard, and Xiangxiong Zhang. An optimization based limiter for enforcing positivity in a semi-implicit discontinuous Galerkin scheme for compressible Navier–Stokes equations. *Journal of Computational Physics*, 519(??):??, December 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124006880.

Lee:2020:MRD

[LC20] Kookjin Lee and Kevin T. Carlberg. Model reduction of dynamical systems on nonlinear manifolds using deep convolutional autoencoders. *Journal of Computational Physics*, 404(??):Article 108973, March 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119306783.

Lin:2022:TSP

[LC22] Shuning Lin and Yong Chen. A two-stage physics-informed neural network method based on conserved quantities and applications in localized wave solutions. *Journal of Computational Physics*, 457(??):??, May 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122001152.

Liu:2023:TLA

[LC23] Yingzhi Liu and Xiao-Chuan Cai. Two-level additive Schwarz methods for three-dimensional unsteady Stokes flows in patient-specific arteries with parameterized one-dimensional central-line coarse preconditioner. *Journal of Computational Physics*, 490(??):??, October 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123003856.

Lin:2024:HOE

[LC24] Yimin Lin and Jesse Chan. High order entropy stable discontinuous Galerkin spectral element methods through subcell limiting. *Journal of Computational Physics*, 498(??): ??, February 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123007726.

Lu:2023:SPI

[LCBW23] Nan Lu, Wenjun Cai, Yonghui Bo, and Yushun Wang. Superconvergence of projection integrators for conservative system. *Journal of Computational Physics*, 490(??):??, October 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123003765.

Liu:2023:CIF

[LCC+23a] Hongtao Liu, Mengyu Chen, Xiaofeng Cai, Yong Cao, and Giovanni Lapenta. A combined immersed finite element and conservative semi-Lagrangian scheme for plasma-material interactions. *Journal of Computational Physics*, 488(??):??, September 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123003273.

Luo:2023:ODC

[LCC+23b] Dingcheng Luo, Lianghao Cao, Peng Chen, Omar Ghattas, and J. Tinsley Oden. Optimal design of chemoepitaxial guideposts for the directed self-assembly of block copolymer systems using an inexact Newton algorithm. *Journal of Computational Physics*, 485(??):??, July 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123001961.

Liu:2023:EEC

[LCCL23] Hongtao Liu, Xiaofeng Cai, Yong Cao, and Giovanni Lapenta. An efficient energy conserving semi-Lagrangian kinetic scheme for the Vlasov–Ampère system. *Journal of Computational Physics*, 492(??):??, November 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (elec-

tronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123005077.

Li:2022:DIM

[LCCM22] Qian Li, Wei Hua Cai, Ching-Yao Chen, and Eckart Meiburg. A diffuse interface model for low solubility binary flows in porous media. *Journal of Computational Physics*, 470(??):??, December 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122006441.

Lyu:2023:SEP

[LCDS23] Ganlin Lyu, Chao Chen, Xi Du, and Spencer J. Sherwin. Stable, entropy-pressure compatible subsonic Riemann boundary condition for embedded DG compressible flow simulations. *Journal of Computational Physics*, 476(??):??, March 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122009597.

Liu:2023:AAD

[LCF+23] Lin Liu, Siyu Chen, Libo Feng, Jihong Wang, Sen Zhang, Yanping Chen, Xinhui Si, and Liancun Zheng. Analysis of the anomalous diffusion in comb structure with absorbing boundary conditions. *Journal of Computational Physics*, 490(??):??, October 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123004102.

Larios-Cardenas:2022:ECN

[LCG22a] Luis Ángel Larios-Cárdenas and Frédéric Gibou. Error-correcting neural networks for semi-Lagrangian advection in the level-set method. *Journal of Computational Physics*, 471(??):??, December 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122006866.

Larios-Cardenas:2022:HIS

[LCG22b] Luis Ángel Larios-Cárdenas and Frédéric Gibou. A hybrid inference system for improved curvature estimation in the level-set method using machine learning. *Journal of Computational Physics*, 463(??):??, August 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122003539.

Larios-Cardenas:2023:MLA

[LCG23] Luis Ángel Larios-Cárdenas and Frédéric Gibou. Machine learning algorithms for three-dimensional mean-curvature computation in the level-set method. *Journal of Computational Physics*, 478(??):??, April 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123000906.

Laiu:2020:FIS

[LCH20] M. Paul Laiu, Zheng Chen, and Cory D. Hauck. A fast implicit solver for semiconductor models in one space dimension. *Journal of Computational Physics*, 417(??): Article 109567, September 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120303417.

Li:2020:EHO

[LCJ20a] Shiyi Li, Yibing Chen, and Song Jiang. An efficient high-order gas-kinetic scheme (I): Euler equations. *Journal of Computational Physics*, 415(??):Article 109488, August 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912030262X.

Lyu:2020:NSC

[LCJ+20b] Maohui Lyu, Weng Cho Chew, Lijun Jiang, Maojun Li, and Liwei Xu. Numerical simulation of a coupled system of Maxwell equations and a gas dynamic model. *Journal of Computational Physics*, 409(??):Article 109354, May 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120301285.

Labeurthre:2022:HOW

[LCL22a] David Labeurthre, Ansar Calloo, and Romain Le Tellier. High-order Wachspress functions on convex polygons through computer algebra. *Journal of Computational Physics*, 470(??):??, December 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122006076.

Lai:2022:SRM

[LCL+22b] Ming-Chih Lai, Che-Chia Chang, Wei-Syuan Lin, Wei-Fan Hu, and Te-Sheng Lin. A shallow Ritz method for elliptic problems with singular sources. *Journal of Computational Physics*, 469(??):??, November 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912200609X.

Linders:2020:ASA

[LCN20] Viktor Linders, Mark H. Carpenter, and Jan Nordström. Accurate solution-adaptive finite difference schemes for coarse and fine grids. *Journal of Computational Physics*, 410(??):Article 109393, June 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120301674.

Linders:2024:SSA

[LCN24] Viktor Linders, Mark H. Carpenter, and Jan Nordström. A superconvergent stencil-adaptive SBP-SAT finite difference scheme. *Journal of Computational Physics*, 501(??):??, March 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124000433.

Lamballais:2021:VHF

[LCP21a] Eric Lamballais, Rodrigo Vicente Cruz, and Rodolphe Perrin. Viscous and hyperviscous filtering for direct and large-eddy simulation. *Journal of Computational Physics*, 431(??):Article 110115, April 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121000073.

Long:2021:ACS

[LCP21b] Tian Long, Jinsheng Cai, and Shucheng Pan. An accelerated conservative sharp-interface method for multiphase flows simulations. *Journal of Computational Physics*, 429(??):Article 110021, March 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120307956.

Long:2023:FCS

[LCP23] Tian Long, Jinsheng Cai, and Shucheng Pan. A fully conservative sharp-interface method for compressible multiphase flows with phase change. *Journal of Computational Physics*, 493(??):??, November 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912300596X.

Lopez:2024:NGC

[LCP+24] Santiago Martelo Lopez, Aristos Christou, Shunqi Pan, Thorsten Stoesser, and Zhihua Xie. A new ghost-cell/level-set method for three-dimensional flows. *Journal of Computational Physics*, 499(??):??, February 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123008057.

Law:2023:MVR

[LCPW23] Frederick Law, Antoine Cerfon, Benjamin Peherstorfer, and Florian Wechsung. Meta variance reduction for Monte Carlo estimation of energetic particle confinement during stellarator optimization. *Journal of Computational Physics*, 495(??):??, December 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123006198.

Li:2022:CHO

[LCR22] Yanhui Li, Congwei Chen, and Yu-Xin Ren. A class of high-order finite difference schemes with minimized dispersion and adaptive dissipation for solving compressible flows. *Journal of Computational Physics*, 448(??):Article 110770, January

1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121006653.

Lei:2022:HOE

[LCS22] Nuo Lei, Juan Cheng, and Chi-Wang Shu. High order entropy stable and positivity-preserving discontinuous Galerkin method for the nonlocal electron heat transport model. *Journal of Computational Physics*, 454(??):Article 110945, April 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122000079.

Lei:2023:HOP

[LCS23] Nuo Lei, Juan Cheng, and Chi-Wang Shu. A high order positivity-preserving polynomial projection remapping method. *Journal of Computational Physics*, 474(??): ??, February 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122008890.

Lei:2024:HOC

[LCS24] Nuo Lei, Juan Cheng, and Chi-Wang Shu. High order conservative Lagrangian schemes for two-dimensional radiation hydrodynamics equations in the equilibrium-diffusion limit. *Journal of Computational Physics*, 503(??):??, April 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124000895.

Li:2021:BPH

[LCSZ21] Maojun Li, Yongping Cheng, Jie Shen, and Xiangxiong Zhang. A bound-preserving high order scheme for variable density incompressible Navier–Stokes equations. *Journal of Computational Physics*, 425(??):Article 109906, January 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912030680X.

Lin:2023:PPS

[LCT23] Yimin Lin, Jesse Chan, and Ignacio Tomas. A positivity preserving strategy for entropy stable discontinuous Galerkin discretizations of the compressible Euler and Navier–Stokes equations. *Journal of Computational Physics*, 475(??):??, February 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122009135.

Liu:2023:SON

[LCWH23] Wei Liu, Yanping Chen, Zhifeng Wang, and Jian Huang. Second-order numerical method for coupling of slightly compressible Brinkman flow with advection-diffusion system in fractured media. *Journal of Computational Physics*, 486(??):??, August 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123002152.

Li:2020:WER

[LCWJ20] Yipeng Li, Qiao Chen, Xuebin Wang, and Xiangmin Jiao. WLS-ENO remap: Superconvergent and non-oscillatory weighted least squares data transfer on surfaces. *Journal of Computational Physics*, 417(??):Article 109578, September 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120303521.

Lespagnol:2020:HOA

[LD20a] Fabien Lespagnol and Gautier Dakin. High order accurate schemes for Euler and Navier–Stokes equations on staggered Cartesian grids. *Journal of Computational Physics*, 410(??):Article 109314, June 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120300887.

Liu:2020:SOL

[LD20b] Fujun Liu and Haitao Dong. Second-order large time step wave adding scheme for hyperbolic conservation laws. *Journal of Computational Physics*, 408(??):Article 109279, May 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912030053X.

Luders:2022:PCA

[LD22] Stefan Lüders and Klaus Dolag. PSI: Constructing ad-hoc simplices to interpolate high-dimensional unstructured data. *Journal of Computational Physics*, 467(??):??, October 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122005381.

Liu:2023:EFF

[LDC23] Qianqian Liu, Chenghua Duan, and Wenbin Chen. EnVarA-FEM for the flux-limited porous medium equation. *Journal of Computational Physics*, 493(??):??, November 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123005272.

Li:2021:ESS

[LDLW21] Xiang Li, Qiang Du, Li Luo, and Xiao-Ping Wang. An energy-stable scheme for a 2D simple fluid-particle interaction problem. *Journal of Computational Physics*, 424 (??):Article 109850, January 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120306240.

Li:2021:ASN

[LDM+21] Fei Li, Viktor K. Decyk, Kyle G. Miller, Adam Tableman, Frank S. Tsung, Marija Vranic, Ricardo A. Fonseca, and Warren B. Mori. Accurately simulating nine-dimensional phase space of relativistic particles in strong fields. *Journal of Computational Physics*, 438(??):Article 110367, August 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912100262X.

Liu:2024:MLA

[LDS24] Chang Liu, Bao Du, and Peng Song. A machine-learning augmented mixed method for simulating α particle transport in inertial confinement fusion. *Journal of Computational Physics*, 515(??):??, October 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912400531X.

Li:2024:LAI

[LDZ24] Zhuoyuan Li, Bin Dong, and Pingwen Zhang. Latent assimilation with implicit neural representations for unknown dynamics. *Journal of Computational Physics*, 506(??):??, June 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912400202X.

LeRoux:2024:SCQ

[Le 24] Daniel Y. Le Roux. A super-convergent quasi-discontinuous Galerkin method for approximating inertia-gravity and Rossby waves in geophysical flows. *Journal of Computational Physics*, 513(??):??, September 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124004327.

Le:2021:QFP

[Le21a] Hai P. Le. Quantum Fokker–Planck modeling of degenerate electrons. *Journal of Computational Physics*, 434(??):Article 110230, June 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912100125X.

Li:2021:SFH

[LE21b] Hang Li and Kivanc Ekici. Supplemental-frequency harmonic balance: a new approach for modeling aperiodic aerodynamic response. *Journal of Computational Physics*, 436(??):Article 110278, July 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912100173X.

Lee:2021:EBQ

[Lee21] David Lee. An energetically balanced, quasi-Newton integrator for non-hydrostatic vertical atmospheric dynamics. *Journal of Computational Physics*, 429(??):Article 109988, March 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120307622.

Lopez:2021:NIE

[LEH+21] Joaquín López, Adolfo Esteban, Julio Hernández, Pablo Gómez, Rosendo Zamora, Claudio Zanzi, and Félix Faura. A new isosurface extraction method on arbitrary grids. *Journal of Computational Physics*, 444(??):Article 110579, November 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121004745.

Lemoine:2020:AGM

[Lem20] Antoine Lemoine. Analytic gradient for the moment-of-fluid method in axisymmetric and on general polyhedrons in any dimension. *Journal of Computational Physics*, 422 (??):Article 109741, December 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120305155.

Lepage:2021:AMI

[Lep21] G. Peter Lepage. Adaptive multidimensional integration: Vegas enhanced. *Journal of Computational Physics*, 439 (??):Article 110386, August 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121002813.

Levy:2022:POT

[Lév22] Bruno Lévy. Partial optimal transport for a constant-volume Lagrangian mesh with free boundaries. *Journal of Computational Physics*, 451(??):Article 110838, February 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121007336.

Spina:2024:HDG

[LF24a] Andrea La Spina and Jacob Fish. A hybridizable discontinuous Galerkin formulation for the Euler–Maxwell plasma model. *Journal of Computational Physics*, 496(??):??, January 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123006307.

Li:2024:FTT

[LF24b] Qichao Li and Lin Fu. A family of TENOA–THINC–MOOD schemes based on diffuse-interface method for compressible multiphase flows. *Journal of Computational Physics*, 519(??):??, December 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999124006235`.

Liang:2024:NTN

[LF24c] Tian Liang and Lin Fu. A new type of non-polynomial based TENO scheme for hyperbolic conservation laws. *Journal of Computational Physics*, 497(??):??, January 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999123007131`.

Liang:2024:NFD

[LF24d] Tian Liang and Lin Fu. A novel finite-difference converged ENO scheme for steady-state simulations of Euler equations. *Journal of Computational Physics*, 519(??):??, December 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S002199912400634X`. See [TZSQ25].

Li:2021:LDS

[LFA21] Yue Li, Lin Fu, and Nikolaus A. Adams. A low-dissipation shock-capturing framework with flexible nonlinear dissipation control. *Journal of Computational Physics*, 428(??):Article 109960, March 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999120307348`.

Long:2022:VVI

[LFL+22] Sifan Long, Xiaokang Fan, Chao Li, Yi Liu, Sijiang Fan, Xiao-Wei Guo, and Canqun Yang. VecDualSPHysics: a vectorized implementation of Smoothed Particle Hydrodynamics method for simulating fluid flows on multi-core processors. *Journal of Computational Physics*, 463(??):??, August 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999122002960`.

Laurent:2021:DCF

[LFP+21] Karine Laurent, Éric Flauraud, Christophe Preux, Quang Huy Tran, and Christophe Berthon. Design of coupled finite volume schemes minimizing the grid orientation effect in reservoir simulation. *Journal of Computational Physics*, 425(??):Article 109923, January 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120306975.

Liu:2020:ENA

[LFT+20] Chen Liu, Florian Frank, Christopher Thiele, Faruk O. Alpak, Steffen Berg, Walter Chapman, and Beatrice Riviere. An efficient numerical algorithm for solving viscosity contrast Cahn–Hilliard–Navier–Stokes system in porous media. *Journal of Computational Physics*, 400(??):Article 108948, January 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119306539.

Liu:2023:IHG

[LFW23] Mengqing Liu, Xueshang Feng, and Xinyi Wang. Implementation of the HLL-GRP solver for multidimensional ideal MHD simulations based on finite volume method. *Journal of Computational Physics*, 473(??):??, January 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122007501.

Li:2021:SMM

[LFY21] Haoya Li, Yuwei Fan, and Lexing Ying. A simple multiscale method for mean field games. *Journal of Computational Physics*, 439(??):Article 110385, August 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121002801.

Liu:2021:HOC

[LFZ21] Yujie Liu, Yue Feng, and Ran Zhang. A high order conservative flux optimization finite element method for steady convection-diffusion equations. *Journal of Computational Physics*, 425(??):Article 109895, January 15, 2021. CODEN

JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120306690.

Lejay:2020:FBP

[LG20] Antoine Lejay and Hernán Mardones González. A forward-backward probabilistic algorithm for the incompressible Navier–Stokes equations. *Journal of Computational Physics*, 420(??):Article 109689, November 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120304630.

Li:2021:SHO

[LG21] Peng Li and Zhen Gao. Simple high order well-balanced finite difference WENO schemes for the Euler equations under gravitational fields. *Journal of Computational Physics*, 437(??):Article 110341, July 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121002369.

Lee:2022:LEC

[LG22] Jae H. Lee and Boyce E. Griffith. On the Lagrangian–Eulerian coupling in the immersed finite element/difference method. *Journal of Computational Physics*, 457(??):??, May 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122001048.

Leathers:2024:IBD

[LG24] Brittany J. Leathers and Robert D. Guy. Immersed boundary double layer method: an introduction of methodology on the Helmholtz equation. *Journal of Computational Physics*, 506(??):??, June 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124001712.

Li:2023:INA

[LGL23a] Tongtong Li, Anne Gelb, and Yoonsang Lee. Improving numerical accuracy for the viscous-plastic formulation of sea ice. *Journal of Computational Physics*, 487(??):??, August

15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123002796.

Lin:2023:EAN

[LGL23b] Jeffmin Lin, Gil Goldshlager, and Lin Lin. Explicitly antisymmetrized neural network layers for variational Monte Carlo simulation. *Journal of Computational Physics*, 474(??):??, February 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122008282.

Li:2024:SID

[LGL24] Tongtong Li, Anne Gelb, and Yoonsang Lee. A structurally informed data assimilation approach for nonlinear partial differential equations. *Journal of Computational Physics*, 519(??):??, December 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124006442.

Li:2022:DMD

[LGMV22] Binghua Li, Jesús Garicano-Mena, and Eusebio Valero. A dynamic mode decomposition technique for the analysis of non-uniformly sampled flow data. *Journal of Computational Physics*, 468(??):??, November 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122005575.

Lambrianides:2020:NSA

[LGV20] Panos Lambrianides, Qi Gong, and Daniele Venturi. A new scalable algorithm for computational optimal control under uncertainty. *Journal of Computational Physics*, 420 (??):Article 109710, November 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120304848.

Lecrivain:2020:ELF

[LGY+20] Gregory Lecrivain, Taisa Beatriz Pacheco Grein, Ryoichi Yamamoto, Uwe Hampel, and Takashi Taniguchi. Eulerian/Lagrangian formulation for the elasto-capillary deformation of a flexible fibre. *Journal of Computational Physics*, 409(??):Article 109324, May 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912030098X.

Liu:2024:OMS

[LGYK24] Lulu Liu, Weiguo Gao, Han Yu, and David E. Keyes. Overlapping multiplicative Schwarz preconditioning for linear and nonlinear systems. *Journal of Computational Physics*, 496(??):??, January 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123006435.

Lee:2021:RMP

[LGZ21] Arum Lee, Weihua Geng, and Shan Zhao. Regularization methods for the Poisson–Boltzmann equation: Comparison and accuracy recovery. *Journal of Computational Physics*, 426(??):Article 109958, February 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120307324.

Li:2024:SDD

[LGZC24] Rui Li, Yali Gao, Chen-Song Zhang, and Zhangxin Chen. A Stokes–Darcy–Darcy model and its discontinuous Galerkin method on polytopic grids. *Journal of Computational Physics*, 501(??):??, March 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124000299.

Liao:2020:HOA

[LH20] Fei Liao and Guowei He. High-order adapter schemes for cell-centered finite difference method. *Journal of Computational Physics*, 403(??):Article 109090, February 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119307958.

Li:2021:WBE

[LH21] Guanglian Li and Jiuhua Hu. Wavelet-based edge multiscale parareal algorithm for parabolic equations with heterogeneous coefficients and rough initial data. *Journal of Computational Physics*, 444(??):Article 110572, November 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121004678.

List:2024:PTI

[LH24] Florian List and Oliver Hahn. Perturbation-theory informed integrators for cosmological simulations. *Journal of Computational Physics*, 513(??):??, September 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124004509.

Linka:2021:CAN

[LHA+21] Kevin Linka, Markus Hillgärtner, Kian P. Abdolazizi, Roland C. Aydin, Mikhail Itskov, and Christian J. Cyron. Constitutive artificial neural networks: a fast and general approach to predictive data-driven constitutive modeling by deep learning. *Journal of Computational Physics*, 429(??):Article 110010, March 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120307841.

Lee:2022:SCH

[LHC22] Junghaeng Lee, Wook Ryol Hwang, and Kwang Soo Cho. Stokes–Cahn–Hilliard formulation in sliding bi-periodic frames for the simulation of two-phase flows. *Journal of Computational Physics*, 471(??):??, December 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122006775.

Lee:2024:MWM

[LHC+24] Chak Shing Lee, François P. Hamon, Nicola Castelletto, Panayot S. Vassilevski, and Joshua A. White. Multilevel well modeling in aggregation-based nonlinear multigrid for multiphase flow in porous media. *Journal of Computational Physics*, 513(??):??, September 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124004121.

Lee:2024:CDC

[LHCK24] Hyeonbeen Lee, Seongji Han, Hee-Sun Choi, and Jin-Gyun Kim. cNN-DP: Composite neural network with differential propagation for impulsive nonlinear dynamics. *Journal of Computational Physics*, 496(??):??, January 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123006733.

Laakmann:2023:SPH

[LHF23] Fabian Laakmann, Kaibo Hu, and Patrick E. Farrell. Structure-preserving and helicity-conserving finite element approximations and preconditioning for the Hall MHD equations. *Journal of Computational Physics*, 492(??):??, November 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123005053.

Lyras:2020:CLS

[LHFH20] Konstantinos G. Lyras, Bruce Hanson, Michael Fairweather, and Peter J. Heggs. A coupled level set and volume of fluid method with a re-initialisation step suitable for unstructured meshes. *Journal of Computational Physics*, 407(??):Article 109224, April 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119309295.

Lu:2022:NSV

[LHL+22] Min-Jhe Lu, Wenrui Hao, Chun Liu, John Lowengrub, and Shuwang Li. Nonlinear simulation of vascular tumor growth with chemotaxis and the control of necrosis. *Journal of Computational Physics*, 459(??):??, June 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122002157.

Lin:2020:DPS

[LHM20] Te-Sheng Lin, Wei-Fan Hu, and Chaouqi Misbah. A direct Poisson solver in spherical geometry with an application to diffusiophoretic problems. *Journal of Computational Physics*, 409(??):Article 109362, May 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999120301364`.

Li:2024:CVB

[LHPS24] Yingzhe Li, Florian Holderied, Stefan Possanner, and Eric Sonnendrücker. Canonical variables based numerical schemes for hybrid plasma models with kinetic ions and massless electrons. *Journal of Computational Physics*, 505(??):??, May 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999124001657`.

Lin:2021:TFI

[LHT21] Tzu-Yuan Lin, Hsin-Yu Hsieh, and Hsieh-Chen Tsai. A target-fixed immersed-boundary formulation for rigid bodies interacting with fluid flow. *Journal of Computational Physics*, 429(??):Article 110003, March 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999120307774`.

Lv:2023:DRQ

[LHW+23] Jiaqi Lv, Qizhen Hong, Xiaoyong Wang, Zhiping Mao, and Quanhua Sun. DeepStSNet: Reconstructing the quantum state-resolved thermochemical nonequilibrium flowfield using deep neural operator learning with scarce data. *Journal of Computational Physics*, 491(??):??, October 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999123004394`.

Liu:2021:MRT

[LHWZ21] Xiaochuan Liu, Yong Huang, Cun-Hai Wang, and Keyong Zhu. A multiple-relaxation-time lattice Boltzmann model for radiative transfer equation. *Journal of Computational Physics*, 429(??):Article 110007, March 15, 2021. CODEN

JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120307816.

Liu:2024:MMN

[LHXF24] Lulu Liu, Shijie Huang, Xufeng Xiao, and Xinlong Feng. Mathematical modeling and numerical simulation of the N-component Cahn–Hilliard model on evolving surfaces. *Journal of Computational Physics*, 513(??):??, September 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124004388.

Li:2022:ICT

[LHXZ22] Yansong Li, Weixi Huang, Chunxiao Xu, and Lihao Zhao. An implicit conformation tensor decoupling approach for viscoelastic flow simulation within the monolithic projection framework. *Journal of Computational Physics*, 468(??):??, November 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122005599.

Li:2020:SSF

[Li20] Longfei Li. A split-step finite-element method for incompressible Navier–Stokes equations with high-order accuracy up-to the boundary. *Journal of Computational Physics*, 408(??):Article 109274, May 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120300486.

Li:2021:CMM

[Li21] Jun Li. Coupling the molecular motion and collision processes in numerical simulations. *Journal of Computational Physics*, 425(??):Article 109878, January 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120306525.

Li:2022:NSL

[Li22] Lu Li. A new symmetric linearly implicit exponential integrator preserving polynomial invariants or Lyapunov functions for conservative or dissipative systems. *Journal of Computational Physics*, 449(??):Article 110800, January 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121006951.

Li:2023:ECP

[Li23] Yingzhe Li. Energy conserving particle-in-cell methods for relativistic Vlasov–Maxwell equations of laser-plasma interaction. *Journal of Computational Physics*, 473(??):??, January 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122007963.

Ly:2024:RIM

[LI24] Nguyen Ly and Matthias Ihme. A regularized-interface method as a unified formulation for simulations of high-pressure multiphase flows. *Journal of Computational Physics*, 518(??):??, December 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124005588.

Lin:2021:ABE

[Lin21] Junshan Lin. An adaptive boundary element method for the transmission problem with hyperbolic metamaterials. *Journal of Computational Physics*, 444(??): Article 110573, November 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912100468X.

Liu:2020:SSP

[Liu20a] Xin Liu. A steady-state-preserving scheme for shallow water flows in channels. *Journal of Computational Physics*, 423(??):Article 109803, December 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120305775.

Liu:2020:MCN

[Liu20b] Yang Liu. Maximizing the CFL number of stable time-space domain explicit finite-difference modeling. *Journal of*

Computational Physics, 416(??):Article 109501, September 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120302758.

Liu:2021:NWB

[Liu21] Xin Liu. A new well-balanced finite-volume scheme on unstructured triangular grids for two-dimensional two-layer shallow water flows with wet-dry fronts. *Journal of Computational Physics*, 438(??):Article 110380, August 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121002758.

Liu:2023:DNS

[Liu23] Ju Liu. On the design of non-singular, energy-momentum consistent integrators for nonlinear dynamics using energy splitting and perturbation techniques. *Journal of Computational Physics*, 487(??):??, August 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123002723.

Laso:2020:HTP

[LJ20] Manuel Laso and Nieves Jimeno. Homogenization of transport properties of composites based on stochastic dynamics. *Journal of Computational Physics*, 413(??):Article 109460, July 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120302345.

Li:2021:DLN

[LJ21] Mengnan Li and Lijian Jiang. Deep learning nonlinear multiscale dynamic problems using Koopman operator. *Journal of Computational Physics*, 446(??):Article 110660, December 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121005556.

Leng:2022:TTB

[LJ22] Wei Leng and Lili Ju. Trace transfer-based diagonal sweeping domain decomposition method for the Helmholtz equation: Algorithms and convergence analysis. *Journal of Com-*

putational Physics, 455(??):??, April 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122000420.

Li:2023:DDR

[LJ23] Mengnan Li and Lijian Jiang. Data-driven reduced-order modeling for nonautonomous dynamical systems in multiscale media. *Journal of Computational Physics*, 474(??): ??, February 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122008622.

Lee:2023:OPI

[LJH23] Jae Yong Lee, Juhi Jang, and Hyung Ju Hwang. opPINN: Physics-informed neural network with operator learning to approximate solutions to the Fokker–Planck–Landau equation. *Journal of Computational Physics*, 480(??):??, May 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123001262.

Liu:2024:CBS

[LJK+24] Mingyang Liu, Chen Jiang, Boo Cheong Khoo, Huifen Zhu, and Guangjun Gao. A cell-based smoothed finite element model for the analysis of turbulent flow using realizable k-ϵ model and mixed meshes. *Journal of Computational Physics*, 501(??):??, March 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124000329.

Liu:2023:HOM

[LJS+23] Shihao Liu, Yan Jiang, Chi-Wang Shu, Mengping Zhang, and Shuhai Zhang. A high order moving boundary treatment for convection–diffusion equations. *Journal of Computational Physics*, 473(??):??, January 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122008154.

Lan:2022:HOM

[LJW+22] Rihui Lan, Lili Ju, Zhu Wang, Max Gunzburger, and Philip Jones. High-order multirate explicit time-stepping schemes for the baroclinic–barotropic split dynamics in primitive equations. *Journal of Computational Physics*, 457(??):??, May 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999122001127`.

Lin:2021:ATF

[LJZK21] Zhiwei Lin, Shaoen Jiang, Lu Zhang, and Longyu Kuang. An analysis of three formulations of the tensor artificial viscosity in two-dimensional Cartesian geometry. *Journal of Computational Physics*, 432(??):Article 110154, May 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999121000462`.

Latimer:2021:SAS

[LKEM21] C. Latimer, J. Kópházi, M. D. Eaton, and R. G. McClarren. Spatial adaptivity of the SAAF and Weighted Least Squares (WLS) forms of the neutron transport equation using constraint based, locally refined, isogeometric analysis (IGA) with dual weighted residual (DWR) error measures. *Journal of Computational Physics*, 426(??):Article 109941, February 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999120307154`.

Lu:2020:TSD

[LKG+20] Yingchao Lu, Patrick Kilian, Fan Guo, Hui Li, and Edison Liang. Time-step dependent force interpolation scheme for suppressing numerical Cherenkov instability in relativistic particle-in-cell simulations. *Journal of Computational Physics*, 413(??):Article 109388, July 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999120301625`.

Lyu:2022:SMB

[LKJL22] Xipeng Lyu, Arno Kruisbrink, and Richard Jefferson-Loveday. A shift model based on particle collisions — preserving kinetic energy and potential energy in a constant force field — to avoid particle clustering in SPH. *Journal of Computational Physics*, 469(??):??, November 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122005927.

Lee:2022:SCA

[LKM22] Byungjoon Lee, Jeongho Kim, and Chohong Min. Superconvergence analysis on two symmetric Poisson solvers in octree grids. *Journal of Computational Physics*, 464(??):??, September 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122003862.

Li:2022:EIW

[LKvM+22] Xun Li, Erik Koene, Dirk-Jan van Manen, Johan Robertsson, and Andrew Curtis. Elastic immersive wavefield modelling. *Journal of Computational Physics*, 451(??):Article 110826, February 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912100721X.

Lallemand:2020:LBE

[LL20] Pierre Lallemand and Li-Shi Luo. Lattice Boltzmann equation with overset method for moving objects in two-dimensional flows. *Journal of Computational Physics*, 407(??):Article 109223, April 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119309283.

Lee:2021:SST

[LL21a] Youngjun Lee and Dongwook Lee. A single-step third-order temporal discretization with Jacobian-free and Hessian-free formulations for finite difference methods. *Journal of Computational Physics*, 427(??):Article 110063, February 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120308378.

Lei:2021:SPG

[LL21b] Xin Lei and Jiequan Li. A staggered-projection Godunov-type method for the Baer–Nunziato two-phase model. *Journal of Computational Physics*, 437(??):Article 110312, July 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121002072.

Lin:2021:DDM

[LL21c] Kevin K. Lin and Fei Lu. Data-driven model reduction, Wiener projections, and the Koopman–Mori–Zwanzig formalism. *Journal of Computational Physics*, 424(??): Article 109864, January 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120306380.

Liu:2021:HEA

[LL21d] Zhengguang Liu and Xiaoli Li. A highly efficient and accurate exponential semi-implicit scalar auxiliary variable (ESI-SAV) approach for dissipative system. *Journal of Computational Physics*, 447(??):Article 110703, December 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121005982.

Li:2022:CFE

[LL22] Xujing Li and Lingxiao Li. A conservative finite element solver for the induction equation of resistive MHD: Vector potential method and constraint preconditioning. *Journal of Computational Physics*, 466(??):??, October 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122004788.

Lee:2023:GPB

[LL23a] Hwi Lee and Yingjie Liu. A ghost-point based second order accurate finite difference method on uniform orthogonal grids for electromagnetic scattering around curved perfect electric conductors with corners. *Journal of Computational Physics*, 490(??):??, October 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

URL http://www.sciencedirect.com/science/article/pii/S0021999123004096.

Luo:2023:FPI

[LL23b] Songting Luo and Qing Huo Liu. A fixed-point iteration method for high frequency vector wave equations. *Journal of Computational Physics*, 490(??):??, October 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123004011.

Liu:2024:DII

[LL24a] Hongyu Liu and Keji Liu. Direct imaging of inhomogeneities in a 3D shallow ocean waveguide with an icecap. *Journal of Computational Physics*, 498(??):??, February 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123007891.

Liu:2024:DOQ

[LL24b] Jin-Peng Liu and Lin Lin. Dense outputs from quantum simulations. *Journal of Computational Physics*, 514(??):??, October 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124004625.

Lu:2024:CSD

[LL24c] Jiaqing Lu and Jin-Fa Lee. A compression scheme for domain decomposition method in solving electromagnetic problems. *Journal of Computational Physics*, 503(??):??, April 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124000731.

Lv:2024:FBM

[LL24d] Minrui Lv and Benzhuo Lu. A flux-based moving mesh method applied to solving the Poisson–Nernst–Planck equations. *Journal of Computational Physics*, 513(??):??, September 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124004182.

Lyu:2024:NDG

[LL24e] Maohui Lyu and Fengyan Li. Nodal discontinuous Galerkin methods for Maxwell's equations in Lorentz-Kerr-Raman medium without nonlinear algebraic solver. *Journal of Computational Physics*, 515(??):??, October 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912400528X.

Leiter:2023:TSB

[LLB+23] Kenneth W. Leiter, James P. Larentzos, Brian C. Barnes, John K. Brennan, Richard Becker, and Jaroslaw Knap. Temporal scale-bridging of chemistry in a multiscale model: Application to reactivity of an energetic material. *Journal of Computational Physics*, 472(??):??, January 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122007458.

Liu:2024:NTS

[LLC+24] Shihao Liu, Tingting Li, Ziqiang Cheng, Yan Jiang, Chi-Wang Shu, and Mengping Zhang. A new type of simplified inverse Lax–Wendroff boundary treatment I: Hyperbolic conservation laws. *Journal of Computational Physics*, 514(??):??, October 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124005072.

Lan:2023:OSB

[LLCJ23] Rihui Lan, Jingwei Li, Yongyong Cai, and Lili Ju. Operator splitting based structure-preserving numerical schemes for the mass-conserving convective Allen–Cahn equation. *Journal of Computational Physics*, 472(??):??, January 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122007586.

Luo:2020:FIH

[LLCK20] Li Luo, Lulu Liu, Xiao-Chuan Cai, and David E. Keyes. Fully implicit hybrid two-level domain decomposition algorithms for two-phase flows in porous media on 3D unstructured grids. *Journal of Computational Physics*, 409(??):Article 109312, May 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120300863.

Li:2020:FSF

[LLD20] Hai-Long Li, Hao-Ran Liu, and Hang Ding. A fully 3D simulation of fluid-structure interaction with dynamic wetting and contact angle hysteresis. *Journal of Computational Physics*, 420(??):Article 109709, November 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120304836.

Lu:2022:ARL

[LLD+22] Jinhua Lu, Haiyan Lei, Chuanshan Dai, Liming Yang, and Chang Shu. Analyses and reconstruction of the lattice Boltzmann flux solver. *Journal of Computational Physics*, 453(??):Article 110923, March 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121008184.

Leute:2022:ERA

[LLF+22] Richard J. Leute, Martin Ladecký, Ali Falsafi, Indre Jödicke, Ivana Pultarová, Jan Zeman, Till Junge, and Lars Pastewka. Elimination of ringing artifacts by finite-element projection in FFT-based homogenization. *Journal of Computational Physics*, 453(??):Article 110931, March 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121008263.

Li:2023:CPM

[LLF23] Yudong Li, Yan Li, and Zhiqiang Feng. A coupled particle model with particle shifting technology for simulating transient viscoelastic fluid flow with free surface. *Journal of Computational Physics*, 488(??):??, September 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912300308X.

Lee:2024:GSA

[LLK24] Dongjin Lee, Elle Lavichant, and Boris Kramer. Global sensitivity analysis with limited data via sparsity-promoting D-MORPH regression: Application to char combustion. *Journal of Computational Physics*, 511(??):??, August 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124003656.

Lallemand:2021:LBM

[LLKY21] Pierre Lallemand, Li-Shi Luo, Manfred Krafczyk, and Wen-An Yong. The lattice Boltzmann method for nearly incompressible flows. *Journal of Computational Physics*, 431(??):Article 109713, April 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120304873.

Li:2022:RDG

[LLL22] Lingquan Li, Xiaodong Liu, and Hong Luo. A reconstructed discontinuous Galerkin method based on variational formulation for compressible flows. *Journal of Computational Physics*, 466(??):??, October 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122004685.

Li:2023:SMT

[LLLL23] Kun Li, Yixin Li, Liang Li, and Stéphane Lanteri. Surrogate modeling of time-domain electromagnetic wave propagation via dynamic mode decomposition and radial basis function. *Journal of Computational Physics*, 491(??):??, October 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123004497.

Lee:2021:GUO

[LLLO21] Wonjun Lee, Rongjie Lai, Wuchen Li, and Stanley Osher. Generalized unnormalized optimal transport and its fast algorithms. *Journal of Computational Physics*, 436(??):Article 110041, July 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

URL http://www.sciencedirect.com/science/article/pii/S0021999120308159.

Li:2020:VTN

[LLM20] Yingzhou Li, Jianfeng Lu, and Anqi Mao. Variational training of neural network approximations of solution maps for physical models. *Journal of Computational Physics*, 409(??):Article 109338, May 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120301121.

Lundquist:2022:MDS

[LLN22] Tomas Lundquist, Fredrik Laurén, and Jan Nordström. A multi-domain summation-by-parts formulation for complex geometries. *Journal of Computational Physics*, 463(??):??, August 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912200331X.

Li:2021:RDG

[LLNL21] Lingquan Li, Jialin Lou, Hiroaki Nishikawa, and Hong Luo. Reconstructed discontinuous Galerkin methods for compressible flows based on a new hyperbolic Navier–Stokes system. *Journal of Computational Physics*, 427 (??):Article 110058, February 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120308329.

Lin:2021:PTT

[lLNZ21] Xue lei Lin, Michael K. Ng, and Yajing Zhi. A parallel-in-time two-sided preconditioning for all-at-once system from a non-local evolutionary equation with weakly singular kernel. *Journal of Computational Physics*, 434(??):Article 110221, June 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121001169.

Li:2022:CMF

[LLO22a] Wuchen Li, Wonjun Lee, and Stanley Osher. Computational mean-field information dynamics associated with reaction–diffusion equations. *Journal of Computational*

Physics, 466(??):??, October 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122004715.

Li:2022:CCL

[LLO22b] Wuchen Li, Siting Liu, and Stanley Osher. Controlling conservation laws II: Compressible Navier–Stokes equations. *Journal of Computational Physics*, 463(??):??, August 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122003266.

Li:2023:CCL

[LLO23] Wuchen Li, Siting Liu, and Stanley Osher. Controlling conservation laws I: Entropy-entropy flux. *Journal of Computational Physics*, 480(??):??, May 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123001146.

Liu:2024:FOC

[LLOL24] Shu Liu, Siting Liu, Stanley Osher, and Wuchen Li. A first-order computational algorithm for reaction-diffusion type equations via primal-dual hybrid gradient method. *Journal of Computational Physics*, 500(??):??, March 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124000020.

Li:2022:VCF

[LLPL22] Lingquan Li, Rainald Löhner, Aditya K. Pandare, and Hong Luo. A vertex-centered finite volume method with interface sharpening technique for compressible two-phase flows. *Journal of Computational Physics*, 460(??):??, July 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912200256X.

Li:2023:OSH

[LLQ+23] Shiyi Li, Dongmi Luo, Jianxian Qiu, Song Jiang, and Yibing Chen. A one-stage high-order gas-kinetic scheme for multi-component flows with interface-sharpening technique. *Jour-*

nal of Computational Physics, 490(??):??, October 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999123004138`.

Luo:2024:CSH

[LLQ+24] Dongmi Luo, Shiyi Li, Jianxian Qiu, Jun Zhu, and Yibing Chen. A compact simple HWENO scheme with ADER time discretization for hyperbolic conservation laws I: structured meshes. *Journal of Computational Physics*, 504(??):??, May 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999124001359`.

Li:2021:CEH

[LLQC21] Shiyi Li, Dongmi Luo, Jianxian Qiu, and Yibing Chen. A compact and efficient high-order gas-kinetic scheme. *Journal of Computational Physics*, 447(??):Article 110661, December 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999121005568`.

Lin:2023:CHD

[LLR23] Bo Lin, Qianxiao Li, and Weiqing Ren. Computing high-dimensional invariant distributions from noisy data. *Journal of Computational Physics*, 474(??):??, February 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999122008464`.

Liu:2020:OSI

[LLS20] Liqi Liu, Xiao Li, and Zhijun Shen. Overcoming shock instability of the HLLE-type Riemann solvers. *Journal of Computational Physics*, 418(??):Article 109628, October 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999120304022`.

Li:2024:UNS

[LLS24a] Jialei Li, Xiaodong Liu, and Qingxiang Shi. Uniqueness and numerical scheme for spherical shell-structured sources from the far field patterns with at most two frequencies. *Journal of Computational Physics*, 498(??):??, February 1, 2024.

CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123007556.

Li:2024:UGK

[LLS24b] Weiming Li, Chang Liu, and Peng Song. Unified gas-kinetic particle method for frequency-dependent radiation transport. *Journal of Computational Physics*, 498(??):??, February 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123007581.

Lu:2020:MAM

[LLSD20] Jinhua Lu, Haiyan Lei, Chang Shu, and Chuanshan Dai. The more actual macroscopic equations recovered from lattice Boltzmann equation and their applications. *Journal of Computational Physics*, 415(??):Article 109546, August 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912030320X.

Lan:2023:DNB

[LLSX23] Yuan Lan, Zhen Li, Jie Sun, and Yang Xiang. DOS-net as a non-black-box PDE solver: When deep learning meets operator splitting. *Journal of Computational Physics*, 491(??):??, October 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123004382.

Logashenko:2024:UQH

[LLT+24] Dmitry Logashenko, Alexander Litvinenko, Raul Tempone, Ekaterina Vasilyeva, and Gabriel Wittum. Uncertainty quantification in the Henry problem using the multilevel Monte Carlo method. *Journal of Computational Physics*, 503(??):??, April 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124001037.

Li:2023:NNT

[LLTY23] Xingjie Li, Fei Lu, Molei Tao, and Felix X.-F. Ye. NySALT: Nyström-type inference-based schemes adaptive to large time-stepping. *Journal of Computational Physics*, 477(??):??, March 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123000475.

Liao:2020:SON

[lLTZ20] Hong lin Liao, Tao Tang, and Tao Zhou. A second-order and nonuniform time-stepping maximum-principle preserving scheme for time-fractional Allen–Cahn equations. *Journal of Computational Physics*, 414(??):Article 109473, August 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120302473.

Li:2020:SLM

[LLW20a] Hanyu Li, Wing Tat Leung, and Mary F. Wheeler. Sequential local mesh refinement solver with separate temporal and spatial adaptivity for non-linear two-phase flow problems. *Journal of Computational Physics*, 403(??):Article 109074, February 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199911930779X.

Li:2020:FIR

[LLW20b] Wuchen Li, Jianfeng Lu, and Li Wang. Fisher information regularization schemes for Wasserstein gradient flows. *Journal of Computational Physics*, 416(??): Article 109449, September 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120302230.

Liao:2024:OED

[lLWW24] Hong lin Liao, Xuping Wang, and Cao Wen. Original energy dissipation preserving corrections of integrating factor Runge–Kutta methods for gradient flow problems. *Journal of Computational Physics*, 519(??):??, December 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124007046.

Li:2022:HSM

[LLWX22] Ruo Li, Yixiao Lu, Yanli Wang, and Haoxuan Xu. Hermite spectral method for multi-species Boltzmann equation. *Journal of Computational Physics*, 471(??):??, December 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122007136.

Liu:2023:ATL

[LLY+23] Yang Liu, Wen Liu, Xunshi Yan, Shuaiqi Guo, and Chen an Zhang. Adaptive transfer learning for PINN. *Journal of Computational Physics*, 490(??):??, October 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123003868.

Li:2024:OCF

[LLY24] Buyang Li, Yonglin Li, and Zongze Yang. An optimized CIP-FEM to reduce the pollution errors for the Helmholtz equation on a general unstructured mesh. *Journal of Computational Physics*, 511(??):??, August 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124003693.

Li:2020:UGK

[LLZ+20a] Weiming Li, Chang Liu, Yajun Zhu, Jiwei Zhang, and Kun Xu. Unified gas-kinetic wave-particle methods III: Multiscale photon transport. *Journal of Computational Physics*, 408(??):Article 109280, May 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120300541.

Lu:2020:CLP

[LLZ20b] Jianfeng Lu, Yulong Lu, and Zhennan Zhou. Continuum limit and preconditioned Langevin sampling of the path integral molecular dynamics. *Journal of Computational Physics*, 423(??):Article 109788, December 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120305623.

Leung:2022:NPN

[LLZ22] Wing Tat Leung, Guang Lin, and Zecheng Zhang. NH-PINN: Neural homogenization-based physics-informed neural network for multiscale problems. *Journal of Computational Physics*, 470(??):??, December 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122006015.

Li:2023:LIH

[LLZ23a] Dongfang Li, Xiaoxi Li, and Zhimin Zhang. Linearly implicit and high-order energy-preserving relaxation schemes for highly oscillatory Hamiltonian systems. *Journal of Computational Physics*, 477(??):??, March 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123000207.

Li:2023:ESF

[LLZ23b] Lingxiao Li, Maohui Lyu, and Weiying Zheng. An energy-stable finite element method for nonlinear Maxwell's equations. *Journal of Computational Physics*, 486(??):??, August 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123002309.

Luo:2023:GKS

[LLZ23c] Hongyang Luo, John G. Lyon, and Binzheng Zhang. Gas kinetic schemes for solving the magnetohydrodynamic equations with pressure anisotropy. *Journal of Computational Physics*, 490(??):??, October 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123004060.

Liu:2020:EMD

[LLZL20] Zicheng Liu, Changyou Li, Yu Zhong, and Dominique Lesselier. Electromagnetic modeling of damaged fiber-reinforced laminates. *Journal of Computational Physics*, 409(??):Article 109318, May 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120300929.

Lipnikov:2020:CHO

[LM20a] Konstantin Lipnikov and Nathaniel Morgan. Conservative high-order discontinuous Galerkin remap scheme on curvilinear polyhedral meshes. *Journal of Computational Physics*, 420(??):Article 109712, November 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120304861.

Liu:2020:PFE

[LM20b] Hailiang Liu and Wumaier Maimaitiyiming. Positive and free energy satisfying schemes for diffusion with interaction potentials. *Journal of Computational Physics*, 419 (??):Article 109483, October 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120302576.

Lundgren:2020:EFD

[LM20c] Lukas Lundgren and Ken Mattsson. An efficient finite difference method for the shallow water equations. *Journal of Computational Physics*, 422(??):Article 109784, December 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120305581.

Lamaakel:2021:GIS

[LM21a] Oumaima Lamaakel and Georgios Matheou. Galilean invariance of shallow cumulus convection large-eddy simulations. *Journal of Computational Physics*, 427(??): Article 110012, February 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120307865.

Lee:2021:OPS

[LM21b] Byungjoon Lee and Chohong Min. Optimal preconditioners on solving the Poisson equation with Neumann boundary conditions. *Journal of Computational Physics*, 433(??):Article 110189, May 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912100084X.

Lou:2021:VEF

[LM21c] Jijie Lou and Jim E. Morel. A variable Eddington factor method with different spatial discretizations for the radiative transfer equation and the hydrodynamics/radiation-moment equations. *Journal of Computational Physics*, 439(??):Article 110393, August 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121002886.

Lundow:2022:ECP

[LM22] P. H. Lundow and K. Markström. Efficient computation of permanents, with applications to boson sampling and random matrices. *Journal of Computational Physics*, 455(??):??, April 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122000523.

Li:2023:PLM

[LM23a] Kangan Li and Yashar Mehmani. A pore-level multiscale method for the elastic deformation of fractured porous media. *Journal of Computational Physics*, 483(??):??, June 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123001699.

Liu:2023:DMT

[LM23b] Hailiang Liu and Wumaier Maimaitiyiming. A dynamic mass transport method for Poisson–Nernst–Planck equations. *Journal of Computational Physics*, 473(??):??, January 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122007628.

Lodares:2022:CES

[LMFV22a] Diego Lodares, Juan Manzanero, Esteban Ferrer, and Eusebio Valero. Corrigendum to “An entropy-stable discontinuous Galerkin approximation of the Spalart-Allmaras turbulence model for the compressible Reynolds Averaged Navier–Stokes equations” [J. Comput. Phys. **455** (2022) 110998]. *Journal of Computational Physics*, 464(??):??, September 1, 2022. CODEN JCTPAH.

ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122004314. See [LMFV22b].

Lodares:2022:ESD

[LMFV22b] Diego Lodares, Juan Manzanero, Esteban Ferrer, and Eusebio Valero. An entropy-stable discontinuous Galerkin approximation of the Spalart–Allmaras turbulence model for the compressible Reynolds Averaged Navier–Stokes equations. *Journal of Computational Physics*, 455(??):??, April 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122000602. See corrigendum [LMFV22a].

Liu:2021:ITM

[LMG+21] Minyun Liu, Yugao Ma, Xiaoyu Guo, Shichang Liu, Guodong Liu, Shanfang Huang, and Kan Wang. An improved tracking method for particle transport Monte Carlo simulations. *Journal of Computational Physics*, 437(??):Article 110330, July 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121002254.

Lu:2021:DIF

[LMHL21] Z. X. Lu, G. Meng, M. Hoelzl, and Ph. Lauber. The development of an implicit full f method for electromagnetic particle simulations of Alfvén waves and energetic particle physics. *Journal of Computational Physics*, 440(??):Article 110384, September 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121002795.

Lou:2021:PIN

[LMK21] Qin Lou, Xuhui Meng, and George Em Karniadakis. Physics-informed neural networks for solving forward and inverse flow problems via the Boltzmann–BGK formulation. *Journal of Computational Physics*, 447(??):Article 110676, December 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121005714.

Lundquist:2020:EEM

[LMN20] Tomas Lundquist, Arnaud G. Malan, and Jan Nordström. Efficient and error minimized coupling procedures for unstructured and moving meshes. *Journal of Computational Physics*, 406(??):Article 109158, April 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119308630.

Lukacova-Medvidova:2024:IES

[LMPT24] Mária Lukácová-Medvid'ová, Ilya Peshkov, and Andrea Thomann. An implicit-explicit solver for a two-fluid single-temperature model. *Journal of Computational Physics*, 498(??):??, February 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912300791X.

Lye:2020:DLO

[LMR20] Kjetil O. Lye, Siddhartha Mishra, and Deep Ray. Deep learning observables in computational fluid dynamics. *Journal of Computational Physics*, 410(??):Article 109339, June 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120301133.

Lario:2022:NNL

[LMS+22] Andrea Lario, Romit Maulik, Oliver T. Schmidt, Gianluigi Rozza, and Gianmarco Mengaldo. Neural-network learning of SPOD latent dynamics. *Journal of Computational Physics*, 468(??):??, November 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912200537X.

Lederer:2023:HOP

[LMS23] Philip L. Lederer, Xaver Mooslechner, and Joachim Schöberl. High-order projection-based upwind method for implicit large eddy simulation. *Journal of Computational Physics*, 493(??):??, November 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123005879.

Lopez-Menchon:2022:PMC

[LMUHR22] Hector Lopez-Menchon, Eduard Ubeda, Alexander Heldring, and Juan M. Rius. A parallel Monte Carlo method for solving electromagnetic scattering in clusters of dielectric objects. *Journal of Computational Physics*, 463(??):??, August 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122002935.

Lin:2024:LTS

[LMW24] Bo Lin, Ying Ma, and Chushan Wang. A Lawson-time-splitting extended Fourier pseudospectral method for the Gross–Pitaevskii equation with time-dependent low regularity potential. *Journal of Computational Physics*, 512(??):??, September 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124003826.

Liu:2021:NST

[LMZ+21a] Wen-Bin Liu, Dong-Jun Ma, Ming-Yu Zhang, An-Min He, Nan-Sheng Liu, and Pei Wang. A new surface tension formulation in smoothed particle hydrodynamics for free-surface flows. *Journal of Computational Physics*, 439 (??):Article 110203, August 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912100098X.

Liu:2021:DNS

[LMZ21b] Xiaoxing Liu, Koji Morita, and Shuai Zhang. Direct numerical simulation of incompressible multiphase flow with vaporization using moving particle semi-implicit method. *Journal of Computational Physics*, 425(??):Article 109911, January 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120306859.

Lin:2023:BDE

[LMZ23] Guang Lin, Christian Moya, and Zecheng Zhang. B-DeepONet: an enhanced Bayesian DeepONet for solving noisy parametric PDEs using accelerated replica exchange

SGLD. *Journal of Computational Physics*, 473(??):??, January 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122007768.

Lauren:2021:SPI

[LN21a] Fredrik Laurén and Jan Nordström. Spectral properties of the incompressible Navier–Stokes equations. *Journal of Computational Physics*, 429(??):Article 110019, March 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120307932.

Lui:2021:SCS

[LN21b] S. H. Lui and Sarah Nataj. Spectral collocation in space and time for linear PDEs. *Journal of Computational Physics*, 424(??):Article 109843, January 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120306173.

Lauren:2022:ESW

[LN22] Fredrik Laurén and Jan Nordström. Energy stable wall modeling for the Navier–Stokes equations. *Journal of Computational Physics*, 457(??):??, May 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122001085.

Leitenmaier:2023:FEB

[LN23] Lena Leitenmaier and Murtazo Nazarov. A finite element based heterogeneous multiscale method for the Landau–Lifshitz equation. *Journal of Computational Physics*, 486(??):??, August 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123002073.

Lorin:2024:NDN

[LN24a] Emmanuel Lorin and Arian Novruzi. Non-diffusive neural network method for hyperbolic conservation laws. *Journal of Computational Physics*, 513(??):??, September 15, 2024.

CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124004108.

Lundgren:2024:FCS

[LN24b] Lukas Lundgren and Murtazo Nazarov. A fully conservative and shift-invariant formulation for Galerkin discretizations of incompressible variable density flow. *Journal of Computational Physics*, 510(??):??, August 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124003358.

Lundgren:2024:HOR

[LN24c] Lukas Lundgren and Murtazo Nazarov. A high-order residual-based viscosity finite element method for incompressible variable density flow. *Journal of Computational Physics*, 497(??):??, January 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123007039.

Liu:2021:EPF

[LNC+21] Hao-Ran Liu, Chong Shen Ng, Kai Leong Chong, Detlef Lohse, and Roberto Verzicco. An efficient phase-field method for turbulent multiphase flows. *Journal of Computational Physics*, 446(??):Article 110659, December 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121005544.

Linders:2020:PRK

[LNF20] Viktor Linders, Jan Nordström, and Steven H. Frankel. Properties of Runge–Kutta-summation-by-parts methods. *Journal of Computational Physics*, 419(??):Article 109684, October 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120304587.

Lin:2020:ESS

[LNYD20] Lianlei Lin, Naxian Ni, Zhiguo Yang, and Suchuan Dong. An energy-stable scheme for incompressible Navier–Stokes equations with periodically updated coefficient matrix. *Journal *of Computational Physics*, 418(??):Article 109624, October 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120303983.

Li:2023:IBP

[LO23] Ying Li and Mustafa Onur. INSIM-BHP: a physics-based data-driven reservoir model for history matching and forecasting with bottomhole pressure and production rate data under waterflooding. *Journal of Computational Physics*, 473(??):??, January 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912200777X.

Li:2020:FVW

[LOL20] Zhe Li, Guillaume Oger, and David Le Touzé. A finite volume WENO scheme for immiscible inviscid two-phase flows. *Journal of Computational Physics*, 418(??):Article 109601, October 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120303752.

Li:2022:PFC

[LOL22] Zhe Li, Guillaume Oger, and David Le Touzé. A partitioned framework for coupling LBM and FEM through an implicit IBM allowing non-conforming time-steps: Application to fluid-structure interaction in biomechanics. *Journal of Computational Physics*, 449(??):Article 110786, January 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121006811.

Liu:2023:PDA

[LOLS23] Siting Liu, Stanley Osher, Wuchen Li, and Chi-Wang Shu. A primal-dual approach for solving conservation laws with implicit in time approximations. *Journal of Computational Physics*, 472(??):??, January 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122007173.

Lee:2020:MMS

[LP20a] D. Lee and A. Palha. A mixed mimetic spectral element model of the 3D compressible Euler equations on the cubed sphere. *Journal of Computational Physics*, 401 (??):Article 108993, January 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119306989.

Lu:2020:MCS

[LP20b] Xiaoyi Lu and Carlos Pantano. On mass conservation and solvability of the discretized variable-density zero-Mach Navier–Stokes equations. *Journal of Computational Physics*, 404(??):Article 109132, March 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199911930837X.

Lee:2021:EST

[LP21] David Lee and Artur Palha. Exact spatial and temporal balance of energy exchanges within a horizontally explicit/ vertically implicit non-hydrostatic atmosphere. *Journal of Computational Physics*, 440(??):Article 110432, September 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121003272.

Lima:2023:CMC

[LP23a] Genilson S. Lima and Pedro S. Peixoto. A consistent mass-conserving C-staggered method for shallow water equations on global reduced grids. *Journal of Computational Physics*, 473(??):??, January 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912200804X.

Lozano:2023:SMD

[LP23b] Carlos Lozano and Jorge Ponsin. Singularity and mesh divergence of inviscid adjoint solutions at solid walls. *Journal of Computational Physics*, 489(??):??, September 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123003510.

Liu:2023:MCA

[LPBK23] Yuying Liu, Colin Ponce, Steven L. Brunton, and J. Nathan Kutz. Multiresolution convolutional autoencoders. *Journal of Computational Physics*, 474(??):??, February 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122008646.

Lischke:2020:WFL

[LPG+20] Anna Lischke, Guofei Pang, Mamikon Gulian, Fangying Song, Christian Glusa, Xiaoning Zheng, Zhiping Mao, Wei Cai, Mark M. Meerschaert, Mark Ainsworth, and George Em Karniadakis. What is the fractional Laplacian? A comparative review with new results. *Journal of Computational Physics*, 404(??):Article 109009, March 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119307156.

Li:2024:GPC

[LPH+24] Yingzhe Li, Martin Campos Pinto, Florian Holderied, Stefan Possanner, and Eric Sonnendrücker. Geometric Particle-In-Cell discretizations of a plasma hybrid model with kinetic ions and mass-less fluid electrons. *Journal of Computational Physics*, 498(??):??, February 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123007660.

Limare:2023:HLS

[LPJ+23] A. Limare, S. Popinet, C. Josserand, Z. Xue, and A. Ghigo. A hybrid level-set/embedded boundary method applied to solidification-melt problems. *Journal of Computational Physics*, 474(??):??, February 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122008920.

Leer:2022:CEL

[LPL+22] M. Leer, M. W. A. Pettit, J. T. Lipkowicz, P. Domingo, L. Vervisch, and A. M. Kempf. A conservative Eulerian–Lagrangian decomposition principle for the solution of multiscale flow problems at high Schmidt or Prandtl numbers. *Journal of Computational Physics*, 464(??):??, September 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122002789.

Laguna:2020:APW

[LPM+20] A. Alvarez Laguna, T. Pichard, T. Magin, P. Chabert, A. Bourdon, and M. Massot. An asymptotic preserving well-balanced scheme for the isothermal fluid equations in low-temperature plasmas at low-pressure. *Journal of Computational Physics*, 419(??):Article 109634, October 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120304083.

Lebbe:2023:OPM

[LPM23] Nicolas Lebbe, Kim Pham, and Agnès Maurel. Optimization of plasmonic metasurfaces: a homogenization-based design. *Journal of Computational Physics*, 495(??):??, December 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123006484.

Lee:2020:STI

[LPP+20] Jaejoon Lee, Yoonseo Park, Hyunseo Park, Changsoo Shin, and Wookeen Chung. A staggered time integrator for the linear acoustic wave equation using the Jacobi–Anger expansion. *Journal of Computational Physics*, 416 (??):Article 109489, September 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120302631.

Landstorfer:2021:MGP

[LPS21] Manuel Landstorfer, Benedikt Prifling, and Volker Schmidt. Mesh generation for periodic 3D microstructure models and computation of effective properties. *Journal of Computational Physics*, 431(??):Article 110071, April 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120308457.

Luo:2021:IWZ

[LpW21] Xin Luo and Song ping Wu. An improved WENO-Z+ scheme for solving hyperbolic conservation laws. *Journal of Computational Physics*, 445(??):Article 110608, November 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999121005039`.

Liu:2022:BFS

[LPZ22] Liu Liu, Lorenzo Pareschi, and Xueyu Zhu. A bi-fidelity stochastic collocation method for transport equations with diffusive scaling and multi-dimensional random inputs. *Journal of Computational Physics*, 462(??):??, August 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S002199912200314X`.

Long:2024:EBI

[LPZ24] Tian Long, Jieyun Pan, and Stéphane Zaleski. An Edge-based Interface Tracking (EBIT) method for multiphase flows with phase change. *Journal of Computational Physics*, 513(??):??, September 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S002199912400408X`.

Liu:2024:GTD

[LQQS24] Qingsong Liu, Feng Qu, Yiping Qu, and Di Sun. A genuinely three-dimensional Riemann solver based on self-similar variables in curvilinear coordinates. *Journal of Computational Physics*, 515(??):??, October 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999124005242`.

Li:2022:SCSb

[LQX22a] Dong Li, Chaoyu Quan, and Jiao Xu. Stability and convergence of Strang splitting. Part I: Scalar Allen–Cahn equation. *Journal of Computational Physics*, 458(??):??, June 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999122001498`.

Li:2022:SCSa

[LQX22b] Dong Li, Chaoyu Quan, and Jiao Xu. Stability and convergence of Strang splitting. Part II: Tensorial Allen–Cahn equations. *Journal of Computational Physics*, 454 (??):Article 110985, April 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912200047X.

Li:2022:ALEb

[LQXM22] Yapeng Li, Yegao Qu, Fangtao Xie, and Guang Meng. An arbitrary Lagrangian–Eulerian method for nonlinear structural–acoustic interaction of hyperelastic solid and compressible viscous fluid. *Journal of Computational Physics*, 471(??):??, December 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122007288.

Liu:2022:PTS

[LR22] Weifan Liu and Minghao W. Rostami. Parallel-in-time simulation of biofluids. *Journal of Computational Physics*, 464(??):??, September 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122004284.

Liu:2023:MMK

[LR23] Weifan Liu and Minghao W. Rostami. A multigrid method for kernel functions acting on interacting structures with applications to biofluids. *Journal of Computational Physics*, 494(??):??, December 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123006010.

Li:2024:SCF

[LR24a] Zhixuan Li and Weiqing Ren. Simulating capillary folding of thin elastic sheets with pinned contact lines. *Journal of Computational Physics*, 511(??):??, August 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124003735.

Lindblom:2024:BTD

[LR24b] Lee Lindblom and Oliver Rinne. Building three-dimensional differentiable manifolds numerically II: Limitations. *Journal of Computational Physics*, 496(??):??, January 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999123006745`.

Lin:2022:HOR

[LRAQ22] Jianfang Lin, Yupeng Ren, Rémi Abgrall, and Jianxian Qiu. High order residual distribution conservative finite difference HWENO scheme for steady state problems. *Journal of Computational Physics*, 457(??):??, May 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999122001073`.

Leclaire:2013:PIL

[LRT13] Sébastien Leclaire, Marcelo Reggio, and Jean-Yves Trépanier. Progress and investigation on lattice Boltzmann modeling of multiple immiscible fluids or components with variable density and viscosity ratios. *Journal of Computational Physics*, 246(??):318–342, August 1, 2013. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999113002179`. See [dv23a].

Lindblom:2022:BTD

[LRT22a] Lee Lindblom, Oliver Rinne, and Nicholas W. Taylor. Building three-dimensional differentiable manifolds numerically. *Journal of Computational Physics*, 460(??):??, July 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999122000195`.

Liu:2022:PCB

[LRT+22b] Chen Liu, Deep Ray, Christopher Thiele, Lu Lin, and Beatrice Riviere. A pressure-correction and bound-preserving discretization of the phase-field method for variable density two-phase flows. *Journal of Computational Physics*, 449(??):Article 110769, January 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

URL http://www.sciencedirect.com/science/article/pii/S0021999121006641.

Laskowski:2022:FOT

[LRVF22] Wojciech Laskowski, Gonzalo Rubio, Eusebio Valero, and Esteban Ferrer. A functional oriented truncation error adaptation method. *Journal of Computational Physics*, 451 (??):Article 110883, February 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121007786.

Li:2021:HSM

[LRW21a] Ruo Li, Yinuo Ren, and Yanli Wang. Hermite spectral method for Fokker–Planck–Landau equation modeling collisional plasma. *Journal of Computational Physics*, 434(??):Article 110235, June 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121001303.

Lindeberg:2021:HOF

[LRW21b] Ludvig Lindeberg, Ylva Ljungberg Rydin, and Leighton M. Watson. A high-order finite-difference scheme to model the fluid-structure interaction in pneumatic seismic sources. *Journal of Computational Physics*, 424(??):Article 109849, January 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120306239.

Lai:2022:SAI

[LS22] Ming-Chih Lai and Yunchang Seol. A stable and accurate immersed boundary method for simulating vesicle dynamics via spherical harmonics. *Journal of Computational Physics*, 449(??):Article 110785, January 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912100680X.

Lipnikov:2023:CHO

[LS23] Konstantin Lipnikov and Mikhail Shashkov. Conservative high-order data transfer method on generalized polygonal meshes. *Journal of Computational Physics*, 474(??):

??, February 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122008853.

Lam:2020:ESA

[LSC20a] P. H. Lam, H. C. So, and C. F. Chan. Exponential sum approximation for Mittag-Leffler function and its application to fractional Zener wave equation. *Journal of Computational Physics*, 410(??):Article 109389, June 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120301637.

Li:2020:NSO

[LSC20b] Yingzhe Li, Yajuan Sun, and Nicolas Crouseilles. Numerical simulations of one laser-plasma model based on Poisson structure. *Journal of Computational Physics*, 405(??):Article 109172, March 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119308770.

Liu:2020:NSS

[LSC+20c] Z. J. Liu, C. Shu, S. Y. Chen, L. M. Yang, M. P. Wan, and W. Liu. A novel solver for simulation of flows from continuum regime to rarefied regime at moderate Knudsen number. *Journal of Computational Physics*, 415(??):Article 109548, August 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120303223.

Lou:2020:EHO

[LsCxL+20] Shuai Lou, Shu sheng Chen, Bo xi Lin, Jian Yu, and Chao Yan. Effective high-order energy stable flux reconstruction methods for first-order hyperbolic linear and nonlinear systems. *Journal of Computational Physics*, 414(??):Article 109475, August 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120302497.

Lee:2020:HSO

[LSL20] Wonjung Lee, Yiqun Sun, and Shuai Lu. Hierarchical sparse observation models and informative prior for Bayesian inference of spatially varying parameters. *Journal of Computational Physics*, 422(??):Article 109768, December 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120305428.

Liu:2020:MFM

[LSLH20] Yang Liu, Mark Sussman, Yongsheng Lian, and M. Yousuff Hussaini. A moment-of-fluid method for diffusion equations on irregular domains in multi-material systems. *Journal of Computational Physics*, 402(??):Article 109017, February 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119307235.

Li:2021:MRH

[LSQ21] Jiayin Li, Chi-Wang Shu, and Jianxian Qiu. Multi-resolution HWENO schemes for hyperbolic conservation laws. *Journal of Computational Physics*, 446(??):Article 110653, December 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121005489.

Lang:2020:FAM

[LSS20] J. Lang, R. Scheichl, and D. Silvester. A fully adaptive multilevel stochastic collocation strategy for solving elliptic PDEs with random data. *Journal of Computational Physics*, 419(??):Article 109692, October 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120304666.

Leng:2024:ZCS

[LST24] Kuangdai Leng, Mallikarjun Shankar, and Jeyan Thiyagalingam. Zero coordinate shift: Whetted automatic differentiation for physics-informed operator learning. *Journal of Computational Physics*, 505(??):??, May 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124001530.

Lu:2021:ILW

[LSTZ21] Jianfang Lu, Chi-Wang Shu, Sirui Tan, and Mengping Zhang. An inverse Lax–Wendroff procedure for hyperbolic conservation laws with changing wind direction on the boundary. *Journal of Computational Physics*, 426 (??):Article 109940, February 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120307142.

Li:2020:HML

[LSW20] Z. F. Li, Y. Y. Shi, and G. X. Wu. A hybrid method for linearized wave radiation and diffraction problem by a three dimensional floating structure in a polynya. *Journal of Computational Physics*, 412(??):Article 109445, July 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120302199.

Li:2020:ECL

[LSXC20] Xiaole Li, Weizhou Sun, Yulong Xing, and Ching-Shan Chou. Energy conserving local discontinuous Galerkin methods for the improved Boussinesq equation. *Journal of Computational Physics*, 401(??):Article 109002, January 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119307077.

Liu:2023:HOI

[LSY+23] Y. Y. Liu, C. Shu, L. M. Yang, Y. G. Liu, W. Liu, and Z. L. Zhang. High-order implicit RBF-based differential quadrature-finite volume method on unstructured grids: Application to inviscid and viscous compressible flows. *Journal of Computational Physics*, 478(??):??, April 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123000578.

Li:2024:EES

[LSYZ24] Buyang Li, Jie Shen, Zongze Yang, and Yanrong Zhang. Efficient energy stable schemes for incompressible flows with variable density. *Journal of Computational Physics*, 517(??):??, November 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124006132.

Liu:2021:WGF

[LSZ21] Yun-Long Liu, Chi-Wang Shu, and A-Man Zhang. Weighted ghost fluid discontinuous Galerkin method for two-medium problems. *Journal of Computational Physics*, 426(??): Article 109956, February 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120307300.

Li:2023:FST

[LSZ+23a] Siye Li, Zhensheng Sun, BaiLin Zha, YuJie Zhu, Yao Ding, and YuTing Xia. A family of spatio-temporal optimized finite difference schemes with adaptive dispersion and critical-adaptive dissipation for compressible flows. *Journal of Computational Physics*, 474(??):??, February 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122008841.

Li:2023:HOL

[LSZ23b] Xin Li, Zhou Sheng, and Luming Zhang. High-order Lagrange multiplier method for the coupled Klein–Gordon–Schrödinger system. *Journal of Computational Physics*, 493(??):??, November 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912300551X.

Liu:2024:EES

[LSZ24] Xinyu Liu, Jie Shen, and Nan Zheng. Efficient energy stable numerical schemes for Cahn–Hilliard equations with dynamical boundary conditions. *Journal of Computational Physics*, 509(??):??, July 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124002869.

Liu:2020:HOL

[LSZY20] Y. Y. Liu, C. Shu, H. W. Zhang, and L. M. Yang. A high order least square-based finite difference-finite volume method with lattice Boltzmann flux solver for simulation of incompressible flows on unstructured grids. *Journal of Computational Physics*, 401(??):Article 109019, January 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119307259.

Li:2020:GPR

[LT20a] Jing Li and Alexandre M. Tartakovsky. Gaussian process regression and conditional polynomial chaos for parameter estimation. *Journal of Computational Physics*, 416 (??):Article 109520, September 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120302941.

Liu:2020:NSF

[LT20b] B. Liu and D. Tan. A Nitsche stabilized finite element method for embedded interfaces: Application to fluid-structure interaction and rigid-body contact. *Journal of Computational Physics*, 413(??):Article 109461, July 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120302357.

Lu:2020:LDM

[LT20c] Hannah Lu and Daniel M. Tartakovsky. Lagrangian dynamic mode decomposition for construction of reduced-order models of advection-dominated phenomena. *Journal of Computational Physics*, 407(??):Article 109229, April 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120300036.

Lu:2021:EDM

[LT21] Hannah Lu and Daniel M. Tartakovsky. Extended dynamic mode decomposition for inhomogeneous problems. *Journal of Computational Physics*, 444(??):Article 110550, November

1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121004459.

Laguzet:2022:CBP

[LT22a] Laetitia Laguzet and Gabriel Turinici. A cell-based population control of Monte Carlo particles for the global variance reduction for transport equations. *Journal of Computational Physics*, 467(??):??, October 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122004351.

Li:2022:PIK

[LT22b] Jing Li and Alexandre M. Tartakovsky. Physics-informed Karhunen–Loéve and neural network approximations for solving inverse differential equation problems. *Journal of Computational Physics*, 462(??):??, August 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122002923.

Lu:2023:DFD

[LT23] Hannah Lu and Daniel M. Tartakovsky. DRIPS: a framework for dimension reduction and interpolation in parameter space. *Journal of Computational Physics*, 493(??):??, November 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123005508.

Li:2024:ACE

[LT24a] Xingjie Helen Li and Molei Tao. Automated construction of effective potential via algorithmic implicit bias. *Journal of Computational Physics*, 514(??):??, October 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124004558.

Lu:2024:DDM

[LT24b] Hannah Lu and Daniel M. Tartakovsky. Data-driven models of nonautonomous systems. *Journal of Computational Physics*, 507(??):??, June 15, 2024. CODEN

JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124002250.

Liu:2023:UFV

[LTBM23] Jun Liu, Tobias Tolle, Dieter Bothe, and Tomislav Marić. An unstructured finite-volume level set/front tracking method for two-phase flows with large density-ratios. *Journal of Computational Physics*, 493(??):??, November 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123005211.

Li:2024:NMC

[LTC24] Lingfeng Li, Xue-Cheng Tai, and Raymond Hon-Fu Chan. A new method to compute the blood flow equations using the physics-informed neural operator. *Journal of Computational Physics*, 519(??):??, December 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124006284.

Lee:2021:CSF

[LTD+21] S. H. Lee, M. Tene, S. Du, X. Wen, and Y. Efendiev. A conservative sequential fully implicit method for compositional reservoir simulation. *Journal of Computational Physics*, 428(??):Article 109961, March 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912030735X.

Leng:2022:PGM

[LTD+22] Yu Leng, Xiaochuan Tian, Leszek Demkowicz, Hector Gomez, and John T. Foster. A Petrov–Galerkin method for nonlocal convection-dominated diffusion problems. *Journal of Computational Physics*, 452(??):Article 110919, March 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121008147.

Ludlam:2023:TTR

[LTDC23] James Ludlam, Katherine Tant, Victorita Dolean, and Andrew Curtis. Travel times and ray paths for acoustic and elastic waves in generally anisotropic media. *Journal of Computational Physics*, 494(??):??, December 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123005958.

Lee:2023:CSF

[LTE23] S. H. Lee, P. Tomin, and Y. Efendiev. Convergent sequential fully implicit method for reservoir simulation. *Journal of Computational Physics*, 492(??):??, November 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123005375.

Liu:2022:QSA

[LTK+22] Jie Liu, Qinglin Tang, Jisheng Kou, Dingguo Xu, Tao Zhang, and Shuyu Sun. A quantitative study on the approximation error and speed-up of the multi-scale MCMC (Monte Carlo Markov chain) method for molecular dynamics. *Journal of Computational Physics*, 469(??):??, November 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122005538.

Li:2021:SFI

[LTT21] Jiawei Li, Pavel Tomin, and Hamdi Tchelepi. Sequential fully implicit Newton method for compositional flow and transport. *Journal of Computational Physics*, 444 (??):Article 110541, November 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121004368.

Lecointre:2022:HON

[LVK+22] Luc Lecointre, Ronan Vicquelin, Sergey Kudriakov, Etienne Studer, and Christian Tenaud. High-order numerical scheme for compressible multi-component real gas flows using an extension of the Roe approximate Riemann solver and specific monotonicity-preserving constraints. *Journal of Computational Physics*, 450(??):Article 110821, February 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121007166.

Liu:2020:LSP

[LW20a] Chun Liu and Yiwei Wang. On Lagrangian schemes for porous medium type generalized diffusion equations: a discrete energetic variational approach. *Journal of Computational Physics*, 417(??):Article 109566, September 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120303405.

Lu:2020:TWC

[LW20b] Xueying Lu and Mary F. Wheeler. Three-way coupling of multiphase flow and poromechanics in porous media. *Journal of Computational Physics*, 401(??):Article 109053, January 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119307582.

Laurain:2021:OCV

[LW21] Antoine Laurain and Shawn W. Walker. Optimal control of volume-preserving mean curvature flow. *Journal of Computational Physics*, 438(??):Article 110373, August 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121002680.

Li:2022:MIS

[LW22a] Gaohua Li and Fuxin Wang. A multiple instance solver framework based on dynamic overset grid method for flow field simulation of array configuration with moving components. *Journal of Computational Physics*, 448 (??):Article 110741, January 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121006367.

Li:2022:DLC

[LW22b] Hanyu Li and Mary F. Wheeler. Dynamic local coupling for multiphase flow: a compromise between efficiency and stability. *Journal of Computational Physics*, 469(??):??, November 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122005976.

Liu:2023:FOS

[LW23] Hao Liu and Dong Wang. Fast operator splitting methods for obstacle problems. *Journal of Computational Physics*, 477(??):??, March 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123000360.

Liu:2024:CFI

[LWC+24] Yang Liu, Zhenhua Wan, Qianqian Chen, Biao Hu, Richard Sun, Chuntie Xu, Huili Yu, and Jianmin Zan. A coupled fully implicit method for solving drag-adjoint equations of steady incompressible flows. *Journal of Computational Physics*, 514(??):??, October 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124004996.

Li:2023:FTS

[LWF23] Ning Li, Jilian Wu, and Xinlong Feng. Filtered time-stepping method for incompressible Navier–Stokes equations with variable density. *Journal of Computational Physics*, 473(??):??, January 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122008270.

Liu:2024:BSP

[LWJ24a] Yanzhi Liu, Ruifan Wu, and Ying Jiang. Binary structured physics-informed neural networks for solving equations with rapidly changing solutions. *Journal of Computational Physics*, 518(??):??, December 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124005898.

Luther:2024:ACT

[LWJ24b] Jonas Luther, Yijun Wang, and Patrick Jenny. Adaptive conservative time integration for unsteady compressible flow. *Journal of Computational Physics*, 517(??):??, November 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124005722.

Lauber:2022:IBS

[LWL22] Marin Lauber, Gabriel D. Weymouth, and Georges Limbert. Immersed boundary simulations of flows driven by moving thin membranes. *Journal of Computational Physics*, 457(??):??, May 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122001383.

Li:2023:SOA

[LWL+23] Hu Li, Conghai Wu, Yong Luo, Xuliang Liu, and Shuhai Zhang. A seventh-order accurate weighted compact scheme for shock-associated noise computation. *Journal of Computational Physics*, 495(??):??, December 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123006708.

Lee:2024:DJT

[LWL24] Wonjun Lee, Li Wang, and Wuchen Li. Deep JKO: Time-implicit particle methods for general nonlinear gradient flows. *Journal of Computational Physics*, 514(??):??, October 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124004364.

Lundquist:2024:EGS

[LWN24] Tomas Lundquist, Andrew R. Winters, and Jan Nordström. Encapsulated generalized summation-by-parts formulations for curvilinear and non-conforming meshes. *Journal of Computational Physics*, 498(??):??, February 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123007945.

Li:2020:WLD

[LWR20] Wanai Li, Qian Wang, and Yu-Xin Ren. A p-weighted limiter for the discontinuous Galerkin method on one-dimensional and two-dimensional triangular grids. *Journal of Computational Physics*, 407(??):Article 109246, April 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120300206.

Lahouel:2024:LNO

[LWR+24] Kamel Lahouel, Michael Wells, Victor Rielly, Ethan Lew, David Lovitz, and Bruno M. Jedynak. Learning nonparametric ordinary differential equations from noisy data. *Journal of Computational Physics*, 507(??):??, June 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124002201.

Li:2024:SCM

[LWT+24] Xi'an Li, Jinran Wu, Xin Tai, Jianhua Xu, and You-Gan Wang. Solving a class of multi-scale elliptic PDEs by Fourier-based mixed physics informed neural networks. *Journal of Computational Physics*, 508(??):??, July 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124002614.

Liu:2021:SPO

[LWW21] Chun Liu, Cheng Wang, and Yiwei Wang. A structure-preserving, operator splitting scheme for reaction-diffusion equations with detailed balance. *Journal of Computational Physics*, 436(??):Article 110253, July 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121001480.

Liu:2023:CER

[LWWH23] Yi Liu, Hongping Wang, Shizhao Wang, and Guowei He. A cache-efficient reordering method for unstructured meshes with applications to wall-resolved large-eddy simulations. *Journal of Computational Physics*, 480(??):??, May 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123001043.

Lu:2024:SBT

[LWX24] Jianfeng Lu, Yue Wu, and Yang Xiang. Score-based transport modeling for mean-field Fokker–Planck equations. *Journal of Computational Physics*, 503(??):??, April 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124001086.

Li:2020:NCM

[LWY+20] Tao Li, Cheng Wang, Tonghui Yang, Dongping Chen, and S. Chung Kim Yuen. A novel construction method of computational domains on large-scale near-ground explosion problems. *Journal of Computational Physics*, 407(??):Article 109226, April 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999119309313`.

Li:2023:SMB

[LWY23] Yongchao Li, Yanyan Wang, and Liang Yan. Surrogate modeling for Bayesian inverse problems based on physics-informed neural networks. *Journal of Computational Physics*, 475(??):??, February 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999122009044`.

Liu:2022:PPT

[LWYY22] Hailiang Liu, Zhongming Wang, Peimeng Yin, and Hui Yu. Positivity-preserving third order DG schemes for Poisson–Nernst–Planck equations. *Journal of Computational Physics*, 452(??):Article 110777, March 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999121006720`.

Lyu:2021:HVI

[LWZ+21] Sijia Lyu, Ke Wang, Zhentong Zhang, Annaïg Pedrono, Chao Sun, and Dominique Legendre. A hybrid VOF-IBM method for the simulation of freezing liquid films and freezing drops. *Journal of Computational Physics*, 432(??):Article 110160, May 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999121000528`.

Lin:2022:MVR

[LWZ22] Guang Lin, Yating Wang, and Zecheng Zhang. Multi-variance replica exchange SGMCMC for inverse and forward problems via Bayesian PINN. *Journal of Computational Physics*, 460(??):??, July 1, 2022. CODEN

JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122002352.

Lin:2023:NTI

[LWZ23] Yicheng Lin, Zhenming Wang, and Jun Zhu. A new type of increasingly higher order finite difference and finite volume MR-WENO schemes with adaptive linear weights for hyperbolic conservation laws. *Journal of Computational Physics*, 493(??):??, November 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123005661.

Lu:2021:EDG

[LX21] Song Lu and Xianmin Xu. An efficient diffusion generated motion method for wetting dynamics. *Journal of Computational Physics*, 441(??):Article 110476, September 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121003715.

Liu:2024:MSB

[LXCZ24] Xinliang Liu, Bo Xu, Shuhao Cao, and Lei Zhang. Mitigating spectral bias for the multiscale operator learning. *Journal of Computational Physics*, 506(??):??, June 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124001931.

Li:2020:TIG

[LXD+20] Panchi Li, Changjian Xie, Rui Du, Jingrun Chen, and Xiao-Ping Wang. Two improved Gauss–Seidel projection methods for Landau–Lifshitz–Gilbert equation. *Journal of Computational Physics*, 401(??):Article 109046, January 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199911930751X.

Liang:2022:FOL

[LXSF22] Tian Liang, Feng Xiao, Wei Shyy, and Lin Fu. A fifth-order low-dissipation discontinuity-resolving TENO scheme for compressible flow simulation. *Journal of Computational Physics*, 467(??):??, October 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122005277.

Li:2023:ECF

[LXY23a] Zhuoning Li, Zhenli Xu, and Zhiguo Yang. An energy-conserving Fourier particle-in-cell method with asymptotic-preserving preconditioner for Vlasov–Ampère system with exact curl-free constraint. *Journal of Computational Physics*, 495(??):??, December 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123006241.

Liu:2023:CGA

[LXY23b] Wei Liu, Ziqing Xie, and Yongjun Yuan. A constrained gentlest ascent dynamics and its applications to finding excited states of Bose–Einstein condensates. *Journal of Computational Physics*, 473(??):??, January 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122007823.

Li:2023:SDB

[LXZ23] Xi-An Li, Zhi-Qin John Xu, and Lei Zhang. Subspace decomposition based DNN algorithm for elliptic type multi-scale PDEs. *Journal of Computational Physics*, 488(??):??, September 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123003376.

Lin:2020:CSR

[LY20a] Cheng-Chuan Lin and Fu-Ling Yang. Continuum simulation for regularized non-local $\mu(I)$ model of dense granular flows. *Journal of Computational Physics*, 420 (??):Article 109708, November 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120304824.

Liu:2020:HBL

[LY20b] Yang Liu and Haizhao Yang. A hierarchical butterfly LU preconditioner for two-dimensional electromagnetic scattering problems involving open surfaces. *Journal of Computational Physics*, 401(??):Article 109014, January 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199911930720X.

Li:2022:SMH

[LY22a] Haoya Li and Lexing Ying. A semigroup method for high dimensional elliptic PDEs and eigenvalue problems based on neural networks. *Journal of Computational Physics*, 453(??):Article 110939, March 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122000018.

Li:2022:ANA

[LY22b] Long Li and Chang Yang. APFOS-Net: Asymptotic preserving scheme for anisotropic elliptic equations with deep neural network. *Journal of Computational Physics*, 453(??):Article 110958, March 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122000201.

Luo:2022:ROM

[LY22c] Zhendong Luo and Jing Yang. The reduced-order method of continuous space-time finite element scheme for the non-stationary incompressible flows. *Journal of Computational Physics*, 456(??):??, May 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122001061.

Lorin:2023:SWR

[LY23] Emmanuel Lorin and Xu Yang. Schwarz waveform relaxation-learning for advection–diffusion–reaction equations. *Journal of Computational Physics*, 473(??):??, January 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122007203.

Lu:2023:IRP

[LYH23] Min Lu, Zixuan Yang, and Guowei He. An interface-resolved phase-change model based on velocity decomposition. *Journal of Computational Physics*, 475(??):??, February 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122008907.

Li:2020:PMC

[LYL20] Guansheng Li, Ting Ye, and Xuejin Li. Parallel modeling of cell suspension flow in complex micro-networks with inflow/outflow boundary conditions. *Journal of Computational Physics*, 401(??):Article 109031, January 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119307375.

Li:2022:FIT

[LYS22a] Yiteng Li, Haijian Yang, and Shuyu Sun. Fully implicit two-phase VT-flash compositional flow simulation enhanced by multilayer nonlinear elimination. *Journal of Computational Physics*, 449(??):Article 110790, January 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121006859.

Liu:2022:IHO

[LYS+22b] Y. Y. Liu, L. M. Yang, C. Shu, Z. L. Zhang, and Z. Y. Yuan. An implicit high-order radial basis function-based differential quadrature-finite volume method on unstructured grids to simulate incompressible flows with heat transfer. *Journal of Computational Physics*, 467(??):??, October 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912200523X.

Li:2020:PMR

[LYY20] Rui Li, Haijian Yang, and Chao Yang. Parallel multilevel restricted Schwarz preconditioners for implicit simulation of subsurface flows with Peng–Robinson equation of state. *Journal of Computational Physics*, 422 (??):Article 109745, December 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

URL http://www.sciencedirect.com/science/article/pii/S0021999120305192.

Li:2022:NFI

[LYZ22] Jianliang Li, Jiaqing Yang, and Bo Zhang. Near-field imaging of a locally rough interface and buried obstacles with the linear sampling method. *Journal of Computational Physics*, 464(??):??, September 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122004004.

Li:2021:SOL

[LYZW21] Yakun Li, Wenkai Yu, Jia Zhao, and Qi Wang. Second order linear decoupled energy dissipation rate preserving schemes for the Cahn–Hilliard-extended-Darcy model. *Journal of Computational Physics*, 444(??):Article 110561, November 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121004563.

Liang:2020:CSD

[LZ20a] Dong Liang and Zhongguo Zhou. The conservative splitting domain decomposition method for multicomponent contamination flows in porous media. *Journal of Computational Physics*, 400(??):Article 108974, January 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119306795.

Liu:2020:BFM

[LZ20b] Liu Liu and Xueyu Zhu. A bi-fidelity method for the multiscale Boltzmann equation with random parameters. *Journal of Computational Physics*, 402(??):Article 108914, February 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119306199.

Li:2022:AAS

[LZ22a] Jichun Li and Li Zhu. Analysis and application of a spatial fourth-order finite difference scheme for the Ziolkowski's PML model. *Journal of Computational*

Physics, 464(??):??, September 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122004120.

Li:2022:OSG

[LZ22b] Jiequan Li and Qinglong Zhang. One-sided GRP solver and numerical boundary conditions for compressible fluid flows. *Journal of Computational Physics*, 459(??):??, June 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122002005.

Liu:2023:PPI

[LZ23] Chen Liu and Xiangxiong Zhang. A positivity-preserving implicit-explicit scheme with high order polynomial basis for compressible Navier–Stokes equations. *Journal of Computational Physics*, 493(??):??, November 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123005910.

Li:2024:PFE

[LZ24a] Meng Li and Quan Zhao. Parametric finite element approximations for anisotropic surface diffusion with axisymmetric geometry. *Journal of Computational Physics*, 497 (??):??, January 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123007271.

Lin:2024:HOF

[LZ24b] Yicheng Lin and Jun Zhu. High-order finite volume multi-resolution WENO schemes with adaptive linear weights on triangular meshes. *Journal of Computational Physics*, 506(??):??, June 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124001761.

Lin:2020:EAM

[LZC+20] Bo Lin, Chijie Zhuang, Zhenning Cai, Rong Zeng, and Weizhu Bao. An efficient and accurate MPI-based parallel simulator for streamer discharges in three dimensions. *Journal of Computational Physics*, 401(??):Article 109026, January 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119307326.

Liu:2023:ESI

[LZC+23] Shuang Liu, Zirui Zhang, Hsiao-Bing Cheng, Li-Tien Cheng, and Bo Li. Explicit-solute implicit-solvent molecular simulation with binary level-set, adaptive-mobility, and GPU. *Journal of Computational Physics*, 472(??):??, January 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122007367.

Lyu:2022:MDM

[LZCC22] Liyao Lyu, Zhen Zhang, Minxin Chen, and Jingrun Chen. MIM: a deep mixed residual method for solving high-order partial differential equations. *Journal of Computational Physics*, 452(??):Article 110930, March 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121008251.

Li:2023:MIC

[LZH23] Shuai Li, A-Man Zhang, and Rui Han. 3D model for inertial cavitation bubble dynamics in binary immiscible fluids. *Journal of Computational Physics*, 494(??):??, December 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123006034.

Lu:2024:WCR

[LZJ+24] Liwei Lu, Zhijun Zeng, Yan Jiang, Yi Zhu, and Pipi Hu. Weak collocation regression method: Fast reveal hidden stochastic dynamics from high-dimensional aggregate data. *Journal of Computational Physics*, 502(??):??, April 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124000482.

Liu:2021:NLD

[LZLS21] Mengqing Liu, Man Zhang, Caixia Li, and Fang Shen. A new locally divergence-free WLS–ENO scheme based on the positivity-preserving finite volume method for ideal MHD equations. *Journal of Computational Physics*, 447 (??):Article 110694, December 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999121005891`.

Li:2021:DOI

[LZLZ21] Ming Li, Liangchao Zhu, Jingzhi Li, and Kai Zhang. Design optimization of interconnected porous structures using extended triply periodic minimal surfaces. *Journal of Computational Physics*, 425(??):Article 109909, January 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999120306835`.

Li:2022:IMC

[LZPM22] Ming-Kang Li, A-Man Zhang, Yu-Xiang Peng, and Fu-Ren Ming. An improved model for compressible multiphase flows based on Smoothed Particle Hydrodynamics with enhanced particle regeneration technique. *Journal of Computational Physics*, 458(??):??, June 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999122001681`.

Li:2022:EHC

[LZS22a] Xiao Li, Jiayin Zhai, and Zhijun Shen. Elastic Hugoniot curve of one-dimensional Wilkins model with general Grüneisen-type equation of state. *Journal of Computational Physics*, 464(??):??, September 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999122003990`.

Li:2022:HTA

[LZS22b] Xiao Li, Jiayin Zhai, and Zhijun Shen. An HLLC-type approximate Riemann solver for two-dimensional elastic-perfectly plastic model. *Journal of Computational Physics*,

448(??):Article 110675, January 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121005702.

Lan:2023:EIV

[LZT+23] Yicong Lan, Yapei Zhang, Wenxi Tian, G. H. Su, and Suizheng Qiu. An enhanced implicit viscosity ISPH method for simulating free-surface flow coupled with solid-liquid phase change. *Journal of Computational Physics*, 474(??):??, February 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122008725.

Liu:2020:UGK

[LZX20] Chang Liu, Yajun Zhu, and Kun Xu. Unified gas-kinetic wave-particle methods I: Continuum and rarefied gas flow. *Journal of Computational Physics*, 401(??): Article 108977, January 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119306825.

Li:2022:ALEa

[LZX+22a] Lei Li, Jiaqi Zhang, Zelai Xu, Y.-N. Young, James J. Feng, and Pengtao Yue. An arbitrary Lagrangian–Eulerian method for simulating interfacial dynamics between a hydrogel and a fluid. *Journal of Computational Physics*, 451 (??):Article 110851, February 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121007464.

Li:2022:AIB

[LZX+22b] Shao-Bo Li, A-Man Zhang, Jing-Ping Xiao, Yu-Xiang Peng, and Ming-Kang Li. An algorithm for implementing a boundary viscous force with single-layer wall particles based on WCSPH. *Journal of Computational Physics*, 464(??):??, September 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122003904.

Li:2022:DDL

[LZY22a] Ying Li, Zuojia Zhou, and Shihui Ying. DeLISA: Deep learning based iteration scheme approximation for solving PDEs. *Journal of Computational Physics*, 451(??): Article 110884, February 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121007798.

Liu:2022:FCS

[LZY+22b] Jia Liu, Chuang Zhang, Haizhuan Yuan, Wei Su, and Lei Wu. A fast-converging scheme for the phonon Boltzmann equation with dual relaxation times. *Journal of Computational Physics*, 467(??):??, October 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122004983.

Li:2021:ACF

[LZZ21a] Liang Li, Jun Zhu, and Yong-Tao Zhang. Absolutely convergent fixed-point fast sweeping WENO methods for steady state of hyperbolic conservation laws. *Journal of Computational Physics*, 443(??):Article 110516, October 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121004113.

Li:2021:CTD

[LZZ21b] Lingxiao Li, Donghang Zhang, and Weiying Zheng. A constrained transport divergence-free finite element method for incompressible MHD equations. *Journal of Computational Physics*, 428(??):Article 109980, March 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120307543.

Li:2024:ACF

[LZZ24] Liang Li, Jun Zhu, and Yong-Tao Zhang. An absolutely convergent fixed-point fast sweeping WENO method on triangular meshes for steady state of hyperbolic conservation laws. *Journal of Computational Physics*, 514(??):??, October 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print),

1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124004649.

Liu:2024:FAM

[LZZW24] Wei Liu, Yanbing Zhang, Jianan Zeng, and Lei Wu. Further acceleration of multiscale simulation of rarefied gas flow via a generalized boundary treatment. *Journal of Computational Physics*, 503(??):??, April 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124000792.

Matsushita:2021:GLT

[MA21] Shintaro Matsushita and Takayuki Aoki. Gas-liquid two-phase flows simulation based on weakly compressible scheme with interface-adapted AMR method. *Journal of Computational Physics*, 445(??):Article 110605, November 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121005003.

Macca:2024:SIF

[MACDR24] Emanuele Macca, Stavros Avgerinos, Manuel J. Castro-Diaz, and Giovanni Russo. A semi-implicit finite volume method for the Exner model of sediment transport. *Journal of Computational Physics*, 499(??):??, February 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123008094.

Munafo:2020:CMN

[MAP+20] Alessandro Munafò, Andrea Alberti, Carlos Pantano, Jonathan B. Freund, and Marco Panesi. A computational model for nanosecond pulse laser-plasma interactions. *Journal of Computational Physics*, 406(??):Article 109190, April 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119308952.

Moura:2020:SES

[MAPS20] Rodrigo C. Moura, Mansoor Aman, Joaquim Peiró, and Spencer J. Sherwin. Spatial eigenanalysis of spectral/*hp* continuous Galerkin schemes and their stabilisation via DG-mimicking spectral vanishing viscosity for high Reynolds number flows. *Journal of Computational Physics*, 406(??):Article 109112, April 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119308174.

Marche:2020:CHD

[Mar20] Fabien Marche. Combined hybridizable discontinuous Galerkin (HDG) and Runge–Kutta discontinuous Galerkin (RK-DG) formulations for Green–Naghdi equations on unstructured meshes. *Journal of Computational Physics*, 418(??):Article 109637, October 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120304113.

Martaud:2023:GES

[Mar23] Ludovic Martaud. Global entropy stability for a class of unlimited second-order schemes for 2D hyperbolic systems of conservation laws on unstructured meshes. *Journal of Computational Physics*, 487(??):??, August 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123002711.

Marskar:2024:SSC

[Mar24a] Robert Marskar. Stochastic and self-consistent 3D modeling of streamer discharge trees with Kinetic Monte Carlo. *Journal of Computational Physics*, 504(??):??, May 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124001074.

Martinet:2024:NON

[Mar24b] Eloi Martinet. Numerical optimization of Neumann eigenvalues of domains in the sphere. *Journal of Computational Physics*, 508(??):??, July 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124002511.

Messenger:2021:WSP

[MB21] Daniel A. Messenger and David M. Bortz. Weak SINDy for partial differential equations. *Journal of Computational Physics*, 443(??):Article 110525, October 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121004204.

Malhotra:2024:ECB

[MB24a] Dhairya Malhotra and Alex Barnett. Efficient convergent boundary integral methods for slender bodies. *Journal of Computational Physics*, 503(??):??, April 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124001049.

Martorell:2024:HOU

[MB24b] Pere A. Martorell and Santiago Badia. High order unfitted finite element discretizations for explicit boundary representations. *Journal of Computational Physics*, 511(??):??, August 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124003760.

Marchner:2021:SPM

[MBAG21] Philippe Marchner, Hadrien Bériot, Xavier Antoine, and Christophe Geuzaine. Stable perfectly matched layers with Lorentz transformation for the convected Helmholtz equation. *Journal of Computational Physics*, 433(??): Article 110180, May 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121000759.

Moraes:2022:AAD

[MBBV22] L. R. C. Moraes, L. B. Barichello, R. C. Barros, and R. Vasques. On the application of the analytical discrete ordinates method to the solution of nonclassical transport problems in slab geometry. *Journal of Computational Physics*, 455(??):??, April 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122000444.

Martin:2023:AEI

[MBDS23] A. Martin, S. Brisard, S. Deleville, and K. Sab. Assessment of the equivalent inclusion method for the numerical homogenization of fibrous composites. *Journal of Computational Physics*, 477(??):??, March 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123000384.

Meng:2021:SSS

[MBE21] Chenwei Meng, Anirban Bhattacharjee, and Mahdi Esmaily. A scalable spectral Stokes solver for simulation of time-periodic flows in complex geometries. *Journal of Computational Physics*, 445(??):Article 110601, November 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121004964.

Meng:2021:MFB

[MBK21] Xuhui Meng, Hessam Babaee, and George Em Karniadakis. Multi-fidelity Bayesian neural networks: Algorithms and applications. *Journal of Computational Physics*, 438(??):Article 110361, August 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121002564.

Mitchell:2022:SLB

[MBM+22] William H. Mitchell, Henry G. Bell, Yoichiro Mori, Laurel Ohm, and Daniel Spirn. A single-layer based numerical method for the slender body boundary value problem. *Journal of Computational Physics*, 450(??):Article 110865, February 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121007609.

Moller:2023:DGH

[MBM+23] F. Møller, N. Besse, I. E. Mazets, H. P. Stimming, and N. J. Mauser. The dissipative Generalized Hydrodynamic equations and their numerical solution. *Journal of Computational Physics*, 493(??):??, November 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

URL http://www.sciencedirect.com/science/article/pii/S0021999123005260.

McClenny:2023:SAP

[MBN23] Levi D. McClenny and Ulisses M. Braga-Neto. Self-adaptive physics-informed neural networks. *Journal of Computational Physics*, 474(??):??, February 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122007859.

Muralikrishnan:2020:MAT

[MBTS20] Sriramkrishnan Muralikrishnan, Tan Bui-Thanh, and John N. Shadid. A multilevel approach for trace system in HDG discretizations. *Journal of Computational Physics*, 407 (??):Article 109240, April 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120300140.

Medale:2020:ODF

[MCBA20] Marc Medale, Bruno Cochelin, Edouard Bissen, and Nicolas Alpy. A one-dimensional full-range two-phase model to efficiently compute bifurcation diagrams in sub-cooled boiling flows in vertical heated tube. *Journal of Computational Physics*, 404(??):Article 109131, March 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119308368.

Modave:2023:HDG

[MCF23] Axel Modave and Théophile Chaumont-Frelet. A hybridizable discontinuous Galerkin method with characteristic variables for Helmholtz problems. *Journal of Computational Physics*, 493(??):??, November 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123005545.

Mantecca:2024:EIC

[MCGN24] E. Mantecca, A. Colombo, A. Ghidoni, and G. Noventa. Efficient implementation of complex equations of state in a high-order framework. *Journal of Computational*

Physics, 505(??):??, May 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124001633.

Mou:2023:EDD

[MCI23] Changhong Mou, Nan Chen, and Traian Iliescu. An efficient data-driven multiscale stochastic reduced order modeling framework for complex systems. *Journal of Computational Physics*, 493(??):??, November 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123005454.

Mozaffari:2024:LBS

[MCJS24] Sajad Mozaffari, Shang-Gui Cai, Jérôme Jacob, and Pierre Sagaut. Lattice Boltzmann k-ω SST based hybrid RANS/LES simulations of turbulent flows. *Journal of Computational Physics*, 514(??):??, October 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124005175.

Mai:2023:CEM

[MCP23] Tina Mai, Siu Wun Cheung, and Jun Sur Richard Park. Constraint energy minimizing generalized multiscale finite element method for multi-continuum Richards equations. *Journal of Computational Physics*, 477(??):??, March 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123000104.

Mehmani:2021:MFF

[MCT21] Yashar Mehmani, Nicola Castelletto, and Hamdi A. Tchelepi. Multiscale formulation of frictional contact mechanics at the pore scale. *Journal of Computational Physics*, 430(??):Article 110092, April 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120308664.

Medvedev:2022:FSO

[MCVF22] Sergey Medvedev, Igor Chekhovskoy, Irina Vaseva, and Mikhail Fedoruk. Fast sixth-order algorithm based on the generalized Cayley transform for the Zakharov–Shabat system associated with nonlinear Schrödinger equation. *Journal of Computational Physics*, 448(??):Article 110764, January 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121006598.

Macias-Diaz:2020:PCM

[MD20a] J. E. Macías-Díaz. A parallelized computational model for multidimensional systems of coupled nonlinear fractional hyperbolic equations. *Journal of Computational Physics*, 402(??):Article 109043, February 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119307491.

Moguen:2020:DDA

[MD20b] Yann Moguen and Erik Dick. Diffusion and dissipation in acoustic propagation simulation by convection-pressure split algorithms in all Mach number form. *Journal of Computational Physics*, 414(??):Article 109480, August 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120302540.

Morgan:2020:LSE

[MD20c] Scott Morgan and Christopher Davies. Linear stability eigenmodal analysis for steady and temporally periodic boundary-layer flow configurations using a velocity-vorticity formulation. *Journal of Computational Physics*, 409(??):Article 109325, May 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120300991.

Mignone:2021:SCU

[MD21] A. Mignone and L. Del Zanna. Systematic construction of upwind constrained transport schemes for MHD. *Journal of Computational Physics*, 424(??):Article 109748, January 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120305222.

Mosharaf-Dehkordi:2022:FPM

[MD22] Mehdi Mosharaf-Dehkordi. A fixed point multi-scale finite volume method: Application to two-phase incompressible fluid flow through highly heterogeneous porous media. *Journal of Computational Physics*, 462(??):??, August 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122002819.

Messai:2024:AVB

[MDB24] Nadir-Alexandre Messaï, Guillaume Daviller, and Jean-François Boussuge. Artificial viscosity-based shock capturing scheme for the spectral difference method on simplicial elements. *Journal of Computational Physics*, 504(??):??, May 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912400113X.

Mittal:2021:MTI

[MDF21] Ketan Mittal, Som Dutta, and Paul Fischer. Multirate timestepping for the incompressible Navier–Stokes equations in overlapping grids. *Journal of Computational Physics*, 437(??):Article 110335, July 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121002308.

Mattesi:2020:QON

[MDG20] V. Mattesi, M. Darbas, and C. Geuzaine. A quasi-optimal non-overlapping domain decomposition method for two-dimensional time-harmonic elastic wave problems. *Journal of Computational Physics*, 401(??):Article 109050, January 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119307557.

Marciante:2022:HL

[ME22] M. Marciante and C. Enaux. The hydrodynamics of LERNA. *Journal of Computational Physics*, 463(??):??, August 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122003278.

Mennemann:2024:DGF

[MEMM24] Jan-Frederik Mennemann, Sebastian Erne, Igor Mazets, and Norbert J. Mauser. The discrete Green's function method for wave packet expansion via the free Schrödinger equation. *Journal of Computational Physics*, 511(??):??, August 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124003802.

Moura:2024:PML

[MF24] A. S. Moura and W. G. Facco. A perfectly matched layer for the absorption of electromagnetic waves using differential forms in three-dimensional domains. *Journal of Computational Physics*, 497(??):??, January 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123007246.

Mannseth:2024:CBM

[MFA24] Trond Mannseth, Kristian Fossum, and Sigurd I. Aanonsen. Calculating Bayesian model evidence for porous-media flow using a multilevel estimator. *Journal of Computational Physics*, 514(??):??, October 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124004583.

Moura:2024:JMD

[MFdSS24] R. C. Moura, L. D. Fernandes, A. F. C. da Silva, and S. J. Sherwin. Joint-mode diffusion analysis of discontinuous Galerkin methods: Towards superior dissipation estimates for nonlinear problems and implicit LES. *Journal of Computational Physics*, 505(??):??, May 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912400161X.

Mathews:2022:SMR

[MFG22] Nathaniel H. Mathews, Natasha Flyer, and Sarah E. Gibson. Solving 3D magnetohydrostatics with RBF-FD: Applications to the solar corona. *Journal of Computational Physics*, 462(??):??, August 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

URL http://www.sciencedirect.com/science/article/pii/S0021999122002765.

Mitusch:2021:HFN

[MFK21] Sebastian K. Mitusch, Simon W. Funke, and Miroslav Kuchta. Hybrid FEM-NN models: Combining artificial neural networks with the finite element method. *Journal of Computational Physics*, 446(??):Article 110651, December 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121005465.

Montanino:2022:FEF

[MFRZ22] Andrea Montanino, Alessandro Franci, Riccardo Rossi, and Giulio Zuccaro. Finite element formulation for compressible multiphase flows and its application to pyroclastic gravity currents. *Journal of Computational Physics*, 451 (??):Article 110825, February 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121007208.

Moura:2022:SHE

[MFS+22] R. C. Moura, L. D. Fernandes, A. F. C. Silva, G. Mengaldo, and S. J. Sherwin. Spectral/hp element methods' linear mechanism of (apparent) energy transfer in Fourier space: Insights into dispersion analysis for implicit LES. *Journal of Computational Physics*, 471(??):??, December 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122006763.

Mazzia:2020:VEM

[MFTZ20] Annamaria Mazzia, Massimiliano Ferronato, Pietro Teatini, and Claudia Zoccarato. Virtual element method for the numerical simulation of long-term dynamics of transitional environments. *Journal of Computational Physics*, 407(??):Article 109235, April 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120300097.

Modave:2020:CTH

[MGA20] A. Modave, C. Geuzaine, and X. Antoine. Corner treatments for high-order local absorbing boundary conditions in high-frequency acoustic scattering. *Journal of Computational Physics*, 401(??):Article 109029, January 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119307351.

Massaro:2024:EPC

[MGH24] Evan K. Massaro, Michael A. Gallis, and Nicolas G. Hadjiconstantinou. Efficient particle control in systems with large density gradients. *Journal of Computational Physics*, 508(??):??, July 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124002055.

Mayfield:2021:AGF

[MGL21] Jay Mayfield, Yijin Gao, and Songting Luo. An asymptotic Green's function method for the wave equation. *Journal of Computational Physics*, 446(??):Article 110655, December 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121005507.

Mateo-Gabin:2022:ESS

[MGMV22] Andrés Mateo-Gabín, Juan Manzanero, and Eusebio Valero. An entropy stable spectral vanishing viscosity for discontinuous Galerkin schemes: Application to shock capturing and LES models. *Journal of Computational Physics*, 471(??):??, December 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122006817.

Magaletti:2022:PPS

[MGP+22] Francesco Magaletti, Mirko Gallo, Sergio P. Perez, José A. Carrillo, and Serafim Kalliadasis. A positivity-preserving scheme for fluctuating hydrodynamics. *Journal of Computational Physics*, 463(??):??, August 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

URL http://www.sciencedirect.com/science/article/pii/S0021999122003102.

Mateo-Gabin:2023:FDF

[MGRRVR23] Andrés Mateo-Gabín, Andrés M. Rueda-Ramírez, Eusebio Valero, and Gonzalo Rubio. A flux-differencing formulation with Gauss nodes. *Journal of Computational Physics*, 489(??):??, September 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123003935.

Mouradi:2021:PIM

[MGT+21] Rem-Sophia Mouradi, Cédric Goeury, Olivier Thual, Fabrice Zaoui, and Pablo Tassi. Physically interpretable machine learning algorithm on multidimensional non-linear fields. *Journal of Computational Physics*, 428(??):Article 110074, March 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120308482.

McClarren:2022:DDA

[MH22a] Ryan G. McClarren and Terry S. Haut. Data-driven acceleration of thermal radiation transfer calculations with the dynamic mode decomposition and a sequential singular value decomposition. *Journal of Computational Physics*, 448(??):Article 110756, January 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121006513.

Miura:2022:SGS

[MH22b] Hideaki Miura and Fujihiro Hamba. Sub-grid-scale model for studying Hall effects on macroscopic aspects of magnetohydrodynamic turbulence. *Journal of Computational Physics*, 448(??):Article 110692, January 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121005878.

Mang:2023:OSA

[MHA23] Andreas Mang, Jiwen He, and Robert Azencott. An operator-splitting approach for variational optimal control formulations for diffeomorphic shape matching. *Journal of Computational Physics*, 493(??):??, November 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123005582.

Margenberg:2022:NNM

[MHLR22] Nils Margenberg, Dirk Hartmann, Christian Lessig, and Thomas Richter. A neural network multigrid solver for the Navier–Stokes equations. *Journal of Computational Physics*, 460(??):??, July 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122000456.

Meng:2024:KOL

[MHQ24] Yuhuang Meng, Jianguo Huang, and Yue Qiu. Koopman operator learning using invertible neural networks. *Journal of Computational Physics*, 501(??):??, March 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124000445.

Mei:2021:EPE

[MHW21] Lijie Mei, Li Huang, and Xinyuan Wu. Energy-preserving exponential integrators of arbitrarily high order for conservative or dissipative systems with highly oscillatory solutions. *Journal of Computational Physics*, 442(??):Article 110429, October 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121003247.

Mei:2022:UFS

[MHW22] Lijie Mei, Li Huang, and Xinyuan Wu. A unified framework for the study of high-order energy-preserving integrators for solving Poisson systems. *Journal of Computational Physics*, 450(??):Article 110822, February 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121007178.

Milan:2021:DLA

[MHWY21] Petro Junior Milan, Jean-Pierre Hickey, Xingjian Wang, and Vigor Yang. Deep-learning accelerated calculation of real-fluid properties in numerical simulation of complex flowfields. *Journal of Computational Physics*, 444 (??):Article 110567, November 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121004629.

Moon:2020:APD

[MHY20] Hojun Moon, Seungpyo Hong, and Donghyun You. Application of the parallel diagonal dominant algorithm for the incompressible Navier–Stokes equations. *Journal of Computational Physics*, 423(??):Article 109795, December 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120305696.

Mirjalili:2020:CDI

[MIM20] Shahab Mirjalili, Christopher B. Ivey, and Ali Mani. A conservative diffuse interface method for two-phase flows with provable boundedness properties. *Journal of Computational Physics*, 401(??):Article 109006, January 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119307119.

Misaka:2023:STA

[Mis23] Takashi Misaka. Space-time adaptive model order reduction utilizing local low-dimensionality of flow field. *Journal of Computational Physics*, 493(??):??, November 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123005703.

Mao:2023:IGP

[MJ23] Xiaoyu Mao and Rajeev Jaiman. An interface and geometry preserving phase-field method for fully Eulerian fluid-structure interaction. *Journal of Computational Physics*, 476(??):??, March 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122009664.

Mao:2021:VIP

[MJJ21] Xiaoyu Mao, Vaibhav Joshi, and Rajeev Jaiman. A variational interface-preserving and conservative phase-field method for the surface tension effect in two-phase flows. *Journal of Computational Physics*, 433(??):Article 110166, May 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121000589.

Mantravadi:2023:HDE

[MJS23] Bhargav Mantravadi, Pankaj Jagad, and Ravi Samtaney. A hybrid discrete exterior calculus and finite difference method for Boussinesq convection in spherical shells. *Journal of Computational Physics*, 491(??):??, October 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123004928.

Meng:2020:CNN

[MK20] Xuhui Meng and George Em Karniadakis. A composite neural network that learns from multi-fidelity data: Application to function approximation and inverse PDE problems. *Journal of Computational Physics*, 401(??):Article 109020, January 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119307260.

Mehlmann:2021:SID

[MK21] Carolin Mehlmann and Peter Korn. Sea-ice dynamics on triangular grids. *Journal of Computational Physics*, 428(??):Article 110086, March 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120308603.

Maric:2020:USG

[MKB20] Tomislav Marić, Douglas B. Kothe, and Dieter Bothe. Unstructured un-split geometrical volume-of-fluid methods — a review. *Journal of Computational Physics*, 420(??):Article 109695, November 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120304691.

Margenberg:2024:ODB

[MKB24] Nils Margenberg, Franz X. Kärtner, and Markus Bause. Optimal Dirichlet boundary control by Fourier neural operators applied to nonlinear optics. *Journal of Computational Physics*, 499(??):??, February 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999123008203`.

Matsunaga:2020:MSM

[MKHI20] Takuya Matsunaga, Seiichi Koshizuka, Tomoyuki Hosaka, and Eiji Ishii. Moving surface mesh-incorporated particle method for numerical simulation of a liquid droplet. *Journal of Computational Physics*, 409(??):Article 109349, May 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999120301236`.

Mirjalili:2023:AEB

[MKM23] Shahab Mirjalili, Makrand A. Khanwale, and Ali Mani. Assessment of an energy-based surface tension model for simulation of two-phase flows using second-order phase field methods. *Journal of Computational Physics*, 474(??):??, February 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999122008580`.

Milcent:2020:MFA

[ML20] Thomas Milcent and Antoine Lemoine. Moment-of-fluid analytic reconstruction on 3D rectangular hexahedrons. *Journal of Computational Physics*, 409(??):Article 109346, May 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999120301200`.

Mehmani:2023:MPM

[ML23] Yashar Mehmani and Kangan Li. A multiscale preconditioner for microscale deformation of fractured porous media. *Journal of Computational Physics*, 482(??):??, June 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999123001560`.

Milcent:2024:AAM

[ML24] Thomas Milcent and Antoine Lemoine. An analytic approach for the moment-of-fluid interface reconstruction method on tetrahedral meshes. *Journal of Computational Physics*, 500(??):??, March 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912400007X.

Moldovan:2021:MEK

[MLCM21] G. Moldovan, G. Lehnasch, L. Cordier, and M. Meldi. A multigrid/ensemble Kalman filter strategy for assimilation of unsteady flows. *Journal of Computational Physics*, 443(??):Article 110481, October 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121003764.

Moldovan:2022:OPI

[MLCM22] G. Moldovan, G. Lehnasch, L. Cordier, and M. Meldi. Optimized parametric inference for the inner loop of the Multigrid Ensemble Kalman Filter. *Journal of Computational Physics*, 471(??):??, December 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122006842.

Martinez-Lera:2024:FEM

[MLD24] P. Martínez-Lera and M. De Corato. A finite element method for stochastic diffusion equations using fluctuating hydrodynamics. *Journal of Computational Physics*, 510(??):??, August 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124003474.

Ma:2024:HOA

[MLL+24] Wenhua Ma, Dongmi Luo, Shiyi Li, Jianxian Qiu, Guoxi Ni, and Yibing Chen. High-order adaptive multi-resolution method on curvilinear grids I: Finite difference framework. *Journal of Computational Physics*, 498(??):??, February 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123007490.

Mao:2021:DHP

[MLM+21] Zhiping Mao, Lu Lu, Olaf Marxen, Tamer A. Zaki, and George Em Karniadakis. DeepM&Mnet for hypersonics: Predicting the coupled flow and finite-rate chemistry behind a normal shock using neural-network approximation of operators. *Journal of Computational Physics*, 447 (??):Article 110698, December 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121005933.

Macca:2024:AFS

[MLPR24] Emanuele Macca, Raphaël Loubère, Carlos Parés, and Giovanni Russo. An almost fail-safe a-posteriori limited high-order CAT scheme. *Journal of Computational Physics*, 498(??):??, February 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123007453.

Miyoshi:2020:SNR

[MM20] Takahiro Miyoshi and Takashi Minoshima. A short note on reconstruction variables in shock capturing schemes for magnetohydrodynamics. *Journal of Computational Physics*, 423(??):Article 109804, December 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120305787.

Menon:2021:QAK

[MM21a] Karthik Menon and Rajat Mittal. Quantitative analysis of the kinematics and induced aerodynamic loading of individual vortices in vortex-dominated flows: a computation and data-driven approach. *Journal of Computational Physics*, 443(??):Article 110515, October 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121004101.

Minoshima:2021:LDH

[MM21b] Takashi Minoshima and Takahiro Miyoshi. A low-dissipation HLLD approximate Riemann solver for a very wide range of Mach numbers. *Journal of Computational Physics*, 446 (??):Article 110639, December 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121005349.

Mirjalili:2021:CEC

[MM21c] Shahab Mirjalili and Ali Mani. Consistent, energy-conserving momentum transport for simulations of two-phase flows using the phase field equations. *Journal of Computational Physics*, 426(??):Article 109918, February 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120306926.

Mirjalili:2022:CCE

[MM22] Shahab Mirjalili and Ali Mani. Corrigendum to "Consistent, energy-conserving momentum transport for simulations of two-phase flows using the phase field equations" [J. Comput. Phys. **426** (2021) 109918]. *Journal of Computational Physics*, 457(??):??, May 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122000821.

Mir:2023:DRP

[MM23] Reyhaneh Mir and Davoud Mirzaei. The D-RBF-PU method for solving surface PDEs. *Journal of Computational Physics*, 479(??):??, April 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123000967.

Mirjalili:2024:CSO

[MM24] Shahab Mirjalili and Ali Mani. A conservative second order phase field model for simulation of N-phase flows. *Journal of Computational Physics*, 498(??):??, February 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123007520.

Mukundan:2022:HMF

[MMdMB22] Anirudh Asuri Mukundan, Thibaut Ménard, Jorge César Brändle de Motta, and Alain Berlemont. A hybrid moment of fluid-level set framework for simulating primary atomization. *Journal of Computational Physics*, 451(??): Article 110864, February 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121007592.

Magome:2024:HCV

[MMKM24] Nozomi Magome, Naoki Morita, Shigeki Kaneko, and Naoto Mitsume. Higher-continuity s-version of finite element method with B-spline functions. *Journal of Computational Physics*, 497(??):??, January 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123006885.

Martin:2024:OBD

[MMLL+24] Hugo A. Martin, Anne Mangeney, Aline Lefebvre-Lepot, Bertrand Maury, and Yvon Maday. An optimization-based discrete element model for dry granular flows: Application to granular collapse on erodible beds. *Journal of Computational Physics*, 498(??):??, February 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912300760X.

Muller:2023:SIF

[MMM23] Christoph Müller, Pascal Mossier, and Claus-Dieter Munz. A sharp interface framework based on the inviscid Godunov–Peshkov–Romenski equations: Simulation of evaporating fluids. *Journal of Computational Physics*, 473(??):??, January 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122008002.

Munoz-Matute:2021:EBD

[MMPD21] Judit Muñoz-Matute, David Pardo, and Leszek Demkowicz. Equivalence between the DPG method and the exponential integrators for linear parabolic problems. *Journal of Computational Physics*, 429(??):Article 110016, March 15, 2021.

CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120307907.

Moufid:2022:EAD

[MMRP22] Ilyes Moufid, Denis Matignon, Rémi Roncen, and Estelle Piot. Energy analysis and discretization of the time-domain equivalent fluid model for wave propagation in rigid porous media. *Journal of Computational Physics*, 451(??):Article 110888, February 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912100783X.

Ma:2024:ESS

[MMS24] Ziqi Ma, Zhiping Mao, and Jie Shen. Efficient and stable SAV-based methods for gradient flows arising from deep learning. *Journal of Computational Physics*, 505(??):??, May 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124001608.

Mazzieri:2022:EAM

[MMSW22] Ilario Mazzieri, Markus Muhr, Marco Stupazzini, and Barbara Wohlmuth. Elasto-acoustic modeling and simulation for the seismic response of structures: the case of the Tahtalı dam in the 2020 İzmir earthquake. *Journal of Computational Physics*, 466(??):??, October 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122004739.

Morand:2024:DLF

[MMW+24] Victor Morand, Nils Müller, Ryan Weightman, Benedetto Piccoli, Alexander Keimer, and Alexandre M. Bayen. Deep learning of first-order nonlinear hyperbolic conservation law solvers. *Journal of Computational Physics*, 511(??):??, August 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124003632.

Ma:2024:MOC

[MMY+24] Yankai Ma, Meiliang Mao, Zhen-Guo Yan, Jinwei Bai, Huajun Zhu, and Xiaogang Deng. A multi-order candidates weighting framework for discontinuity capturing of hyperbolic conservation laws. *Journal of Computational Physics*, 510(??):??, August 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124003139.

Morinishi:2023:CLE

[MMYT23] Yohei Morinishi, Teppei Miyanishi, Toru Yamada, and Shinji Tamano. Convection linearization of energy conservative implicit method for incompressible turbulence simulations. *Journal of Computational Physics*, 475(??):??, February 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122009305.

Malan:2021:GVM

[MMZR21] L. C. Malan, A. G. Malan, S. Zaleski, and P. G. Rousseau. A geometric VOF method for interface resolved phase change and conservative thermal energy advection. *Journal of Computational Physics*, 426(??):Article 109920, February 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912030694X.

Mu:2022:SCG

[MMZZ22] Kailong Mu, Jia Mao, Lanhao Zhao, and Hanyue Zhu. A simple Chimera grid method with an implicit Dirichlet/Neumann coupling scheme for flows with moving boundaries. *Journal of Computational Physics*, 468(??):??, November 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122005745.

Millmore:2020:MPS

[MN20] Stephen Millmore and Nikolaos Nikiforakis. Multi-physics simulations of lightning strike on elastoplastic substrates. *Journal of Computational Physics*, 405(??):Article 109142, March 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print),

1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119308472.

Mantri:2021:WBD

[MN21] Yogiraj Mantri and Sebastian Noelle. Well-balanced discontinuous Galerkin scheme for 2×2 hyperbolic balance law. *Journal of Computational Physics*, 429(??):Article 110011, March 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120307853.

MacLean:2022:AMG

[MN22] Keigan MacLean and Siva Nadarajah. Anisotropic mesh generation and adaptation for quads using the L_p-CVT method. *Journal of Computational Physics*, 470(??):??, December 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122006404.

Mowlavi:2023:OCP

[MN23] Saviz Mowlavi and Saleh Nabi. Optimal control of PDEs using physics-informed neural networks. *Journal of Computational Physics*, 473(??):??, January 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912200794X.

Maurer:2020:GGG

[MND+20] M. Maurer, A. Bañón Navarro, T. Dannert, M. Restelli, F. Hindenlang, T. Görler, D. Told, D. Jarema, G. Merlo, and F. Jenko. GENE-3D: a global gyrokinetic turbulence code for stellarators. *Journal of Computational Physics*, 420(??):Article 109694, November 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912030468X.

Marx:2022:REF

[MNG+22] Laura Marx, Justyna A. Niestrawska, Matthias A. F. Gsell, Federica Caforio, Gernot Plank, and Christoph M. Augustin. Robust and efficient fixed-point algorithm for the inverse elastostatic problem to identify myocardial passive material parameters and the unloaded reference configuration. *Journal of Computational Physics*, 463(??):??, August 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912200328X.

Magnetta:2022:VFC

[MO22] Bradley Magnetta and Vidvuds Ozolins. A variational framework for computing Wannier functions using dictionary learning. *Journal of Computational Physics*, 455(??):??, April 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121006884.

Massa:2022:AES

[MOBR22] F. Massa, L. Ostrowski, F. Bassi, and C. Rohde. An artificial equation of state based Riemann solver for a discontinuous Galerkin discretization of the incompressible Navier–Stokes equations. *Journal of Computational Physics*, 448(??):Article 110705, January 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121006008.

Maurel-Oujia:2024:CDO

[MOMS24] Thibault Maurel-Oujia, Keigo Matsuda, and Kai Schneider. Computing differential operators of the particle velocity in moving particle clouds using tessellations. *Journal of Computational Physics*, 498(??):??, February 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123007532.

Montecinos:2021:UCH

[Mon21] Gino I. Montecinos. A universal centred high-order method based on implicit Taylor series expansion with fast second order evolution of spatial derivatives. *Journal of Computational Physics*, 443(??):Article 110535, October 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121004307.

Mantri:2024:FWB

[MÖR24] Yogiraj Mantri, Philipp Öffner, and Mario Ricchiuto. Fully well-balanced entropy controlled discontinuous Galerkin spectral element method for shallow water flows: Global flux quadrature and cell entropy correction. *Journal of Computational Physics*, 498(??):??, February 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123007684.

Monrolin:2021:MST

[MP21] Nicolas Monrolin and Franck Plouraboué. Multi-scale two-domain numerical modeling of stationary positive DC corona discharge/drift-region coupling. *Journal of Computational Physics*, 443(??):Article 110517, October 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121004125.

Matharu:2024:ABE

[MP24a] Pritpal Matharu and Bartosz Protas. Adjoint-based enforcement of state constraints in PDE optimization problems. *Journal of Computational Physics*, 517(??):??, November 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124005461.

Mora-Paz:2024:HOT

[MP24b] Jaime Mora-Paz. High-order transient multidimensional simulation of a thermo-electro-chemo-mechanical model for lithium-ion batteries. *Journal of Computational Physics*, 519(??):??, December 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124006405.

Menez:2023:AVP

[MPBG23] L. Ménez, P. Parnaudeau, M. Beringhier, and E. Goncalves Da Silva. Assessment of volume penalization and immersed boundary methods for compressible flows with various thermal boundary conditions. *Journal of Computational Physics*, 493(??):??, November 15, 2023. CODEN

JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123005600.

Mistani:2023:JDN

[MPIG23] Pouria A. Mistani, Samira Pakravan, Rajesh Ilango, and Frederic Gibou. JAX-DIPS: Neural bootstrapping of finite discretization methods and application to elliptic problems with discontinuities. *Journal of Computational Physics*, 493(??):??, November 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123005752.

Munoz-Perez:2020:SGH

[MPMD20] Luis F. Muñoz-Pérez and J. E. Macías-Díaz. On the solution of a generalized Higgs boson equation in the de Sitter space-time through an efficient and Hamiltonian scheme. *Journal of Computational Physics*, 417(??):Article 109568, September 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120303429.

McGregor:2022:VSS

[MPSP22] Duncan McGregor, Edward Phillips, David Sirajuddin, and Timothy Pointon. Variational, stable, and self-consistent coupling of 3D electromagnetics to 1D transmission lines in the time domain. *Journal of Computational Physics*, 451(??):Article 110856, February 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121007518.

Medaglia:2023:SGP

[MPZ23] Andrea Medaglia, Lorenzo Pareschi, and Mattia Zanella. Stochastic Galerkin particle methods for kinetic equations of plasmas with uncertainties. *Journal of Computational Physics*, 479(??):??, April 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123001067.

Medaglia:2024:PSM

[MPZ24] Andrea Medaglia, Lorenzo Pareschi, and Mattia Zanella. Particle simulation methods for the Landau–Fokker–Planck equation with uncertain data. *Journal of Computational Physics*, 503(??):??, April 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124000949.

Mezzadri:2020:SOM

[MQ20] Francesco Mezzadri and Xiaoping Qian. A second-order measure of boundary oscillations for overhang control in topology optimization. *Journal of Computational Physics*, 410(??):Article 109365, June 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912030139X.

Magiera:2022:MCM

[MR22] Jim Magiera and Christian Rohde. A molecular-continuum multiscale model for inviscid liquid–vapor flow with sharp interfaces. *Journal of Computational Physics*, 469(??):??, November 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122006131.

Mattsson:2023:ISP

[MR23a] Ken Mattsson and Ylva Ljungberg Rydin. Implicit summation by parts operators for finite difference approximations of first and second derivatives. *Journal of Computational Physics*, 473(??):??, January 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122008063.

Mouton:2023:DNM

[MR23b] Alexandre Mouton and Thomas Rey. On deterministic numerical methods for the quantum Boltzmann–Nordheim equation. I. Spectrally accurate approximations, Bose–Einstein condensation, Fermi–Dirac saturation. *Journal of Computational Physics*, 488(??):??, September 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (elec-

tronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123002929.

Miller:2022:NNB

[MRBC22] Sean T. Miller, Nathan V. Roberts, Stephen D. Bond, and Eric C. Cyr. Neural-network based collision operators for the Boltzmann equation. *Journal of Computational Physics*, 470(??):??, December 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122006039.

Mortier:2022:MAP

[MRBS22] Bert Mortier, Pieterjan Robbe, Martine Baelmans, and Giovanni Samaey. Multilevel asymptotic-preserving Monte Carlo for kinetic-diffusive particle simulations of the Boltzmann–BGK equation. *Journal of Computational Physics*, 450(??):Article 110736, February 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121006318.

Morvillo:2021:SPA

[MRdB21] Maria Morvillo, Calogero B. Rizzo, and Felipe P. J. de Barros. A scalable parallel algorithm for reactive particle tracking. *Journal of Computational Physics*, 446 (??):Article 110664, December 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121005593.

Meyers:2021:KOM

[MRG21] Joseph Meyers, Jonathan Rogers, and Adam Gerlach. Koopman operator method for solution of generalized aggregate data inverse problems. *Journal of Computational Physics*, 428(??):Article 110082, March 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120308561.

Magiera:2020:CAN

[MRHR20] Jim Magiera, Deep Ray, Jan S. Hesthaven, and Christian Rohde. Constraint-aware neural networks for Riemann problems. *Journal of Computational Physics*, 409 (??):Article 109345, May 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120301194.

Manzanero:2020:ESDa

[MRK+20a] Juan Manzanero, Gonzalo Rubio, David A. Kopriva, Esteban Ferrer, and Eusebio Valero. An entropy-stable discontinuous Galerkin approximation for the incompressible Navier–Stokes equations with variable density and artificial compressibility. *Journal of Computational Physics*, 408(??):Article 109241, May 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120300152.

Manzanero:2020:ESDb

[MRK+20b] Juan Manzanero, Gonzalo Rubio, David A. Kopriva, Esteban Ferrer, and Eusebio Valero. Entropy-stable discontinuous Galerkin approximation with summation-by-parts property for the incompressible Navier–Stokes/Cahn–Hilliard system. *Journal of Computational Physics*, 408(??):Article 109363, May 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120301376.

Manzanero:2020:FES

[MRK+20c] Juan Manzanero, Gonzalo Rubio, David A. Kopriva, Esteban Ferrer, and Eusebio Valero. A free-energy stable nodal discontinuous Galerkin approximation with summation-by-parts property for the Cahn–Hilliard equation. *Journal of Computational Physics*, 403(??):Article 109072, February 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119307776.

Moes:2023:EMD

[MRL+23] Nicolas Moës, Jean-François Remacle, Jonathan Lambrechts, Benoît Lé, and Nicolas Chevaugeon. The eXtreme mesh deformation approach (X-MESH) for the Stefan phase change model. *Journal of Computational Physics*, 477(??):??, March

15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912200941X.

Milani:2024:MPP

[MRR24] Riccardo Milani, Florent Renac, and Jean Ruel. Maximum principle preserving time implicit DGSEM for linear scalar hyperbolic conservation laws. *Journal of Computational Physics*, 514(??):??, October 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124005023.

Morita:2022:ABO

[MRT+22] Y. Morita, S. Rezaeiravesh, N. Tabatabaei, R. Vinuesa, K. Fukagata, and P. Schlatter. Applying Bayesian optimization with Gaussian process regression to computational fluid dynamics problems. *Journal of Computational Physics*, 449(??):Article 110788, January 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121006835.

Maurya:2020:NHC

[MRYS20] Praveen K. Maurya, Manoj K. Rajpoot, Vivek S. Yadav, and Ankit Singh. New hybrid compact schemes for structured irregular meshes using Birkhoff polynomial basis. *Journal of Computational Physics*, 423(??):Article 109808, December 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120305829.

Morse:2021:RSE

[MRZ21] Matthew J. Morse, Abtin Rahimian, and Denis Zorin. A robust solver for elliptic PDEs in 3D complex geometries. *Journal of Computational Physics*, 442(??):Article 110511, October 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912100406X.

Maes:2020:USF

[MS20a] Julien Maes and Cyprien Soulaine. A unified single-field volume-of-fluid-based formulation for multi-component interfacial transfer with local volume changes. *Journal of Computational Physics*, 402(??):Article 109024, February 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119307302.

Mullner:2020:NSM

[MS20b] M. Müllner and W. Schröder. A novel solution method for unsteady incompressible Euler flow using the vorticity-Bernoulli-pressure formulation. *Journal of Computational Physics*, 413(??):Article 109462, July 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120302369.

Mirzaei:2024:NOF

[MS24] Davoud Mirzaei and Navid Soodbakhsh. A non-oscillatory finite volume scheme using a weighted smoothed reconstruction. *Journal of Computational Physics*, 508(??):??, July 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124002304.

Mabuza:2020:LPN

[MSC+20] Sibusiso Mabuza, John N. Shadid, Eric C. Cyr, Roger P. Pawlowski, and Dmitri Kuzmin. A linearity preserving nodal variation limiting algorithm for continuous Galerkin discretization of ideal MHD equations. *Journal of Computational Physics*, 410(??):Article 109390, June 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120301649.

Millevoi:2024:PIN

[MSF24] Caterina Millevoi, Nicolò Spiezia, and Massimiliano Ferronato. On Physics-Informed Neural Networks training for coupled hydro-poromechanical problems. *Journal of Computational Physics*, 516(??):??, November 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124005473.

Metivet:2021:DRS

[MSIM21] Thibaut Metivet, Arnaud Sengers, Mourad Ismaïl, and Emmanuel Maitre. Diffusion-redistanciation schemes for 2D and 3D constrained Willmore flow: Application to the equilibrium shapes of vesicles. *Journal of Computational Physics*, 436(??):Article 110288, July 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999121001832`.

Matsunaga:2022:AFS

[MSK+22] Takuya Matsunaga, Axel Södersten, Seiichi Koshizuka, Tomoyuki Hosaka, and Eiji Ishii. Axisymmetric free-surface flow simulation using the moving surface mesh particle method and application to drop formation. *Journal of Computational Physics*, 463(??):??, August 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999122003606`.

Morab:2024:LMN

[MSM24] Sumant R. Morab, Atul Sharma, and Janani S. Murallidharan. Low Mach number approximated linearized perturbed Euler equations-based unified computational flow-induced acoustic model for 2D planar/axisymmetric complex geometry. *Journal of Computational Physics*, 514(??):??, October 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S002199912400490X`.

Mies:2023:EJD

[MST23] Fabian Mies, Mohsen Sadr, and Manuel Torrilhon. An efficient jump-diffusion approximation of the Boltzmann equation. *Journal of Computational Physics*, 490(??):??, October 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999123004035`.

Maltsev:2024:HOH

[MST24] Vadim Maltsev, Martin Skote, and Panagiotis Tsoutsanis. High-order hybrid DG-FV framework for compressible multi-fluid problems on unstructured meshes. *Journal of Computational Physics*, 502(??):??, April 1, 2024. CODEN

JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124000688.

Meehan:2022:EAP

[MSWH22] Michael A. Meehan, Sam Simons-Wellin, and Peter E. Hamlington. Efficient algorithm for proper orthogonal decomposition of block-structured adaptively refined numerical simulations. *Journal of Computational Physics*, 469(??):??, November 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122005897.

Mohan:2021:IRA

[MT21] Ananthan Mohan and Gaurav Tomar. Interface reconstruction and advection schemes for volume of fluid method in axisymmetric coordinates. *Journal of Computational Physics*, 446(??):Article 110663, December 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121005581.

Michelet:2022:MRT

[MTB22] Jordan Michelet, Mohamed Mahdi Tekitek, and Michel Berthier. Multiple relaxation time lattice Boltzmann schemes for advection-diffusion equations with application to radar image processing. *Journal of Computational Physics*, 471(??):??, December 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122006751.

Mancini:2022:PMF

[MTK22] Marc Mancini, Maxime Theillard, and Changho Kim. Projection method for the fluctuating hydrodynamics equations. *Journal of Computational Physics*, 463(??):??, August 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122003503.

Markeeva:2021:QIS

[MTO21] L. Markeeva, I. Tsybulin, and I. Oseledets. QTT-isogeometric solver in two dimensions. *Journal of Compu-*

tational Physics, 424(??):Article 109835, January 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120306094.

Mialhe:2023:EMD

[MTT+23] Guillaume Mialhe, Sébastien Tanguy, Léo Tranier, Elena-Roxana Popescu, and Dominique Legendre. An extended model for the direct numerical simulation of droplet evaporation. Influence of the Marangoni convection on Leidenfrost droplet. *Journal of Computational Physics*, 491(??):??, October 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123004618.

McGraw:2023:NOS

[MTW23] Carolyn McGraw, Andrew Till, and James Warsa. A new operator-split Compton scattering method. *Journal of Computational Physics*, 478(??):??, April 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912300075X.

Myers:2021:SET

[MTWBT21] Aaron Myers, Alexandre H. Thiéry, Kainan Wang, and Tan Bui-Thanh. Sequential ensemble transform for Bayesian inverse problems. *Journal of Computational Physics*, 427 (??):Article 110055, February 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120308299.

Muller:2023:ECL

[Mül23] Eike Hermann Müller. Exact conservation laws for neural network integrators of dynamical systems. *Journal of Computational Physics*, 488(??):??, September 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123003297.

Martin-Vaquero:2020:SNP

[MVK20] J. Martín-Vaquero and A. Kleefeld. Solving nonlinear parabolic PDEs in several dimensions: Parallelized ES-

ERK codes. *Journal of Computational Physics*, 423 (??):Article 109771, December 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120305453.

Michel:2022:PST

[MVO+22] J. Michel, A. Vergnaud, G. Oger, C. Hermange, and D. Le Touzé. On particle shifting techniques (PSTs): Analysis of existing laws and proposition of a convergent and multi-invariant law. *Journal of Computational Physics*, 459(??):??, June 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122000614.

Miao:2022:NCS

[MW22] Shuai Miao and Jiming Wu. A nonlinear correction scheme for the heterogeneous and anisotropic diffusion problems on polygonal meshes. *Journal of Computational Physics*, 448(??):Article 110729, January 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121006240.

Maddu:2024:LFA

[MWS24] Suryanarayana Maddu, Scott Weady, and Michael J. Shelley. Learning fast, accurate, and stable closures of a kinetic theory of an active fluid. *Journal of Computational Physics*, 504(??):??, May 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124001189.

Ma:2020:IBL

[MWY+20] Jingtao Ma, Zhen Wang, John Young, Joseph C. S. Lai, Yi Sui, and Fang-Bao Tian. An immersed boundary-lattice Boltzmann method for fluid-structure interaction problems involving viscoelastic fluids and complex geometries. *Journal of Computational Physics*, 415(??):Article 109487, August 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120302618.

Mu:2023:FEM

[MWZ23] Pengcong Mu, Xinming Wu, and Weiying Zheng. A finite element method with energy-adaptive grids for the coupled Schrödinger–Poisson-drift–diffusion model. *Journal of Computational Physics*, 495(??):??, December 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912300623X.

Mehmani:2022:PNM

[MX22] Yashar Mehmani and Ke Xu. Pore-network modeling of Ostwald ripening in porous media: How do trapped bubbles equilibrate? *Journal of Computational Physics*, 457(??):??, May 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122001036.

Ma:2024:HLF

[MXL+24] Yihui Ma, Xiaoyu Xiao, Wei Li, Mathieu Desbrun, and Xiaopei Liu. Hybrid LBM-FVM solver for two-phase flow simulation. *Journal of Computational Physics*, 506(??):??, June 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124001694.

Meng:2023:SGP

[MY23] Rui Meng and Xianjin Yang. Sparse Gaussian processes for solving nonlinear PDEs. *Journal of Computational Physics*, 490(??):??, October 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123004357.

Mor-Yossef:2024:QNP

[MY24] Yair Mor-Yossef. Quasi-Newton positivity-preserving scheme for the Spalart–Allmaras turbulence model using unstructured grids. *Journal of Computational Physics*, 513(??):??, September 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124004157.

Maltsev:2023:HDG

[MYJ+23] Vadim Maltsev, Dean Yuan, Karl W. Jenkins, Martin Skote, and Panagiotis Tsoutsanis. Hybrid discontinuous Galerkin-finite volume techniques for compressible flows on unstructured meshes. *Journal of Computational Physics*, 473(??):??, January 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912200818X.

Miao:2021:EPI

[MYL21] Shuai Miao, Yanzhong Yao, and Guixia Lv. An efficient parallel iteration algorithm for nonlinear diffusion equations with time extrapolation techniques and the Jacobi explicit scheme. *Journal of Computational Physics*, 441 (??):Article 110435, September 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121003302.

Maurya:2021:NOI

[MYM+21] Praveen K. Maurya, Vivek S. Yadav, Bikash Mahato, Naveen Ganta, Manoj K. Rajpoot, and Yogesh G. Bhumkar. New optimized implicit-explicit Runge–Kutta methods with applications to the hyperbolic conservation laws. *Journal of Computational Physics*, 446(??):Article 110650, December 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121005453.

Meng:2022:LFP

[MYM+22] Xuhui Meng, Liu Yang, Zhiping Mao, José del Águila Ferrandis, and George Em Karniadakis. Learning functional priors and posteriors from data and physics. *Journal of Computational Physics*, 457(??):??, May 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122001358.

Mo:2023:ILB

[MYY+23] Hanyang Mo, Yumei Yong, Kang Yu, Wenqiang Chen, Jialin Dai, and Chao Yang. An integrated Lattice-Boltzmann model of immiscible two-phase flow and bulk mass transfer with Marangoni effect. *Journal of Computational Physics*, 481(??):??, May 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123001328.

Mou:2022:NMM

[MYZ22] Chenchen Mou, Xianjin Yang, and Chao Zhou. Numerical methods for mean field games based on Gaussian processes and Fourier features. *Journal of Computational Physics*, 460(??):??, July 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122002509.

Mei:2024:EER

[MYZJ24] Lijie Mei, Yunbo Yang, Xiaohua Zhang, and Yaolin Jiang. Embedded exponential Runge–Kutta–Nyström methods for highly oscillatory Hamiltonian systems. *Journal of Computational Physics*, 514(??):??, October 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124004704.

Marchildon:2020:OMD

[MZ20] André L. Marchildon and David W. Zingg. Optimization of multidimensional diagonal-norm summation-by-parts operators on simplices. *Journal of Computational Physics*, 411(??):Article 109380, June 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120301546.

Ma:2022:FOU

[MZ22] Chuwen Ma and Weiying Zheng. A fourth-order unfitted characteristic finite element method for free-boundary problems. *Journal of Computational Physics*, 469(??):??, November 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122006143.

Mirhoseini:2023:MRC

[MZ23] Marzieh Alireza Mirhoseini and Matthew J. Zahr. Model reduction of convection-dominated partial differential equations via optimization-based implicit feature tracking. *Journal of Computational Physics*, 473(??):??, January 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122008026.

Montoya:2024:EES

[MZ24] Tristan Montoya and David W. Zingg. Efficient entropy-stable discontinuous spectral-element methods using tensor-product summation-by-parts operators on triangles and tetrahedra. *Journal of Computational Physics*, 516(??):??, November 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124006089.

Meng:2022:NMC

[MZC+22] Baoqing Meng, Junsheng Zeng, Qian Chen, Rui Zhou, and Baolin Tian. Numerical method for compressible gas-particle flow coupling using adaptive parcel refinement (APR) method on non-uniform mesh. *Journal of Computational Physics*, 466(??):??, October 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122004806.

Ma:2023:ESB

[MZI+23] Wentao Ma, Xuning Zhao, Shafquat Islam, Aditya Narkhede, and Kevin Wang. Efficient solution of bimaterial Riemann problems for compressible multi-material flow simulations. *Journal of Computational Physics*, 493(??):??, November 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123005697.

Nordstrom:2021:NNE

[NÅ21] Jan Nordström and Oskar Ålund. Neural network enhanced computations on coarse grids. *Journal of Computational Physics*, 425(??):Article 109821, January 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

URL http://www.sciencedirect.com/science/article/pii/S0021999120305957.

Nasu:2022:NCM

[NAZ22] Nasrin Jahan Nasu, Md. Abdullah Al Mahbub, and Haibiao Zheng. A new coupled multiphysics model and partitioned time-stepping method for the triple-porosity-Stokes fluid flow model. *Journal of Computational Physics*, 466(??):??, October 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122004594.

Nguyen:2022:HOS

[NBR22] Tuan Dung Nguyen, Christophe Besse, and François Rogier. High-order Scharfetter–Gummel-based schemes and applications to gas discharge modeling. *Journal of Computational Physics*, 461(??):??, July 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122002583.

Negrini:2021:SIT

[NCC21] Elisa Negrini, Giovanna Citti, and Luca Capogna. System identification through Lipschitz regularized deep neural networks. *Journal of Computational Physics*, 444 (??):Article 110549, November 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121004447.

Nakao:2022:ELR

[NCQ22] Joseph Nakao, Jiajie Chen, and Jing-Mei Qiu. An Eulerian–Lagrangian Runge–Kutta finite volume (EL-RK-FV) method for solving convection and convection–diffusion equations. *Journal of Computational Physics*, 470(??):??, December 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122006519.

Napier:2020:UMA

[ND20] John Napier and Emmanuel Detournay. An unstructured mesh algorithm for simulation of hydraulic fracture. *Journal of Computational Physics*, 419(??):Article 109691, October

15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120304654.

Nasir:2023:DRL

[ND23] Yusuf Nasir and Louis J. Durlofsky. Deep reinforcement learning for optimal well control in subsurface systems with uncertain geology. *Journal of Computational Physics*, 477(??):??, March 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123000402.

Nath:2020:LDR

[NDH20] Kamaljyoti Nath, Anjan Dutta, and Budhaditya Hazra. Long duration response evaluation of linear structural system with random system properties using time dependent polynomial chaos. *Journal of Computational Physics*, 418(??):Article 109596, October 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120303703.

Naddei:2021:SME

[NdlLPL21] Fabio Naddei, Marta de la Llave Plata, and Eric Lamballais. Spectral and modal energy transfer analyses of LES using the discontinuous Galerkin method and their application to the variational multiscale approach. *Journal of Computational Physics*, 427(??):Article 110031, February 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120308056.

Naevdal:2023:CCC

[NE23] Geir Nævdal and Steinar Evje. Can cancer cells inform us about the tumor microenvironment? *Journal of Computational Physics*, 492(??):??, November 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123005442.

Nardean:2021:NBN

[NFA21] Stefano Nardean, Massimiliano Ferronato, and Ahmad S. Abushaikha. A novel block non-symmetric preconditioner for mixed-hybrid finite-element-based Darcy flow simulations. *Journal of Computational Physics*, 442(??):Article 110513, October 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121004083.

Norddine:2023:RPT

[NFB23] T. Norddine, M. Ferrand, and S. Benhamadouche. Realizability-preserving time-stepping for the differential Reynolds stress turbulence models. *Journal of Computational Physics*, 494(??):??, December 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912300606X.

Nasar:2021:HOC

[NFL+21a] A. M. A. Nasar, G. Fourtakas, S. J. Lind, J. R. C. King, B. D. Rogers, and P. K. Stansby. High-order consistent SPH with the pressure projection method in 2-D and 3-D. *Journal of Computational Physics*, 444(??):Article 110563, November 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121004587.

Nasar:2021:HOV

[NFL+21b] A. M. A. Nasar, G. Fourtakas, S. J. Lind, B. D. Rogers, P. K. Stansby, and J. R. C. King. High-order velocity and pressure wall boundary conditions in Eulerian incompressible SPH. *Journal of Computational Physics*, 434(??):Article 109793, June 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120305672.

Nagar:2024:AMS

[NFPSSA24] Lorenzo Nagar, Mario Fernández-Pendás, Jesús María Sanz-Serna, and Elena Akhmatskaya. Adaptive multi-stage integration schemes for Hamiltonian Monte Carlo. *Journal of Computational Physics*, 502(??):??, April 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

URL http://www.sciencedirect.com/science/article/pii/S0021999124000494.

Nordstrom:2020:RBP

[NG20] Jan Nordström and Fatemeh Ghasemi. The relation between primal and dual boundary conditions for hyperbolic systems of equations. *Journal of Computational Physics*, 401(??):Article 109032, January 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119307387.

Nair:2022:SCI

[NG22] Nirmal J. Nair and Andres Goza. A strongly coupled immersed boundary method for fluid-structure interaction that mimics the efficiency of stationary body methods. *Journal of Computational Physics*, 454(??):Article 110897, April 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121007920.

Nikl:2021:IRV

[NGK+21] Jan Nikl, Ilja Göthel, Milan Kucharík, Stefan Weber, and Michael Bussmann. Implicit reduced Vlasov–Fokker–Planck–Maxwell model based on high-order mixed elements. *Journal of Computational Physics*, 434(??):Article 110214, June 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121001091.

Nguyen:2024:POD

[Ngu24] Ngoc Cuong Nguyen. Proper orthogonal descriptors for multi-element chemical systems. *Journal of Computational Physics*, 511(??):??, August 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124003516.

Natarajan:2022:MEB

[NGZD22] Mahesh Natarajan, Ray Grout, Weiqun Zhang, and Marc Day. A moving embedded boundary approach for the compressible Navier–Stokes equations in a block-structured adaptive refinement framework. *Journal of Computational*

Physics, 465(??):??, September 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122003771.

Nicholls:2022:HOS

[Nic22] David P. Nicholls. A high-order spectral algorithm for the numerical simulation of layered media with uniaxial hyperbolic materials. *Journal of Computational Physics*, 453(??):Article 110961, March 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122000237.

Nikiforov:2023:MGM

[Nik23] Djulustan Nikiforov. Meshfree Generalized Multiscale Finite Element Method. *Journal of Computational Physics*, 474(??):??, February 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122008610.

Nishikawa:2020:FAW

[Nis20a] Hiroaki Nishikawa. A face-area-weighted 'centroid' formula for finite-volume method that improves skewness and convergence on triangular grids. *Journal of Computational Physics*, 401(??):Article 109001, January 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119307065.

Nishikawa:2020:HPS

[Nis20b] Hiroaki Nishikawa. A hyperbolic Poisson solver for tetrahedral grids. *Journal of Computational Physics*, 409(??):Article 109358, May 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120301327.

Nishikawa:2020:LRS

[Nis20c] Hiroaki Nishikawa. On the loss and recovery of second-order accuracy with U-MUSCL. *Journal of Computational Physics*, 417(??):Article 109600, September 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (elec-

tronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120303740.

Nishikawa:2020:RNF

[Nis20d] Hiroaki Nishikawa. Robust numerical fluxes for unrealizable states. *Journal of Computational Physics*, 408 (??):Article 109244, May 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120300188.

Nishikawa:2021:HPS

[Nis21] Hiroaki Nishikawa. A hyperbolic Poisson solver for wall distance computation on irregular triangular grids. *Journal of Computational Physics*, 445(??):Article 110599, November 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121004940.

Nishikawa:2022:AFV

[Nis22a] Hiroaki Nishikawa. Analytical formulas for verification of aerodynamic force and moment computations. *Journal of Computational Physics*, 466(??):??, October 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122004703.

Nishikawa:2022:FCF

[Nis22b] Hiroaki Nishikawa. A flux correction for finite-volume discretizations: Achieving second-order accuracy on arbitrary polyhedral grids. *Journal of Computational Physics*, 468(??):??, November 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122005435.

Nishikawa:2023:PAV

[Nis23] Hiroaki Nishikawa. On pitfalls in accuracy verification using time-dependent problems. *Journal of Computational Physics*, 491(??):??, October 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123004849.

Nagata:2021:CAC

[NIT21] K. Nagata, N. Ikegaya, and J. Tanimoto. Consideration of artificial compressibility for explicit computational fluid dynamics simulation. *Journal of Computational Physics*, 443(??):Article 110524, October 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121004198.

Nykteri:2020:TFM

[NKA+20] Georgia Nykteri, Phoevos Koukouvinis, Silvestre Roberto Gonzalez Avila, Claus-Dieter Ohl, and Manolis Gavaises. A Σ–Υ two-fluid model with dynamic local topology detection: Application to high-speed droplet impact. *Journal of Computational Physics*, 408(??):Article 109225, May 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119309301.

Nayak:2021:DPE

[NKT21] Indranil Nayak, Mrinal Kumar, and Fernando L. Teixeira. Detection and prediction of equilibrium states in kinetic plasma simulations via mode tracking using reduced-order dynamic mode decomposition. *Journal of Computational Physics*, 447(??):Article 110671, December 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121005660.

Nikl:2022:HOC

[NKW22] Jan Nikl, Milan Kucharík, and Stefan Weber. High-order curvilinear finite element magneto-hydrodynamics I: a conservative Lagrangian scheme. *Journal of Computational Physics*, 464(??):??, September 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122002200.

Ni:2022:IBM

[NLZ+22] Ruichen Ni, Jiasheng Li, Xiong Zhang, Xu Zhou, and Xiaoxiao Cui. An immersed boundary-material point method for shock-structure interaction and dynamic fracture. *Journal of Computational Physics*, 470(??):??, December 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122006209.

Navas-Montilla:2023:FWB

[NME23] Adrián Navas-Montilla and Isabel Echeverribar. A family of well-balanced WENO and TENO schemes for atmospheric flows. *Journal of Computational Physics*, 489(??):??, September 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123003686.

Nikan:2021:NEF

[NMGR21] O. Nikan, J. A. Tenreiro Machado, A. Golbabai, and J. Rashidinia. Numerical evaluation of the fractional Klein–Kramers model arising in molecular dynamics. *Journal of Computational Physics*, 428(??):Article 109983, March 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120307579.

Nakayama:2024:SBM

[NMK24] Yasuya Nakayama, Yuki Matsuoka, and Toshihisa Kajiwara. Simulating Brownian motion in thermally fluctuating viscoelastic fluids by using the smoothed profile method. *Journal of Computational Physics*, 509(??):??, July 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124002845.

Najafiyazdi:2023:LES

[NMN23] Mostafa Najafiyazdi, Luc Mongeau, and Siva Nadarajah. Large eddy simulation on unstructured grids using explicit differential filtering: a case study of Taylor–Green vortex. *Journal of Computational Physics*, 476(??):??, March 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122008968.

Ntoukas:2021:FES

[NMR+21] Gerasimos Ntoukas, Juan Manzanero, Gonzalo Rubio, Eusebio Valero, and Esteban Ferrer. A free-energy stable p-adaptive nodal discontinuous Galerkin for the Cahn–Hilliard equation. *Journal of Computational Physics*, 442 (??):Article 110409, October 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121003041.

Ntoukas:2022:ESP

[NMR+22] Gerasimos Ntoukas, Juan Manzanero, Gonzalo Rubio, Eusebio Valero, and Esteban Ferrer. An entropy-stable p-adaptive nodal discontinuous Galerkin for the coupled Navier–Stokes/Cahn–Hilliard system. *Journal of Computational Physics*, 458(??):??, June 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122001553.

Naranjo-Noda:2021:LLR

[NNJ21] F. S. Naranjo-Noda and J. C. Jimenez. Locally linearized Runge–Kutta method of Dormand and Prince for large systems of initial value problems. *Journal of Computational Physics*, 426(??):Article 109946, February 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120307208.

Na:2020:DNC

[NNL+20] D.-Y. Na, J. L. Nicolini, R. Lee, B.-H. V. Borges, Y. A. Omelchenko, and F. L. Teixeira. Diagnosing numerical Cherenkov instabilities in relativistic plasma simulations based on general meshes. *Journal of Computational Physics*, 402(??):Article 108880, February 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119305777.

Nordstrom:2022:NLP

[Nor22a] Jan Nordström. Nonlinear and linearised primal and dual initial boundary value problems: When are they bounded? How are they connected? *Journal of Computational Physics*, 455(??):??, April 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122000638.

Nordstrom:2022:SSE

[Nor22b] Jan Nordström. A skew-symmetric energy and entropy stable formulation of the compressible Euler equations. *Journal of Computational Physics*, 470(??):??, December 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122006350.

Nordstrom:2024:NBC

[Nor24a] Jan Nordström. Nonlinear boundary conditions for initial boundary value problems with applications in computational fluid dynamics. *Journal of Computational Physics*, 498(??):??, February 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123007805.

Nordstrom:2024:SSE

[Nor24b] Jan Nordström. A skew-symmetric energy stable almost dissipation free formulation of the compressible Navier–Stokes equations. *Journal of Computational Physics*, 512(??):??, September 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124003942.

Nordstrom:2024:UDI

[Nor24c] Jan Nordström. Uncertain data in initial boundary value problems: Impact on short and long time predictions. *Journal of Computational Physics*, 505(??):??, May 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124001402.

Nguyen:2023:EAN

[NP23] Ngoc Cuong Nguyen and Jaime Peraire. Efficient and accurate nonlinear model reduction via first-order empirical interpolation. *Journal of Computational Physics*, 494(??):??, December 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123006071.

Nennig:2020:HOC

[NPD20] Benoit Nennig and Emmanuel Perrey-Debain. A high order continuation method to locate exceptional points and to compute Puiseux series with applications to acoustic waveguides. *Journal of Computational Physics*, 412(??):Article 109425, July 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120301996.

Novello:2024:AHR

[NPL+24] Paul Novello, Gaël Poëtte, David Lugato, Simon Peluchon, and Pietro Marco Congedo. Accelerating hypersonic reentry simulations using deep learning-based hybridization (with guarantees). *Journal of Computational Physics*, 498(??):??, February 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123007957.

Nguwi:2024:DBS

[NPP24] Jiang Yu Nguwi, Guillaume Penent, and Nicolas Privault. A deep branching solver for fully nonlinear partial differential equations. *Journal of Computational Physics*, 499(??):??, February 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123008070.

Nguyen:2023:POD

[NR23] Ngoc Cuong Nguyen and Andrew Rohskopf. Proper orthogonal descriptors for efficient and accurate interatomic potentials. *Journal of Computational Physics*, 480(??):??, May 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123001250.

Nan:2022:HOM

[NS22] Caixia Nan and Huailing Song. The high-order maximum-principle-preserving integrating factor Runge–Kutta methods for nonlocal Allen–Cahn equation. *Journal of Computational Physics*, 456(??):??, May 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122000900.

Nekkanti:2023:GSP

[NS23] Akhil Nekkanti and Oliver T. Schmidt. Gappy spectral proper orthogonal decomposition. *Journal of Computational Physics*, 478(??):??, April 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123000451.

Neron:2024:RBK

[NS24] Loann Neron and Richard Saurel. Revisiting the Becker–Kistiakowsky–Wilson equation of state. *Journal of Computational Physics*, 513(??):??, September 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124004145.

Neunteufel:2023:NSO

[NSS23] Michael Neunteufel, Joachim Schöberl, and Kevin Sturm. Numerical shape optimization of the Canham–Helfrich–Evans bending energy. *Journal of Computational Physics*, 488(??):??, September 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123003133.

Novak:2024:PIP

[NSS24] Lukás Novák, Himanshu Sharma, and Michael D. Shields. Physics-informed polynomial chaos expansions. *Journal of Computational Physics*, 506(??):??, June 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912400175X.

Nguyen:2020:SPL

[NT20] Hieu Nguyen and Richard Tsai. A stable parareal-like method for the second order wave equation. *Journal of Computational Physics*, 405(??):Article 109156, March 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119308617.

Nguyen:2023:NWP

[NT23] Hieu Nguyen and Richard Tsai. Numerical wave propagation aided by deep learning. *Journal of Computational Physics*, 475(??):??, February 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122008919.

New-Tolley:2020:HCQ

[NTSM20] Matthew R. New-Tolley, Mikhail N. Shneider, and Richard B. Miles. Hydrodynamic confirmation of quasi-similarity theory and its application to weak blast wave motion generated by ultrashort pulse laser breakdown in quiescent air. *Journal of Computational Physics*, 408(??):Article 109306, May 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120300802.

Nasab:2022:TOP

[NV22] Siavash Hedayati Nasab and Brian C. Vermeire. Third-order Paired Explicit Runge–Kutta schemes for stiff systems of equations. *Journal of Computational Physics*, 468(??):??, November 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122005320.

Novikov:2022:SCF

[NVK+22] Aleksei Novikov, Denis Voskov, Mark Khait, Hadi Hajibeygi, and Jan Dirk Jansen. A scalable collocated finite volume scheme for simulation of induced fault slip. *Journal of Computational Physics*, 469(??):??, November 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912200660X.

Nguyen:2023:AVR

[NVPP23] Ngoc Cuong Nguyen, Jordi Vila-Pérez, and Jaime Peraire. An adaptive viscosity regularization approach for the numerical solution of conservation laws: Application to finite element methods. *Journal of Computational Physics*, 494(??):??, December 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123006022.

Nguyen:2024:OTM

[NVVPP24] Ngoc Cuong Nguyen, R. Loek Van Heyningen, Jordi Vila-Pérez, and Jaime Peraire. Optimal transport for mesh adaptivity and shock capturing of compressible flows. *Journal of Computational Physics*, 508(??):??, July 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124002547.

Nishikawa:2020:ECC

[NW20] Hiroaki Nishikawa and Jeffery A. White. An efficient cell-centered finite-volume method with face-averaged nodal-gradients for triangular grids. *Journal of Computational Physics*, 411(??):Article 109423, June 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120301972.

Nordstrom:2022:LNA

[NW22] Jan Nordström and Andrew R. Winters. A linear and nonlinear analysis of the shallow water equations and its impact on boundary conditions. *Journal of Computational Physics*, 463(??):??, August 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122003163.

Nishikawa:2023:EQI

[NW23] Hiroaki Nishikawa and Jeffery A. White. An efficient quadratic interpolation scheme for a third-order cell-centered finite-volume method on tetrahedral grids. *Journal of Computational Physics*, 490(??):??, October 1, 2023. CODEN

JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123004199.

Nishioka:2021:MEM

[NWM21] Kenji Nishioka, Tomo-Hiko Watanabe, and Shinya Maeyama. Moment extract method for drift kinetic simulation of magnetized plasma. *Journal of Computational Physics*, 432 (??):Article 110167, May 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121000590.

Nillama:2022:ESF

[NYY22] Loic Balazi Atchy Nillama, Jianhui Yang, and Liang Yang. An explicit stabilised finite element method for Navier–Stokes–Brinkman equations. *Journal of Computational Physics*, 457(??):??, May 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912200095X.

Narayan:2021:ODK

[NYZ21] Akil Narayan, Liang Yan, and Tao Zhou. Optimal design for kernel interpolation: Applications to uncertainty quantification. *Journal of Computational Physics*, 430(??):Article 110094, April 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120308688.

Naudet:2024:STH

[NZ24] Charles J. Naudet and Matthew J. Zahr. A space-time high-order implicit shock tracking method for shock-dominated unsteady flows. *Journal of Computational Physics*, 501(??):??, March 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912400041X.

Ni:2024:NSA

[NZRH24] Weidan Ni, Qinghong Zeng, Yucang Ruan, and Zhiwei He. A novel steepness-adjustable harmonic volume-of-fluid method for interface capturing. *Journal of Computational Physics*, 501(??):??, March 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124000147.

Ning:2021:NFS

[NZXM21] Jianguo Ning, Hetao Zhang, Xiangzhao Xu, and Tianbao Ma. A novel fluid-structure interaction algorithm for compressible flows and deformable structures. *Journal of Computational Physics*, 426(??):Article 109921, February 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120306951.

Oulghelou:2021:NIM

[OA21] M. Oulghelou and C. Allery. Non intrusive method for parametric model order reduction using a bi-calibrated interpolation on the Grassmann manifold. *Journal of Computational Physics*, 426(??):Article 109924, February 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120306987.

OBrien:2020:MIB

[OB20] Adam O'Brien and Markus Bussmann. A moving immersed boundary method for simulating particle interactions at fluid-fluid interfaces. *Journal of Computational Physics*, 402(??):Article 109089, February 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119307946.

Orlando:2022:EID

[OBB22] Giuseppe Orlando, Paolo Francesco Barbante, and Luca Bonaventura. An efficient IMEX-DG solver for the compressible Navier–Stokes equations for non-ideal gases. *Journal of Computational Physics*, 471(??):??, December 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122007161.

Orlando:2024:ICE

[OBB24] Giuseppe Orlando, Tommaso Benacchio, and Luca Bonaventura. Impact of curved elements for flows over orography with a Discontinuous Galerkin scheme. *Journal of Computational Physics*, 519(??):??, December 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999124006934`.

Ou:2022:DGC

[OCGT22] Zhisong Ou, Cheng Chi, Liejin Guo, and Dominique Thévenin. A directional ghost-cell immersed boundary method for low Mach number reacting flows with interphase heat and mass transfer. *Journal of Computational Physics*, 468(??):??, November 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999122005095`.

Oppenheimer:2023:MSP

[ODM23] Michael W. Oppenheimer, David B. Doman, and Justin D. Merrick. Multi-scale physics-informed machine learning using the Buckingham pi theorem. *Journal of Computational Physics*, 474(??):??, February 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999122008737`.

Owen:2020:TIM

[OGG20] L. D. Owen, X. Gao, and S. M. Guzik. Techniques for improving monotonicity in a fourth-order finite-volume algorithm solving shocks and detonations. *Journal of Computational Physics*, 415(??):Article 109515, August 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999120302898`.

Oblapenko:2020:VSH

[OGVM20] G. Oblapenko, D. Goldstein, P. Varghese, and C. Moore. A velocity space hybridization-based Boltzmann equation solver. *Journal of Computational Physics*, 408 (??):Article 109302, May 1, 2020. CODEN JCTPAH.

ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120300760.

Oblapenko:2022:HDS

[OGVM22] G. Oblapenko, D. Goldstein, P. Varghese, and C. Moore. Hedging direct simulation Monte Carlo bets via event splitting. *Journal of Computational Physics*, 466(??):??, October 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122004521.

Ovadia:2021:BCF

[OKTD21] Oded Ovadia, Adar Kahana, Eli Turkel, and Shai Dekel. Beyond the Courant-Friedrichs-Lewy condition: Numerical methods for the wave problem using deep learning. *Journal of Computational Physics*, 442(??):Article 110493, October 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121003880.

Ong:2020:IBP

[OL20] Kian Chuan Ong and Ming-Chih Lai. An immersed boundary projection method for simulating the inextensible vesicle dynamics. *Journal of Computational Physics*, 408(??):Article 109277, May 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120300516.

Onder:2023:DLI

[ÖL23] Asim Önder and Philip L.-F. Liu. Deep learning of interfacial curvature: a symmetry-preserving approach for the volume of fluid method. *Journal of Computational Physics*, 485(??):??, July 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912300205X.

Orsi:2023:FIS

[OLP23] Michel Orsi, Laurent Lobry, and François Peters. Frame-invariant sub-grid corrections to the fictitious domain method for the simulation of particulate suspensions in nonlinear flows using OpenFOAM. *Journal of Computational Physics*, 474(??):??, February 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122008865.

Ong:2021:IBP

[OLS21] Kian Chuan Ong, Ming-Chih Lai, and Yunchang Seol. An immersed boundary projection method for incompressible interface simulations in 3D flows. *Journal of Computational Physics*, 430(??):Article 110090, April 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120308640.

Ortega-Moya:2024:VNU

[OMMAFPGN24] J. Ortega-Moya, S. Martínez-Aranda, J. Fernández-Pato, and P. García-Navarro. A vertically non-uniform temperature approach for the friction term computation in depth-averaged viscoplastic lava flows. *Journal of Computational Physics*, 519(??):??, December 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124006260.

Otto:2024:MLV

[OOA+24] Samuel E. Otto, Cassio M. Oishi, Fabio V. G. Amaral, Steven L. Brunton, and J. Nathan Kutz. Machine learning in viscoelastic fluids via energy-based kernel embedding. *Journal of Computational Physics*, 516(??):??, November 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124006193.

OReilly:2020:ECS

[OP20] Ossian O'Reilly and N. Anders Petersson. Energy conservative SBP discretizations of the acoustic wave equation in covariant form on staggered curvilinear grids. *Journal of Computational Physics*, 411(??):Article 109386, June 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120301601.

Olivier:2023:FIV

[OPHY23] Samuel Olivier, Will Pazner, Terry S. Haut, and Ben C. Yee. A family of independent Variable Eddington Factor methods with efficient preconditioned iterative solvers. *Journal of Computational Physics*, 473(??):??, January 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999122008105`.

OLeary:2022:SPI

[OPM22] Jared O'Leary, Joel A. Paulson, and Ali Mesbah. Stochastic physics-informed neural ordinary differential equations. *Journal of Computational Physics*, 468(??):??, November 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999122005289`.

OLeary-Roseberry:2024:DIN

[ORCVG24] Thomas O'Leary-Roseberry, Peng Chen, Umberto Villa, and Omar Ghattas. Derivative-Informed Neural Operator: an efficient framework for high-dimensional parametric derivative learning. *Journal of Computational Physics*, 496(??):??, January 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999123006502`.

Oh:2024:EEW

[ORKK24] Jun Seok Oh, Jae Sang Rhee, Tae Yoon Kung, and Kyu Hong Kim. Exact and efficient wall distance pre-classification overset grid assembly for unstructured grids. *Journal of Computational Physics*, 511(??):??, August 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999124003759`.

Oruc:2021:EMM

[Oru21] Ömer Oruç. An efficient meshfree method based on Pascal polynomials and multiple-scale approach for numerical solution of 2-D and 3-D second order elliptic interface problems. *Journal of Computational Physics*, 428(??):Article 110070, March 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print),

1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120308445.

Osinsky:2020:LRM

[Osi20] A. I. Osinsky. Low-rank method for fast solution of generalized Smoluchowski equations. *Journal of Computational Physics*, 422(??):Article 109764, December 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120305386.

Osinsky:2024:LRM

[Osi24] A. I. Osinsky. Low-rank Monte Carlo for Smoluchowski-class equations. *Journal of Computational Physics*, 506(??):??, June 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124001918.

Ong:2022:IBP

[OSL22] Kian Chuan Ong, Yunchang Seol, and Ming-Chih Lai. An immersed boundary projection method for solving the fluid-rigid body interaction problems. *Journal of Computational Physics*, 466(??):??, October 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122004296.

Ouaknin:2021:PAS

[OSZ21] Gaddiel Y. Ouaknin, Yu Su, and Roseanna N. Zia. Parallel accelerated Stokesian dynamics with Brownian motion. *Journal of Computational Physics*, 442(??):Article 110447, October 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121003429.

Oliva:2022:TFW

[OWHN22] Paul Valsecchi Oliva, Yue Wu, Cuiyu He, and Hao Ni. Towards fast weak adversarial training to solve high dimensional parabolic partial differential equations using XNODE-WAN. *Journal of Computational Physics*, 463(??):??, August 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122002959.

Ou:2024:PFM

[OXW+24] Zhisong Ou, Qiang Xue, Yong Wan, Houzhen Wei, Cheng Chi, and Dominique Thévenin. A parameter-free and monolithic approach for multiscale simulations of flow, transport, and chemical reactions in porous media. *Journal of Computational Physics*, 514(??):??, October 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124004522.

Ohmichi:2021:MFT

[OY21] Yuya Ohmichi and Kento Yamada. Matrix-free TriGlobal adjoint stability analysis of compressible Navier–Stokes equations. *Journal of Computational Physics*, 437(??): Article 110332, July 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121002278.

Ouyang:2022:HSP

[OYK+22] Zhenyu Ouyang, Zhaosheng Yu, Boo Cheong Khoo, Di Wang, and Nhan Phan-Thien. A hybrid smoothed particle hydrodynamics coupled to a fictitious domain method for particulate flows and its application in a three-dimensional printing process. *Journal of Computational Physics*, 463(??):??, August 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122003746.

Ou:2024:REP

[OZL24] Na Ou, Zecheng Zhang, and Guang Lin. A replica exchange preconditioned Crank–Nicolson Langevin dynamic MCMC method with multi-variance strategy for Bayesian inverse problems. *Journal of Computational Physics*, 510(??):??, August 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124003164.

Petrov:2020:PAM

[PA20] P. S. Petrov and X. Antoine. Pseudodifferential adiabatic mode parabolic equations in curvilinear coordinates and their numerical solution. *Journal of Computational*

Physics, 410(??):Article 109392, June 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120301662.

Pakseresht:2021:DCP

[PA21] Pedram Pakseresht and Sourabh V. Apte. A disturbance corrected point-particle approach for two-way coupled particle-laden flows on arbitrary shaped grids. *Journal of Computational Physics*, 439(??):Article 110381, August 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912100276X.

Peng:2021:TCP

[PAA21] Cheng Peng, Luis F. Ayala, and Orlando M. Ayala. A thermodynamically consistent pseudo-potential lattice Boltzmann model for multi-component, multiphase, partially miscible mixtures. *Journal of Computational Physics*, 429(??):Article 110018, March 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120307920.

Paula:2023:RHR

[PAA23] Thomas Paula, Stefan Adami, and Nikolaus A. Adams. A robust high-resolution discrete-equations method for compressible multi-phase flow with accurate interface capturing. *Journal of Computational Physics*, 491(??):??, October 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123004667.

Pei:2023:FMI

[PAGJ23] Ruqi Pei, Travis Askham, Leslie Greengard, and Shidong Jiang. A fast method for imposing periodic boundary conditions on arbitrarily-shaped lattices in two dimensions. *Journal of Computational Physics*, 474(??):??, February 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122008555.

Petrella:2023:DEM

[PAM23] M. Petrella, R. Abgrall, and S. Mishra. On the discrete equation model for compressible multiphase fluid flows. *Journal of Computational Physics*, 478(??):??, April 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999123000694`.

Pan:2020:HOS

[Pan20a] Yulin Pan. High-order spectral method for the simulation of capillary waves with complete order consistency. *Journal of Computational Physics*, 408(??):Article 109299, May 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999120300735`.

Pantokratoras:2020:CPC

[Pan20b] Asterios Pantokratoras. Comment on the paper "A computational wavelet method for variable-order fractional model of dual phase lag bioheat equation, M. Hosseininia, M. H. Heydari, R. Roohi, Z. Avazzadeh, Journal of Computational Physics **395** (2019) 1–18". *Journal of Computational Physics*, 413(??):Article 109431, July 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999120302059`. See [HHRA19].

Park:2022:NSM

[Par22] Won-Kwang Park. A novel study on the MUSIC-type imaging of small electromagnetic inhomogeneities in the limited-aperture inverse scattering problem. *Journal of Computational Physics*, 460(??):??, July 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999122002534`.

Paciorri:2020:ADS

[PB20a] Renato Paciorri and Aldo Bonfiglioli. Accurate detection of shock waves and shock interactions in two-dimensional shock-capturing solutions. *Journal of Computational Physics*, 406(??):Article 109196, April 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

URL http://www.sciencedirect.com/science/article/pii/S0021999119309015.

Patil:2020:RTR

[PB20b] Prerna Patil and Hessam Babaee. Real-time reduced-order modeling of stochastic partial differential equations via time-dependent subspaces. *Journal of Computational Physics*, 415(??):Article 109511, August 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120302850.

Poette:2022:EUC

[PB22] Gaël Poëtte and Emeric Brun. Efficient uncertain k_{eff} computations with the Monte Carlo resolution of generalised Polynomial Chaos based reduced models. *Journal of Computational Physics*, 456(??):??, May 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122000699.

Parkinson:2024:ESP

[PB24a] Christian Parkinson and Isabelle Boyle. Efficient and scalable path-planning algorithms for curvature constrained motion in the Hamilton–Jacobi formulation. *Journal of Computational Physics*, 509(??):??, July 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124002997.

Pradovera:2024:MBS

[PB24b] Davide Pradovera and Alessandro Borghi. Match-based solution of general parametric eigenvalue problems. *Journal of Computational Physics*, 519(??):??, December 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124006326.

Peng:2020:APP

[PBCL20] Zhichao Peng, Vrushali A. Bokil, Yingda Cheng, and Fengyan Li. Asymptotic and positivity preserving methods for Kerr-Debye model with Lorentz dispersion in one dimension. *Journal of Computational Physics*, 402

(??):Article 109101, February 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199911930806X.

Prouvost:2024:MBA

[PBF24] Lucas Prouvost, Anca Belme, and Daniel Fuster. A metric-based adaptive mesh refinement criterion under constrain for solving elliptic problems on quad/octree grids. *Journal of Computational Physics*, 506(??):??, June 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124001906.

Pertant:2021:FVM

[PBGB21] Savinien Pertant, Manuel Bernard, Giovanni Ghigliotti, and Guillaume Balarac. A finite-volume method for simulating contact lines on unstructured meshes in a conservative level-set framework. *Journal of Computational Physics*, 444(??):Article 110582, November 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121004770.

Peters:2022:FDC

[PBJ+22] Eric L. Peters, Riccardo Balin, Kenneth E. Jansen, Alireza Doostan, and John A. Evans. S-frame discrepancy correction models for data-informed Reynolds stress closure. *Journal of Computational Physics*, 448(??):Article 110717, January 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121006124.

Piroozmand:2023:DRR

[PBJ23] Pasha Piroozmand, Oliver Brenner, and Patrick Jenny. Dimensionality reduction for regularization of sparse data-driven RANS simulations. *Journal of Computational Physics*, 492(??):??, November 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123004990.

Panchal:2023:SED

[PBM23] Achyut Panchal, Spencer H. Bryngelson, and Suresh Menon. A seven-equation diffused interface method for resolved multiphase flows. *Journal of Computational Physics*, 475(??):??, February 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122009330.

Parsani:2021:HOA

[PBN+21] Matteo Parsani, Radouan Boukharfane, Irving Reyna Nolasco, David C. Del Rey Fernández, Stefano Zampini, Bilel Hadri, and Lisandro Dalcin. High-order accurate entropy-stable discontinuous collocated Galerkin methods with the summation-by-parts property for compressible CFD frameworks: Scalable SSDC algorithms and flow solver. *Journal of Computational Physics*, 424(??):Article 109844, January 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120306185.

Ponga:2020:LSI

[PBO20] Mauricio Ponga, Kaushik Bhattacharya, and Michael Ortiz. Large scale *ab-initio* simulations of dislocations. *Journal of Computational Physics*, 407(??):Article 109249, April 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120300231.

Piccioli:2022:MBF

[PBVC22] Francesco Piccioli, Giulia Bertaglia, Alessandro Valiani, and Valerio Caleffi. Modeling blood flow in networks of viscoelastic vessels with the 1-D augmented fluid-structure interaction system. *Journal of Computational Physics*, 464(??):??, September 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122004260.

Perez:2024:NFE

[PBZ24] Kyle A. Perez, Paul L. Barclay, and Duan Z. Zhang. Nodal force error and its reduction for material point methods. *Journal of Computational Physics*, 498(??):??, February 1,

2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123007763.

Parish:2021:WLS

[PC21a] Eric J. Parish and Kevin T. Carlberg. Windowed least-squares model reduction for dynamical systems. *Journal of Computational Physics*, 426(??):Article 109939, February 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120307130.

Perot:2021:MMP

[PC21b] J. Blair Perot and Chris Chartrand. A mimetic method for polygons. *Journal of Computational Physics*, 424 (??):Article 109853, January 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120306276.

Pudykiewicz:2022:CEE

[PC22] Janusz A. Pudykiewicz and Colm Clancy. Convection experiments with the exponential time integration scheme. *Journal of Computational Physics*, 449(??):Article 110803, January 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121006987.

Pan:2023:DFM

[PC23] Tsorng-Whay Pan and Shang-Huan Chiu. A DLM/FD method for simulating balls settling in Oldroyd-B viscoelastic fluids. *Journal of Computational Physics*, 484(??):??, July 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123001663.

Pu:2024:LPI

[PC24] Juncai Pu and Yong Chen. Lax pairs informed neural networks solving integrable systems. *Journal of Computational Physics*, 510(??):??, August 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124003395.

Pretti:2023:CLC

[PCA+23] Giuliano Pretti, William M. Coombs, Charles E. Augarde, Bradley Sims, Marc Marchena Puigvert, and José Antonio Reyna Gutiérrez. A conservation law consistent updated Lagrangian material point method for dynamic analysis. *Journal of Computational Physics*, 485(??):??, July 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999123001705`.

Parada:2021:DAF

[PCB21] Samuel Parada, Ramon Codina, and Joan Baiges. Development of an algebraic fractional step scheme for the primitive formulation of the compressible Navier–Stokes equations. *Journal of Computational Physics*, 433(??):Article 110017, May 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999120307919`.

Parada:2022:VBF

[PCB22] Samuel Parada, Ramon Codina, and Joan Baiges. A VMS-based fractional step technique for the compressible Navier–Stokes equations using conservative variables. *Journal of Computational Physics*, 459(??):??, June 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999122001991`.

Potter:2023:NGA

[PCD23] Samuel F. Potter, Maria K. Cameron, and Ramani Duraiswami. Numerical geometric acoustics: an eikonal-based approach for modeling sound propagation in 3D environments. *Journal of Computational Physics*, 486(??):??, August 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999123002061`.

Pan:2021:SOU

[PCF21] Jianhua Pan, Yu-Yen Chen, and Liang-Shih Fan. Second-order unconditional positive preserving schemes for non-equilibrium reactive flows with mass and mole balance. *Journal of Computational Physics*, 441(??):Article 110477, September 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121003727.

Peng:2020:SEA

[PCQL20] Zhichao Peng, Yingda Cheng, Jing-Mei Qiu, and Fengyan Li. Stability-enhanced AP IMEX-LDG schemes for linear kinetic transport equations under a diffusive scaling. *Journal of Computational Physics*, 415(??):Article 109485, August 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912030259X.

Pezzano:2021:NBD

[PD21] Stefano Pezzano and Régis Duvigneau. A NURBS-based discontinuous Galerkin method for conservation laws with high-order moving meshes. *Journal of Computational Physics*, 434(??):Article 110093, June 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120308676.

Pagliantini:2023:PBA

[PDM23] Cecilia Pagliantini, Gian Luca Delzanno, and Stefano Markidis. Physics-based adaptivity of a spectral method for the Vlasov–Poisson equations based on the asymmetrically-weighted Hermite expansion in velocity space. *Journal of Computational Physics*, 488(??):??, September 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123003479.

Pang:2020:NNP

[PDPK20] G. Pang, M. D'Elia, M. Parks, and G. E. Karniadakis. nPINNs: Nonlocal physics-informed neural networks for a parametrized nonlocal universal Laplacian operator. Algorithms and applications. *Journal of Computational Physics*, 422(??):Article 109760, December 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120305349.

Pakseresht:2020:CSW

[PEA20] Pedram Pakseresht, Mahdi Esmaily, and Sourabh V. Apte. A correction scheme for wall-bounded two-way coupled point-particle simulations. *Journal of Computational Physics*, 420(??):Article 109711, November 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912030485X.

Prugger:2023:DLR

[PEL23] Martina Prugger, Lukas Einkemmer, and Carlos F. Lopez. A dynamical low-rank approach to solve the chemical master equation for biological reaction networks. *Journal of Computational Physics*, 489(??):??, September 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123003455.

Peng:2024:ROM

[Pen24] Zhichao Peng. Reduced order model enhanced source iteration with synthetic acceleration for parametric radiative transfer equation. *Journal of Computational Physics*, 517(??):??, November 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124005515.

Perrin:2023:ESF

[Per23] Guy Perrin. An exact solution to the Fourier Transform of band-limited periodic functions with nonequispaced data and application to non-periodic functions. *Journal of Computational Physics*, 474(??):??, February 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122008695.

Pham:2024:AAG

[PFF+24] Ha Pham, Florian Faucher, Damien Fournier, Hélène Barucq, and Laurent Gizon. Assembling algorithm for Green's tensors and absorbing boundary conditions for Galbrun's equation in radial symmetry. *Journal of Computational Physics*, 519(??):??, December 15, 2024. CODEN

JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124006922.

Puelz:2020:SIM

[PG20] Charles Puelz and Boyce E. Griffith. A sharp interface method for an immersed viscoelastic solid. *Journal of Computational Physics*, 409(??):Article 109217, May 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119309222.

Plaud:2024:SIL

[PG24] Mathieu Plaud and Stany Gallier. A sharp-interface level-set formalism for multiphase suspension flows. *Journal of Computational Physics*, 512(??):??, September 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124003504.

Poveda:2024:SOE

[PGC24] Leonardo A. Poveda, Juan Galvis, and Eric Chung. A second-order exponential integration constraint energy minimizing generalized multiscale method for parabolic problems. *Journal of Computational Physics*, 502(??):??, April 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124000457.

Pimentel-Garcia:2022:CDR

[PGCC+22] Ernesto Pimentel-García, Manuel J. Castro, Christophe Chalons, Tomás Morales de Luna, and Carlos Parés. In-cell discontinuous reconstruction path-conservative methods for non conservative hyperbolic systems — second-order extension. *Journal of Computational Physics*, 459(??):??, June 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122002145.

Piccardo:2024:UHO

[PGH24] Stefano Piccardo, Matteo Giacomini, and Antonio Huerta. An unfitted high-order HDG method for two-fluid Stokes flow with exact NURBS geometries. *Journal of Computational Physics*, 512(??):??, September 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124003929.

Peluchon:2022:DNM

[PGM22] S. Peluchon, G. Gallice, and L. Mieussens. Development of numerical methods to simulate the melting of a thermal protection system. *Journal of Computational Physics*, 448(??):Article 110753, January 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121006483.

Pimentel-Garcia:2023:HOF

[PGMTP23] Ernesto Pimentel-García, Lucas O. Müller, Eleuterio F. Toro, and Carlos Parés. High-order fully well-balanced numerical methods for one-dimensional blood flow with discontinuous properties. *Journal of Computational Physics*, 475(??):??, February 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122009329.

Pitassi:2023:CMF

[PGP+23] Silvano Pitassi, Riccardo Ghiloni, Igor Petretti, Francesco Trevisan, and Ruben Specogna. The *curved* mimetic finite difference method: Allowing grids with curved faces. *Journal of Computational Physics*, 490(??):??, October 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123003893.

Partin:2023:MDF

[PGR+23] Lauren Partin, Gianluca Geraci, Ahmad A. Rushdi, Michael S. Eldred, and Daniele E. Schiavazzi. Multifidelity data fusion in convolutional encoder/decoder networks. *Journal of Computational Physics*, 472(??):??, January 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912200729X.

Pitassi:2022:IDC

[PGS22] Silvano Pitassi, Riccardo Ghiloni, and Ruben Specogna. Inverting the discrete curl operator: a novel graph algorithm to find a vector potential of a given vector field. *Journal of Computational Physics*, 466(??):??, October 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122004661.

Pitassi:2021:RDG

[PGTS21] Silvano Pitassi, Riccardo Ghiloni, Francesco Trevisan, and Ruben Specogna. The role of the dual grid in low-order compatible numerical schemes on general meshes. *Journal of Computational Physics*, 436(??):Article 110285, July 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121001807.

Pazner:2021:SNA

[PH21] Will Pazner and Terry Haut. A short note on the accuracy of the discontinuous Galerkin method with reentrant faces. *Journal of Computational Physics*, 443(??): Article 110448, October 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121003430.

Peschka:2022:MHH

[PH22] Dirk Peschka and Luca Heltai. Model hierarchies and higher-order discretisation of time-dependent thin-film free boundary problems with dynamic contact angle. *Journal of Computational Physics*, 464(??):??, September 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122003874.

Pamela:2022:GFG

[PHHJ22] S. J. P. Pamela, G. T. A. Huijsmans, M. Hoelzl, and JOREK Team. A generalised formulation of G-continuous Bézier elements applied to non-linear MHD simulations. *Journal of Computational Physics*, 464(??):??, September 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (elec-

tronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122001632.

Pan:2021:ESF

[PHP21] Mingyang Pan, Dongdong He, and Kejia Pan. Energy stable finite element method for an electrohydrodynamic model with variable density. *Journal of Computational Physics*, 424(??):Article 109870, January 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120306446.

Park:2024:RRI

[PhSHK24] Yesom Park, Chang hoon Song, Jooyoung Hahn, and Myungjoo Kang. *ReSDF*: Redistancing implicit surfaces using neural networks. *Journal of Computational Physics*, 502(??):??, April 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124000524.

Peng:2023:NGM

[PHX23] Yifan Peng, Dan Hu, and Zin-Qin John Xu. A non-gradient method for solving elliptic partial differential equations with deep neural networks. *Journal of Computational Physics*, 472(??):??, January 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122007537.

Pang:2022:AAB

[PJA22] Gang Pang, Songsong Ji, and Xavier Antoine. Accurate absorbing boundary conditions for two-dimensional peridynamics. *Journal of Computational Physics*, 466(??):??, October 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122004132.

Pulliam:2020:IEP

[PJBB20] Thomas H. Pulliam, Dennis C. Jespersen, Daniel J. Bodony, and Shreyas Bidadi. Improved eigenvectors for Pulliam–Chaussee diagonalized approximate-factorization algorithm. *Journal of Computational Physics*, 412(??):Article 109443, July 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120302175.

Pathak:2023:TDN

[PJR23] Ashish Pathak, Wen Jin, and Mehdi Raessi. A three-dimensional numerical scheme for modeling discontinuous pinning at sharp edges using the Volume-of-Fluid method. *Journal of Computational Physics*, 479(??):??, April 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123000815.

Pant:2021:TPM

[PJW21] Tejas Pant, Utsav Jain, and Haifeng Wang. Transported PDF modeling of compressible turbulent reactive flows by using the Eulerian Monte Carlo fields method. *Journal of Computational Physics*, 425(??):Article 109899, January 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120306732.

Penwarden:2023:USF

[PJZ+23] Michael Penwarden, Ameya D. Jagtap, Shandian Zhe, George Em Karniadakis, and Robert M. Kirby. A unified scalable framework for causal sweeping strategies for Physics-Informed Neural Networks (PINNs) and their temporal decompositions. *Journal of Computational Physics*, 493(??):??, November 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123005594.

Piao:2020:ETT

[PK20] Xiangfan Piao and Philsu Kim. An efficient trajectory tracking algorithm for the backward semi-Lagrangian method of solving the guiding center problems. *Journal of Computational Physics*, 418(??):Article 109664, October 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120304381.

Petrushov:2023:ATP

[PK23] Andrey Petrushov and Boris Krasnopolsky. Automated tuning for the parameters of linear solvers. *Journal of Computational Physics*, 494(??):??, December 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123006289.

Pan:2022:MPB

[PKC22] Xiaomin Pan, Ki-Ha Kim, and Jung-Il Choi. Monolithic projection-based method with staggered time discretization for solving non–Oberbeck–Boussinesq natural convection flows. *Journal of Computational Physics*, 463(??):??, August 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912200300X.

Papoutsakis:2020:SCC

[PKG20] Andreas Papoutsakis, Phoevos Koukouvinis, and Manolis Gavaises. Solution of cavitating compressible flows using Discontinuous Galerkin discretisation. *Journal of Computational Physics*, 410(??):Article 109377, June 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120301510.

Psaros:2022:MLP

[PKK22] Apostolos F. Psaros, Kenji Kawaguchi, and George Em Karniadakis. Meta-learning PINN loss functions. *Journal of Computational Physics*, 458(??):??, June 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122001838.

Peyvan:2021:FRU

[PKL+21] Ahmad Peyvan, Jonathan Komperda, Dongru Li, Zia Ghiasi, and Farzad Mashayek. Flux reconstruction using Jacobi correction functions in discontinuous spectral element method. *Journal of Computational Physics*, 435(??):Article 110261, June 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912100156X.

Park:2023:DMM

[PKSH23] Min Sue Park, Cheolhyeong Kim, Hwijae Son, and Hyung Ju Hwang. The deep minimizing movement scheme. *Journal of Computational Physics*, 494(??):??, December 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123006137.

Peton:2020:IBM

[PL20] Nicolas Peton and Nicolas Lardjane. An immersed boundary method for geometrical shock dynamics. *Journal of Computational Physics*, 417(??):Article 109573, September 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120303478.

Pan:2024:EBI

[PLC+24] Jieyun Pan, Tian Long, Leonardo Chirco, Ruben Scardovelli, Stéphane Popinet, and Stéphane Zaleski. An edge-based interface tracking (EBIT) method for multiphase-flow simulation with surface tension. *Journal of Computational Physics*, 508(??):??, July 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124002651.

Peyvan:2022:OFN

[PLKM22] Ahmad Peyvan, Dongru Li, Jonathan Komperda, and Farzad Mashayek. Oscillation-free nodal discontinuous spectral element method for the simulation of compressible multicomponent flows. *Journal of Computational Physics*, 452(??):Article 110921, March 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121008160.

Peng:2021:ETE

[PLL+21] Jun Peng, Shengping Liu, Shiyao Li, Ke Zhang, and Yiqing Shen. An efficient targeted ENO scheme with local adaptive dissipation for compressible flow simulation. *Journal of Computational Physics*, 425(??):Article 109902, January

15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120306768.

Pham:2023:DGV

[PLM23a] Kim Pham, Nicolas Lebbe, and Agnès Maurel. Diffraction grating with varying slit width: Quasi-periodic homogenization and its numerical implementation. *Journal of Computational Physics*, 473(??):??, January 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122007902.

Puzzuoli:2023:APA

[PLM+23b] Daniel Puzzuoli, Sophia Fuhui Lin, Moein Malekakhlagh, Emily Pritchett, Benjamin Rosand, and Christopher J. Wood. Algorithms for perturbative analysis and simulation of quantum dynamics. *Journal of Computational Physics*, 489(??):??, September 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123003571.

Perez:2020:RTD

[PLV20] José Miguel Pérez, Soledad Le Clainche, and José Manuel Vega. Reconstruction of three-dimensional flow fields from two-dimensional data. *Journal of Computational Physics*, 407(??):Article 109239, April 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120300139.

Pu:2024:GKS

[PLX24] Zhigang Pu, Chang Liu, and Kun Xu. Gas-kinetic scheme for partially ionized plasma in hydrodynamic regime. *Journal of Computational Physics*, 505(??):??, May 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124001542.

Peng:2023:ELR

[PLYZN23] Yifan Peng, Lin Lin, Lexing Ying, and Leonardo Zepeda-Núñez. Efficient long-range convolutions for point clouds.

Journal of Computational Physics, 473(??):??, January 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122007550.

Panchal:2021:HEE

[PM21a] Achyut Panchal and Suresh Menon. A hybrid Eulerian-Eulerian/Eulerian–Lagrangian method for dense-to-dilute dispersed phase flows. *Journal of Computational Physics*, 439(??):Article 110339, August 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121002345.

Peng:2021:HOL

[PM21b] Zhuogang Peng and Ryan G. McClarren. A high-order/low-order (HOLO) algorithm for preserving conservation in time-dependent low-rank transport calculations. *Journal of Computational Physics*, 447(??):Article 110672, December 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121005672.

Paul:2022:NEB

[PM22a] Immanuvel Paul and Ali Mani. A novel energy balance approach for a verifiable and accurate solution of radiation extinction in purely absorbing particle clouds. *Journal of Computational Physics*, 451(??):Article 110880, February 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121007750.

Pham:2022:DGS

[PM22b] Kim Pham and Agnès Maurel. Diffraction grating with space-time modulation. *Journal of Computational Physics*, 469(??):??, November 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122005903.

Peng:2023:SBL

[PM23] Zhuogang Peng and Ryan G. McClarren. A sweep-based low-rank method for the discrete ordinate transport equation.

Journal of Computational Physics, 473(??):??, January 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122008117.

Price:2024:DAS

[PM24] Matthew A. Price and Jason D. McEwen. Differentiable and accelerated spherical harmonic and Wigner transforms. *Journal of Computational Physics*, 510(??):??, August 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124003589.

Pakravan:2021:SIP

[PMACG21] Samira Pakravan, Pouria A. Mistani, Miguel A. Aragon-Calvo, and Frederic Gibou. Solving inverse-PDE problems with physics-aware neural networks. *Journal of Computational Physics*, 440(??):Article 110414, September 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121003090.

Peng:2020:LRM

[PMF20] Zhuogang Peng, Ryan G. McClarren, and Martin Frank. A low-rank method for two-dimensional time-dependent radiation transport calculations. *Journal of Computational Physics*, 421(??):Article 109735, November 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912030509X.

Pichi:2024:GCA

[PMH24] Federico Pichi, Beatriz Moya, and Jan S. Hesthaven. A graph convolutional autoencoder approach to model order reduction for parametrized PDEs. *Journal of Computational Physics*, 501(??):??, March 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124000111.

Perez:2023:AWB

[PMSP23] Sarah Perez, Suryanarayana Maddu, Ivo F. Sbalzarini, and Philippe Poncet. Adaptive weighting of Bayesian physics informed neural networks for multitask and multiscale forward and inverse problems. *Journal of Computational Physics*, 491(??):??, October 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123004370.

Patel:2022:TCP

[PMT+22] Ravi G. Patel, Indu Manickam, Nathaniel A. Trask, Mitchell A. Wood, Myoungkyu Lee, Ignacio Tomas, and Eric C. Cyr. Thermodynamically consistent physics-informed neural networks for hyperbolic systems. *Journal of Computational Physics*, 449(??):Article 110754, January 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121006495.

Psaros:2023:UQS

[PMZ+23] Apostolos F. Psaros, Xuhui Meng, Zongren Zou, Ling Guo, and George Em Karniadakis. Uncertainty quantification in scientific machine learning: Methods, metrics, and comparisons. *Journal of Computational Physics*, 477(??):??, March 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122009652.

Pourahmadian:2022:PNF

[PN22] Fatemeh Pourahmadian and Kevish Napal. Poroelastic near-field inverse scattering. *Journal of Computational Physics*, 455(??):??, April 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122000675.

Pirozzoli:2021:NGS

[PO21] Sergio Pirozzoli and Paolo Orlandi. Natural grid stretching for DNS of wall-bounded flows. *Journal of Computational Physics*, 439(??):Article 110408, August 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912100303X.

Putz:2023:PAB

[PO23] Michele Pütz and Michael Oevermann. Performance and accuracy of the basic closure algorithm of quadrature-based moment methods. *Journal of Computational Physics*, 494(??):??, December 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123006095.

Poette:2022:EUP

[Poë22] Gaël Poëtte. Efficient uncertainty propagation for photonics: Combining implicit semi-analog Monte Carlo (ISMC) and Monte Carlo generalised Polynomial Chaos (MC-gPC). *Journal of Computational Physics*, 450(??):Article 110807, February 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121007026.

Poette:2023:MLM

[Poë23] Gaël Poëtte. Multigroup-like MC resolution of generalised polynomial chaos reduced models of the uncertain linear Boltzmann equation (+discussion on hybrid intrusive/non-intrusive uncertainty propagation). *Journal of Computational Physics*, 474(??):??, February 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122008889.

Popinet:2020:VLN

[Pop20] Stéphane Popinet. A vertically-Lagrangian, non-hydrostatic, multilayer model for multiscale free-surface flows. *Journal of Computational Physics*, 418(??):Article 109609, October 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120303831.

Panda:2020:MIP

[POS+20] Nishant Panda, Dave Osthus, Gowri Srinivasan, Daniel O'Malley, Viet Chau, Diane Oyen, and Humberto Godinez. Mesoscale informed parameter estimation through machine learning: a case-study in fracture modeling. *Journal of Computational Physics*, 420(??):Article 109719, November

1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999120304939`.

Pan:2022:ABG

[PP22a] Y. Pan and P.-O. Persson. Agglomeration-based geometric multigrid solvers for compact discontinuous Galerkin discretizations on unstructured meshes. *Journal of Computational Physics*, 449(??):Article 110775, January 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999121006707`.

Pan:2022:HOA

[PP22b] Y. Pan and P.-O. Persson. High-order accurate finite difference discretisations on fully unstructured dual quadrilateral meshes. *Journal of Computational Physics*, 461(??):??, July 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999122002637`.

Pinto:2022:SIE

[PP22c] Martin Campos Pinto and Valentin Pagès. A semi-implicit electromagnetic FEM–PIC scheme with exact energy and charge conservation. *Journal of Computational Physics*, 453(??):Article 110912, March 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S002199912100807X`.

Pan:2024:FUS

[PP24] Y. Pan and P.-O. Persson. A face-upwinded spectral element method. *Journal of Computational Physics*, 503(??):??, April 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999124000743`.

Potluri:2023:HOD

[PPB23] Vachan D. Potluri, Bhalchandra P. Puranik, and Kowsik V. R. Bodi. High order discontinuous Galerkin simulation of hypersonic shock-boundary layer interaction using subcell limiting approach. *Journal of Computational Physics*, 485(??):??, July 15, 2023. CODEN JCTPAH.

ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123002127.

Putz:2022:GAG

[PPHO22] Michele Pütz, Martin Pollack, Christian Hasse, and Michael Oevermann. A Gauss/anti-Gauss quadrature method of moments applied to population balance equations with turbulence-induced nonlinear phase-space diffusion. *Journal of Computational Physics*, 466(??):??, October 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122004259.

Pares:2021:WBH

[PPP21] Carlos Parés and Carlos Parés-Pulido. Well-balanced high-order finite difference methods for systems of balance laws. *Journal of Computational Physics*, 425(??): Article 109880, January 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120306549.

Panfilov:2021:NMF

[PPV+21] Mikhail Panfilov, Stéphane Popinet, Viatcheslav Vostrikov, Zharasbek Baishemirov, and Abdumaulen Berdyshev. Numerical modeling of fluid flow through multiscale fractured-porous media by quadtrees. *Journal of Computational Physics*, 444(??):Article 110566, November 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121004617.

Pathak:2020:ISN

[PR20] Ashish Pathak and Mehdi Raessi. An implicit, sharp numerical treatment of viscous terms at arbitrarily shaped liquid-gas interfaces in evaporative flows. *Journal of Computational Physics*, 418(??):Article 109625, October 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120303995.

Prado:2021:DDD

[PR21] Luan S. Prado and Thiago G. Ritto. Data driven Dirichlet sampling on manifolds. *Journal of Computational Physics*, 444(??):Article 110583, November 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121004782.

Parish:2023:IDC

[PR23] Eric J. Parish and Francesco Rizzi. On the impact of dimensionally-consistent and physics-based inner products for POD–Galerkin and least-squares model reduction of compressible flows. *Journal of Computational Physics*, 491(??):??, October 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123004825.

Padovan:2024:CTB

[PR24] Alberto Padovan and Clarence W. Rowley. Continuous-time balanced truncation for time-periodic fluid flows using frequential Gramians. *Journal of Computational Physics*, 496(??):??, January 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123006927.

Patsatzis:2023:DDC

[PRKS23] Dimitrios G. Patsatzis, Lucia Russo, Ioannis G. Kevrekidis, and Constantinos Siettos. Data-driven control of agent-based models: an Equation/Variable-free machine learning approach. *Journal of Computational Physics*, 478(??):??, April 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123000487.

Peter:2022:AFV

[PRL22] Jacques Peter, Florent Renac, and Clément Labbé. Analysis of finite-volume discrete adjoint fields for two-dimensional compressible Euler flows. *Journal of Computational Physics*, 449(??):Article 110811, January 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

URL http://www.sciencedirect.com/science/article/pii/S0021999121007063.

Pearl:2022:FSF

[PRO22] Jason M. Pearl, Cody D. Raskin, and J. Michael Owen. FSISPH: an SPH formulation for impacts between dissimilar materials. *Journal of Computational Physics*, 469(??):??, November 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122005952.

Pollinger:2023:SMC

[PRPK23] Theresa Pollinger, Johannes Rentrop, Dirk Pflüger, and Katharina Kormann. A stable and mass-conserving sparse grid combination technique with biorthogonal hierarchical basis functions for kinetic simulations. *Journal of Computational Physics*, 491(??):??, October 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123004333.

Park:2022:DRL

[PS22a] Kevin Min Seong Park and Adam R. Stinchcombe. Deep reinforcement learning of viscous incompressible flow. *Journal of Computational Physics*, 467(??):??, October 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122005174.

Persson:2022:DGM

[PS22b] Per-Olof Persson and Benjamin Stamm. A discontinuous Galerkin method for shock capturing using a mixed high-order and sub-grid low-order approximation space. *Journal of Computational Physics*, 449(??):Article 110765, January 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121006604.

Piotrowski:2022:SRP

[PS22c] Zbigniew P. Piotrowski and Piotr K. Smolarkiewicz. A suite of Richardson preconditioners for semi-implicit all-scale atmospheric models. *Journal of Computational*

Physics, 463(??):??, August 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122003588.

Peyvan:2023:HOM

[PSCK23] Ahmad Peyvan, Khemraj Shukla, Jesse Chan, and George Karniadakis. High-order methods for hypersonic flows with strong shocks and real chemistry. *Journal of Computational Physics*, 490(??):??, October 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123004059.

Pahlani:2023:OMD

[PSJ23] Gunjan Pahlani, Thomas E. Schwartzentruber, and Richard D. James. Objective molecular dynamics for atomistic simulation of macroscopic fluid motion. *Journal of Computational Physics*, 478(??):??, April 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123000335.

Padrino:2020:CAS

[PSL20] Juan C. Padrino, James E. Sprittles, and Duncan A. Lockerby. Comment on "Applying a second-kind boundary integral equation for surface tractions in Stokes flow". *Journal of Computational Physics*, 401(??):Article 109007, January 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119307132. See [KS11].

Perot:2020:FSM

[PSRM20] J. Blair Perot, Martin Sanchez-Rocha, and Paul Malan. A fractional-step method for steady-state flow. *Journal of Computational Physics*, 403(??):Article 109057, February 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119307624.

Palitta:2023:SBP

[PT23a] Davide Palitta and Jemima M. Tabeart. Stein-based preconditioners for weak-constraint 4D-var. *Journal of Computational Physics*, 482(??):??, June 1, 2023. CODEN

JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123001638.

Pironneau:2023:RCR

[PT23b] Olivier Pironneau and Pierre-Henri Tournier. Reflective conditions for radiative transfer in integral form with H-matrices. *Journal of Computational Physics*, 495(??):??, December 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123006265.

Prakash:2024:PGN

[PT24] Sakthi Kumar Arul Prakash and Conrad Tucker. Probabilistic graph networks for learning physics simulations. *Journal of Computational Physics*, 513(??):??, September 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124003863.

Petropavlovsky:2022:TDS

[PTT22] Sergey Petropavlovsky, Semyon Tsynkov, and Eli Turkel. 3D time-dependent scattering about complex shapes using high order difference potentials. *Journal of Computational Physics*, 471(??):??, December 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122006957.

Petropavlovsky:2024:CUE

[PTT24] Sergey Petropavlovsky, Semyon Tsynkov, and Eli Turkel. Computation of unsteady electromagnetic scattering about 3D complex bodies in free space with high-order difference potentials. *Journal of Computational Physics*, 498 (??):??, February 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123008008.

Picklo:2024:DPC

[PTZ+24] Matthew J. Picklo, Qi Tang, Yanzeng Zhang, Jennifer K. Ryan, and Xian-Zhu Tang. Denoising Particle-In-Cell data via Smoothness-Increasing Accuracy-Conserving filters with application to Bohm speed computation. *Journal of Computational Physics*, 502(??):??, April 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124000391.

Pukhov:2020:XDM

[Puk20] Alexander Pukhov. X-dispersionless Maxwell solver for plasma-based particle acceleration. *Journal of Computational Physics*, 418(??):Article 109622, October 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912030396X.

Poette:2020:NIM

[PV20] Gaël Poëtte and Xavier Valentin. A new Implicit Monte-Carlo scheme for photonics (without teleportation error and without tilts). *Journal of Computational Physics*, 412(??):Article 109405, July 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120301790.

Pereira:2022:PAH

[PV22] Carlos A. Pereira and Brian C. Vermeire. Performance and accuracy of hybridized flux reconstruction schemes. *Journal of Computational Physics*, 457(??):??, May 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122001012.

Pereira:2024:HFF

[PV24a] Carlos A. Pereira and Brian C. Vermeire. Hybridized formulations of flux reconstruction schemes for advection–diffusion problems. *Journal of Computational Physics*, 516 (??):??, November 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124006120.

Pereira:2024:AHF

[PV24b] Carlos A. Pereira and Brian C. Vermeire. p-adaptive hybridized flux reconstruction schemes. *Journal of Computational Physics*, 514(??):??, October 1, 2024. CODEN

JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124004674.

Prescott:2024:EML

[PWB24] Thomas P. Prescott, David J. Warne, and Ruth E. Baker. Efficient multifidelity likelihood-free Bayesian inference with adaptive computational resource allocation. *Journal of Computational Physics*, 496(??):??, January 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123006721.

Pan:2024:SOS

[PWbCJ24] Liujun Pan, Yue Wang, Jun bo Cheng, and Song Jiang. Second order symmetry-preserving conservative intersection-based remapping method in two-dimensional cylindrical coordinates. *Journal of Computational Physics*, 503(??):??, April 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124000883.

Pan:2022:NFS

[PWH+22] Kejia Pan, Xiaoxin Wu, Hongling Hu, Yunlong Yu, and Zhilin Li. A new FV scheme and fast cell-centered multigrid solver for 3D anisotropic diffusion equations with discontinuous coefficients. *Journal of Computational Physics*, 449(??):Article 110794, January 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121006896.

Panuelos:2020:LSD

[PWK20] Jonathan Panuelos, James Wadsley, and Nicholas Kevlahan. Low shear diffusion central schemes for particle methods. *Journal of Computational Physics*, 414(??):Article 109454, August 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912030228X.

Pandare:2023:DSC

[PWL+23] Aditya K. Pandare, Jacob Waltz, Weizhao Li, Hong Luo, and Jozsef Bakosi. On the design of stable, consistent, and conservative high-order methods for multi-material hydrodynamics. *Journal of Computational Physics*, 490(??):??, October 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123004084.

Pan:2024:BED

[PWX24] Kejia Pan, Xiaoxin Wu, and Yufeng Xu. Biquadratic element discrete duality finite volume method for solving elliptic equations on quadrilateral mesh. *Journal of Computational Physics*, 503(??):??, April 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124001062.

Pan:2022:EIF

[PWXY22] Kejia Pan, Xiaoxin Wu, Yufeng Xu, and Guangwei Yuan. An exact-interface-fitted mesh generator and linearity-preserving finite volume scheme for anisotropic elliptic interface problems. *Journal of Computational Physics*, 463(??):??, August 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122003552.

Peterseim:2024:SLW

[PWZ24] Daniel Peterseim, Johan Wärnegård, and Christoph Zimmer. Super-localised wave function approximation of Bose–Einstein condensates. *Journal of Computational Physics*, 510(??):??, August 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124003462.

Pan:2024:DDP

[PX24] Xinyu Pan and Dunhui Xiao. Domain decomposition for physics-data combined neural network based parametric reduced order modelling. *Journal of Computational Physics*, 519(??):??, December 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124007009.

Pareschi:2020:MCS

[PZ20] L. Pareschi and M. Zanella. Monte Carlo stochastic Galerkin methods for the Boltzmann equation with uncertainties: Space-homogeneous case. *Journal of Computational Physics*, 423(??):Article 109822, December 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120305969.

Padmanabha:2021:SIP

[PZ21] Govinda Anantha Padmanabha and Nicholas Zabaras. Solving inverse problems using conditional invertible neural networks. *Journal of Computational Physics*, 433 (??):Article 110194, May 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121000899.

Park:2022:PIN

[PZ22] Jun Sur Richard Park and Xueyu Zhu. Physics-informed neural networks for learning the homogenized coefficients of multiscale elliptic equations. *Journal of Computational Physics*, 467(??):??, October 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912200482X.

Park:2024:NIB

[PZ24a] Jun Sur Richard Park and Xueyu Zhu. A non-intrusive bifidelity reduced basis method for time-independent problems. *Journal of Computational Physics*, 502(??):??, April 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124000469.

Pensoneault:2024:EBP

[PZ24b] Andrew Pensoneault and Xueyu Zhu. Efficient Bayesian Physics Informed Neural Networks for inverse problems via Ensemble Kalman Inversion. *Journal of Computational Physics*, 508(??):??, July 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124002559.

Penwarden:2022:MMP

[PZNK22] Michael Penwarden, Shandian Zhe, Akil Narayan, and Robert M. Kirby. Multifidelity modeling for Physics-Informed Neural Networks (PINNs). *Journal of Computational Physics*, 451(??):Article 110844, February 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121007397.

Penwarden:2023:MAP

[PZNK23] Michael Penwarden, Shandian Zhe, Akil Narayan, and Robert M. Kirby. A metalearning approach for Physics-Informed Neural Networks (PINNs): Application to parameterized PDEs. *Journal of Computational Physics*, 477(??):??, March 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123000074.

Putek:2024:MOS

[PZvR24] Piotr Putek, Shahnam Gorgi Zadeh, and Ursula van Rienen. Multi-objective shape optimization of TESLA-like cavities: Addressing stochastic Maxwell's eigenproblem constraints. *Journal of Computational Physics*, 513(??):??, September 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124003747.

Pan:2020:HOA

[PZX20] Liang Pan, Fengxiang Zhao, and Kun Xu. High-order ALE gas-kinetic scheme with WENO reconstruction. *Journal of Computational Physics*, 417(??):Article 109558, September 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120303326.

Pan:2023:MDF

[PZZ+23] Dongxin Pan, Rui Zhang, Congshan Zhuo, Sha Liu, and Chengwen Zhong. A multi-degree-of-freedom gas kinetic multi-prediction implicit scheme. *Journal of Computational Physics*, 475(??):??, February 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122009342.

Qin:2020:DNS

[QAS20] Zhipeng Qin, Kali Allison, and Jenny Suckale. Direct numerical simulations of viscous suspensions with variably shaped crystals. *Journal of Computational Physics*, 401 (??):Article 109021, January 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999119307272`.

Quan:2023:FEC

[QC23] Xue Quan and Huajie Chen. A finite element configuration interaction method for Wigner localization. *Journal of Computational Physics*, 489(??):??, September 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999123003467`.

Qin:2021:RGC

[QCD21] Jiaxian Qin, Yaming Chen, and Xiaogang Deng. On the role of global conservation property for finite difference schemes. *Journal of Computational Physics*, 440 (??):Article 110437, September 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999121003326`.

Qin:2023:HPF

[QCWC23] Shanlin Qin, Rongliang Chen, Bokai Wu, and Xiao-Chuan Cai. A highly parallel fully implicit domain decomposition method for the simulation of the hemodynamics of a patient-specific artery at the full-body scale. *Journal of Computational Physics*, 472(??):??, January 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999122007938`.

Qu:2022:LTD

[QCZ22] Jiagang Qu, Weihua Cai, and Yijun Zhao. Learning time-dependent PDEs with a linear and nonlinear separate convolutional neural network. *Journal of Computational Physics*, 453(??):Article 110928, March 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

URL http://www.sciencedirect.com/science/article/pii/S0021999121008238.

Qin:2024:GDG

[QDRB24] Yigong Qin, Stephen DeWitt, Balasubramaniam Radhakrishnan, and George Biros. GrainGNN: a dynamic graph neural network for predicting 3D grain microstructure. *Journal of Computational Physics*, 510(??):??, August 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124003103.

Qin:2020:TPM

[QERT20] Zhipeng Qin, Soheil Esmaeilzadeh, Amir Riaz, and Hamdi A. Tchelepi. Two-phase multiscale numerical framework for modeling thin films on curved solid surfaces in porous media. *Journal of Computational Physics*, 413(??):Article 109464, July 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120302382.

Qadeer:2021:SFE

[QG21] Saad Qadeer and Boyce E. Griffith. The smooth forcing extension method: a high-order technique for solving elliptic equations on complex domains. *Journal of Computational Physics*, 439(??):Article 110390, August 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121002850.

Qi:2023:DDS

[QH23] Di Qi and John Harlim. A data-driven statistical-stochastic surrogate modeling strategy for complex nonlinear non-stationary dynamics. *Journal of Computational Physics*, 485(??):??, July 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123001808.

Qiu:2020:DDM

[QHLL20] Changxin Qiu, Xiaoming He, Jian Li, and Yanping Lin. A domain decomposition method for the time-dependent Navier–Stokes–Darcy model with Beavers–Joseph interface condition and defective boundary condition. *Journal of Computational Physics*, 411(??):Article 109400, June 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120301741.

Qin:2022:PFM

[QHZ+22] Yuzhe Qin, Huaxiong Huang, Yi Zhu, Chun Liu, and Shixin Xu. A phase field model for mass transport with semi-permeable interfaces. *Journal of Computational Physics*, 464(??):??, September 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122003965.

Qian:2022:FDR

[Qia22] Xiaoping Qian. On-the-fly dual reduction for time-dependent topology optimization. *Journal of Computational Physics*, 452(??):Article 110917, March 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121008123.

Qing:2023:CCD

[QJL23] Fang Qing, Zupeng Jia, and Liqi Liu. A cell-centered discontinuous Galerkin multi-material arbitrary Lagrangian–Eulerian method in axisymmetric geometry. *Journal of Computational Physics*, 473(??):??, January 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122008087.

Qian:2022:IUS

[QJQW22] Jianzhen Qian, Zupeng Jia, Fang Qing, and Pei Wang. Interface-unaware sub-scale dynamics closure model for multimaterial cells in cell-centered arbitrary Lagrangian–Eulerian hydrodynamics. *Journal of Computational Physics*, 463(??):??, August 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122003576.

Qin:2021:IIL

[QKG21] Jianhua Qin, Ebrahim M. Kolahdouz, and Boyce E. Griffith. An immersed interface-lattice Boltzmann method for fluid-structure interaction. *Journal of Computational Physics*, 428(??):Article 109807, March 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999120305817`.

Quiriny:2024:XMN

[QLMR24] Antoine Quiriny, Jonathan Lambrechts, Nicolas Moës, and Jean-François Remacle. X-Mesh: a new approach for the simulation of two-phase flow with sharp interface. *Journal of Computational Physics*, 501(??):??, March 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S002199912400024X`.

Qiu:2021:TOP

[QLY21] Changxin Qiu, Qingyuan Liu, and Jue Yan. Third order positivity-preserving direct discontinuous Galerkin method with interface correction for chemotaxis Keller–Segel equations. *Journal of Computational Physics*, 433 (??):Article 110191, May 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999121000863`.

Qian:2021:LTT

[QPW21] Jianzhen Qian, Hao Pan, and Pei Wang. A local tensor type artificial viscosity for two-dimensional Lagrangian staggered grid hydrodynamics. *Journal of Computational Physics*, 430(??):Article 110038, April 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999120308123`.

Qu:2020:SSS

[QSZB20] Feng Qu, Di Sun, Boxiao Zhou, and Junqiang Bai. Self-similar structures based genuinely two-dimensional Riemann solvers in curvilinear coordinates. *Journal of Computational Physics*, 420(??):Article 109668, November 1, 2020. CODEN

JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120304423.

Quan:2022:ESL

[QW22] Chaoyu Quan and Boyi Wang. Energy stable L2 schemes for time-fractional phase-field equations. *Journal of Computational Physics*, 458(??):??, June 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122001474.

Qian:2021:PES

[QWZ21] Yiran Qian, Cheng Wang, and Shenggao Zhou. A positive and energy stable numerical scheme for the Poisson–Nernst–Planck–Cahn–Hilliard equations with steric interactions. *Journal of Computational Physics*, 426(??): Article 109908, February 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120306823.

Qian:2023:CAS

[QWZ+23] Zhihao Qian, Lihua Wang, Chuanzeng Zhang, Zheng Zhong, and Qiang Chen. Conservation and accuracy studies of the LESCM for incompressible fluids. *Journal of Computational Physics*, 489(??):??, September 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123003649.

Qian:2023:ECS

[QWZW23] Jianzhen Qian, Yanjin Wang, Yang Zhang, and Pei Wang. An entropy consistent and symmetric seven-equation model for compressible two-phase flows. *Journal of Computational Physics*, 489(??):??, September 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123003662.

Qiao:2023:SPN

[QXYZ23] Zhonghua Qiao, Zhenli Xu, Qian Yin, and Shenggao Zhou. Structure-preserving numerical method for Maxwell–

Ampère Nernst–Planck model. *Journal of Computational Physics*, 475(??):??, February 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122009081.

Qian:2023:PIN

[QZHD23] Yanxia Qian, Yongchao Zhang, Yunqing Huang, and Suchuan Dong. Physics-informed neural networks for approximating dynamic (hyperbolic) PDEs of second order in time: Error analysis and algorithms. *Journal of Computational Physics*, 495(??):??, December 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123006228.

Qian:2024:NVC

[QZZ+24] Yingzhi Qian, Xiaoping Zhang, Yan Zhu, Lili Ju, Alberto Guadagnini, and Jiesheng Huang. A novel vertex-centered finite volume method for solving Richards' equation and its adaptation to local mesh refinement. *Journal of Computational Physics*, 501(??):??, March 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124000159.

Rondeau:2021:TPM

[RA21] Maxime Rondeau and R. Arès. On the test particle Monte-Carlo method to solve the steady state Boltzmann equation, the congruity of its results with experiments and its potential for shared memory parallelism. *Journal of Computational Physics*, 444(??):Article 110590, November 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912100485X.

Rumpler:2023:MMW

[RA23] Romain Rumpler and Quirin Aumann. MWCAWE: a multivariate WCAWE approach for parametric model order reduction, and a sampling strategy for the bivariate case. *Journal of Computational Physics*, 490(??):??, October 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912300414X.

Roy:2023:SDS

[RAB23] Thomas Roy, Julian Andrej, and Victor A. Beck. A scalable DG solver for the electroneutral Nernst–Planck equations. *Journal of Computational Physics*, 475(??):??, February 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122009226.

Rajora:2024:BSA

[RAC+24] Vaibhav Rajora, Tariq Aslam, Wesley W. Chapman, Chad Meyer, Steve F. Son, and Carlo Scalo. A block-spectral adaptive h-/p-refinement strategy for shock-dominated problems. *Journal of Computational Physics*, 514(??):??, October 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124005035.

Ranocha:2022:NNF

[Ran22] Hendrik Ranocha. A note on numerical fluxes conserving a member of Harten's one-parameter family of entropies for the compressible Euler equations. *Journal of Computational Physics*, 462(??):??, August 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122002984.

Ranocha:2023:DGD

[Ran23] Hendrik Ranocha. A discontinuous Galerkin discretization of elliptic problems with improved convergence properties using summation by parts operators. *Journal of Computational Physics*, 491(??):??, October 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912300462X.

Runnels:2021:MPF

[RAZA21] Brandon Runnels, Vinamra Agrawal, Weiqun Zhang, and Ann Almgren. Massively parallel finite difference elasticity using block-structured adaptive mesh refinement with a geometric multigrid solver. *Journal of Computational*

Physics, 427(??):Article 110065, February 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120308391.

Robaux:2021:DVN

[RB21] Fabien Robaux and Michel Benoit. Development and validation of a numerical wave tank based on the Harmonic Polynomial Cell and Immersed Boundary methods to model nonlinear wave-structure interaction. *Journal of Computational Physics*, 446(??):Article 110560, December 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121004551.

Rullan:2022:HGS

[RB22] Francesc Rul·lan and Marta M. Betcke. Hamilton–Green solver for the forward and adjoint problems in photoacoustic tomography. *Journal of Computational Physics*, 449(??):Article 110797, January 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121006926.

Roy:2024:NAK

[RB24] S. Roy and A. Borzì. Numerical approximation of kinetic Fokker–Planck equations with specular reflection boundary conditions. *Journal of Computational Physics*, 503(??):??, April 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124000901.

Rossat:2022:BIU

[RBBD22] D. Rossat, J. Baroth, M. Briffaut, and F. Dufour. Bayesian inversion using adaptive Polynomial Chaos Kriging within Subset Simulation. *Journal of Computational Physics*, 455(??):??, April 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122000481.

Ruzayqat:2023:UEU

[RBC+23] Hamza Ruzayqat, Alexandros Beskos, Dan Crisan, Ajay Jasra, and Nikolas Kantas. Unbiased estimation using a class of diffusion processes. *Journal of Computational Physics*, 472(??):??, January 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122007069.

Rojas:2021:RPE

[RBD+21] Diego Rojas, Radouan Boukharfane, Lisandro Dalcin, David C. Del Rey Fernández, Hendrik Ranocha, David E. Keyes, and Matteo Parsani. On the robustness and performance of entropy stable collocated discontinuous Galerkin methods. *Journal of Computational Physics*, 426(??): Article 109891, February 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120306653.

Riffaud:2021:DMR

[RBF+21] Sébastien Riffaud, Michel Bergmann, Charbel Farhat, Sebastian Grimberg, and Angelo Iollo. The DGDD method for reduced-order modeling of conservation laws. *Journal of Computational Physics*, 437(??):Article 110336, July 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912100231X.

Reynolds-Barredo:2020:NES

[RBPRST20] J. M. Reynolds-Barredo, H. Peraza-Rodríguez, R. Sanchez, and V. Tribaldos. A novel efficient solver for Ampere's equation in general toroidal topologies based on singular value decomposition techniques. *Journal of Computational Physics*, 406(??):Article 109214, April 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119309192.

Ricketson:2020:ECA

[RC20a] L. F. Ricketson and L. Chacón. An energy-conserving and asymptotic-preserving charged-particle orbit implicit time integrator for arbitrary electromagnetic fields. *Journal of Computational Physics*, 418(??):Article 109639, October 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120304137.

Roth:2020:SAD

[RC20b] Thomas E. Roth and Weng C. Chew. Stability analysis and discretization of A–Φ time domain integral equations for multiscale electromagnetics. *Journal of Computational Physics*, 408(??):Article 109102, May 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119308071.

Ricketson:2024:APG

[RC24] L. F. Ricketson and L. Chacón. Asymptotic-preserving gyrokinetic implicit particle-orbit integrator for arbitrary electromagnetic fields. *Journal of Computational Physics*, 513(??):??, September 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124003851.

Roy-Chowdhury:2024:HOD

[RCSS24] Ritoban Roy-Chowdhury, Tamar Shinar, and Craig Schroeder. Higher order divergence-free and curl-free interpolation on MAC grids. *Journal of Computational Physics*, 503(??):??, April 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124000809.

Rocha:2023:DML

[RDAB23] Felipe Rocha, Simone Deparis, Pablo Antolin, and Annalisa Buffa. DeepBND: a machine learning approach to enhance multiscale solid mechanics. *Journal of Computational Physics*, 479(??):??, April 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123000918.

Rydquist:2020:OSS

[RE20] Grant Rydquist and Mahdi Esmaily. An optimal $O(N)$ scheme for simulations of colliding, particle-laden flows on unstructured grids. *Journal of Computational Physics*, 420 (??):Article 109703, November 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120304770.

Rydquist:2022:CRL

[RE22] Grant Rydquist and Mahdi Esmaily. A cell-resolved, Lagrangian solver for modeling red blood cell dynamics in macroscale flows. *Journal of Computational Physics*, 461 (??):??, July 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122002662.

Ramirez:2022:ALE

[REC+22] Luis Ramírez, Antonio Eirís, Iván Couceiro, José París, and Xesús Nogueira. An arbitrary Lagrangian–Eulerian SPH-MLS method for the computation of compressible viscous flows. *Journal of Computational Physics*, 464(??):??, September 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122002340.

Reeger:2023:AIB

[Ree23] Jonah A. Reeger. Approximate integrals over bounded volumes with smooth boundaries. *Journal of Computational Physics*, 488(??):??, September 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123003303.

Reis:2022:LBF

[Rei22] T. Reis. A lattice Boltzmann formulation of the one-fluid model for multiphase flow. *Journal of Computational Physics*, 453(??):Article 110962, March 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122000249.

Renac:2021:ESR

[Ren21] Florent Renac. Entropy stable, robust and high-order DGSEM for the compressible multicomponent Euler equations. *Journal of Computational Physics*, 445(??):Article 110584, November 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121004794.

Ren:2022:FAH

[RFZ22] Yiming Ren, Hongsong Feng, and Shan Zhao. A FFT accelerated high order finite difference method for elliptic boundary value problems over irregular domains. *Journal of Computational Physics*, 448(??):Article 110762, January 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121006574.

Rabinovich:2022:ECU

[RG22] Daniel Rabinovich and Dan Givoli. Elastodynamic 2D–1D coupling using the DtN method. *Journal of Computational Physics*, 448(??):Article 110722, January 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121006173.

Rakotoarivelo:2022:CRM

[RGH+22] Hoby Rakotoarivelo, Rao Garimella, Angela Herring, Mikhail Shashkov, Daniel Shevitz, Evgeny Kikinzon, Jan Velechovsky, Konstantin Lipnikov, and Navamita Ray. Conservative remapping of material-dependent fields between possibly misaligned material regions. *Journal of Computational Physics*, 466(??):??, October 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122004636.

Ruiz-Gutierrez:2024:PCM

[RGHK+24] Élfego Ruiz-Gutiérrez, Josef Hasslberger, Markus Klein, Kenny Dalgarno, and Nilanjan Chakraborty. Physically consistent modelling of surface tension forces in the volume-of-fluid method for three or more phases. *Journal of Computational Physics*, 513(??):??, September 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912400398X.

Ruan:2022:SRD

[RGLN22] Xuan Ruan, Matthew T. Gorman, Shuiqing Li, and Rui Ni. Surface-resolved dynamic simulation of charged non-spherical particles. *Journal of Computational Physics*, 466 (??):??, October 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999122004430`.

Ruiz-Girones:2021:MIG

[RGSR21] Eloi Ruiz-Gironés, Josep Sarrate, and Xevi Roca. Measuring and improving the geometric accuracy of piece-wise polynomial boundary meshes. *Journal of Computational Physics*, 443(??):Article 110500, October 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999121003958`.

Rudi:2024:SIS

[RHC+24] Johann Rudi, Max Heldman, Emil M. Constantinescu, Qi Tang, and Xian-Zhu Tang. Scalable implicit solvers with dynamic mesh adaptation for a relativistic drift-kinetic Fokker–Planck–Boltzmann model. *Journal of Computational Physics*, 507(??):??, June 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999124002031`.

Rao:2024:NPB

[RHD+24] Xiang Rao, Xupeng He, Kou Du, Hyung Kwak, Ali Yousef, and Hussein Hoteit. A novel Projection-based Embedded Discrete Fracture Model (pEDFM) for anisotropic two-phase flow simulation using hybrid of two-point flux approximation and mimetic finite difference (TPFA-MFD) methods. *Journal of Computational Physics*, 499(??):??, February 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S002199912300832X`.

Raynaud:2022:MEP

[RHG22] Gaétan Raynaud, Sébastien Houde, and Frédérick P. Gosselin. ModalPINN: an extension of physics-informed neural networks with enforced truncated Fourier decomposition for periodic flow reconstruction using a limited number of imperfect sensors. *Journal of Computational Physics*, 464(??):??, September 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122003333.

Reuber:2020:ABI

[RHR20] Georg S. Reuber, Lukas Holbach, and Ludovic Räss. Adjoint-based inversion for porosity in shallow reservoirs using pseudo-transient solvers for non-linear hydro-mechanical processes. *Journal of Computational Physics*, 423(??): Article 109797, December 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120305714.

Reissmann:2021:AGE

[RHSK21] Maximilian Reissmann, Josef Hasslberger, Richard D. Sandberg, and Markus Klein. Application of Gene Expression Programming to a-posteriori LES modeling of a Taylor Green Vortex. *Journal of Computational Physics*, 424(??):Article 109859, January 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120306331.

Rodriguez:2022:PTR

[RIC+22] Steven N. Rodriguez, Athanasios P. Iliopoulos, Kevin T. Carlberg, Steven L. Brunton, John C. Steuben, and John G. Michopoulos. Projection-tree reduced-order modeling for fast N-body computations. *Journal of Computational Physics*, 459(??):??, June 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122002030.

Rixner:2021:PGM

[RK21] Maximilian Rixner and Phaedon-Stelios Koutsourelakis. A probabilistic generative model for semi-supervised training of coarse-grained surrogates and enforcing physical constraints through virtual observables. *Journal of Computational Physics*, 434(??):Article 110218, June 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (elec-

tronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121001133.

Raj:2023:GAS

[RKA+23] Apurva Raj, Piru Mohan Khan, Md. Irshad Alam, Akshay Prakash, and Somnath Roy. A GPU-accelerated sharp interface immersed boundary method for versatile geometries. *Journal of Computational Physics*, 478(??):??, April 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123000803.

Reutzsch:2020:CMD

[RKRW20] Jonathan Reutzsch, Corine Kieffer-Roth, and Bernhard Weigand. A consistent method for direct numerical simulation of droplet evaporation. *Journal of Computational Physics*, 413(??):Article 109455, July 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120302291.

Rozema:2020:NSL

[RKVV20] Wybe Rozema, Johan C. Kok, Arthur E. P. Veldman, and Roel W. C. P. Verstappen. Numerical simulation with low artificial dissipation of transitional flow over a delta wing. *Journal of Computational Physics*, 405(??):Article 109182, March 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119308873.

Ricardo:2024:CSD

[RLD24a] Kieran Ricardo, Dave Lee, and Kenneth Duru. Conservation and stability in a discontinuous Galerkin method for the vector invariant spherical shallow water equations. *Journal of Computational Physics*, 500(??):??, March 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124000123.

Ricardo:2024:EEC

[RLD24b] Kieran Ricardo, David Lee, and Kenneth Duru. Entropy and energy conservation for thermal atmospheric dynamics using mixed compatible finite elements. *Journal of Computational Physics*, 496(??):??, January 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123007003.

Resseguier:2022:RTE

[RLH22] Valentin Resseguier, Matheus Ladvig, and Dominique Heitz. Real-time estimation and prediction of unsteady flows using reduced-order models coupled with few measurements. *Journal of Computational Physics*, 471(??):??, December 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122006945.

Ramezanian:2020:OPS

[RMA20] Donya Ramezanian, Dimitri Mavriplis, and Behzad R. Ahrabi. An order $N \log N$ parallel solver for time-spectral problems. *Journal of Computational Physics*, 411(??):Article 109319, June 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120300930.

Rangarajan:2020:ABA

[RMD20] Ajay Rangarajan, Georg May, and Vit Dolejsi. Adjoint-based anisotropic *hp*-adaptation for discontinuous Galerkin methods using a continuous mesh model. *Journal of Computational Physics*, 409(??):Article 109321, May 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120300954.

Rath:2023:IPR

[RMJ23] Biswajeet Rath, Xiaoyu Mao, and Rajeev K. Jaiman. An interface preserving and residual-based adaptivity for phase-field modeling of fully Eulerian fluid-structure interaction. *Journal of Computational Physics*, 488(??):??, September 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123002838.

Radtke:2022:RVS

[RMM+22] Gregg A. Radtke, Nevin Martin, Christopher H. Moore, Andy Huang, and Keith L. Cartwright. Robust verification of stochastic simulation codes. *Journal of Computational Physics*, 451(??):Article 110855, February 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999121007506`.

Rakyta:2024:HOQ

[RMN+24] Péter Rakyta, Gregory Morse, Jakab Nádori, Zita Majnay-Takács, Oskar Mencer, and Zoltán Zimborás. Highly optimized quantum circuits synthesized via data-flow engines. *Journal of Computational Physics*, 500(??):??, March 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999124000056`.

Rydin:2021:HOF

[RMWS21] Ylva Ljungberg Rydin, Ken Mattsson, Jonatan Werpers, and Erik Sjöqvist. High-order finite difference method for the Schrödinger equation on deforming domains. *Journal of Computational Physics*, 443(??):Article 110530, October 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999121004253`.

Rothkopf:2023:NVD

[RN23] Alexander Rothkopf and Jan Nordström. A new variational discretization technique for initial value problems bypassing governing equations. *Journal of Computational Physics*, 477(??):??, March 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999123000372`.

Rothkopf:2024:CRL

[RN24a] Alexander Rothkopf and Jan Nordström. The crucial role of Lagrange multipliers in a space-time symmetry preserving discretization scheme for IVPs. *Journal of Computational Physics*, 511(??):??, August 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

URL http://www.sciencedirect.com/science/article/pii/S0021999124003875.

Rothkopf:2024:SNC

[RN24b] Alexander Rothkopf and Jan Nordström. A symmetry and Noether charge preserving discretization of initial value problems. *Journal of Computational Physics*, 498(??):??, February 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123007477.

Reuter:2024:SOT

[ROM24] Bryan W. Reuter, Todd A. Oliver, and Robert D. Moser. A second-order-in-time, explicit approach addressing the redundancy in the low-Mach, variable-density Navier–Stokes equations. *Journal of Computational Physics*, 514(??):??, October 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124004650.

Rower:2022:SFH

[RPA22] David A. Rower, Misha Padidar, and Paul J. Atzberger. Surface fluctuating hydrodynamics methods for the drift-diffusion dynamics of particles and microstructures within curved fluid interfaces. *Journal of Computational Physics*, 455(??):??, April 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122000560.

Russo:2021:FVM

[RPDO+21] Antonio Russo, Sergio P. Perez, Miguel A. Durán-Olivencia, Peter Yatsyshin, José A. Carrillo, and Serafim Kalliadasis. A finite-volume method for fluctuating dynamical density functional theory. *Journal of Computational Physics*, 428(??):Article 109796, March 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120305702.

Ramabathiran:2021:SSP

[RR21a] Amuthan A. Ramabathiran and Prabhu Ramachandran. SPINN: Sparse, physics-based, and partially interpretable neural networks for PDEs. *Journal of Computational*

Physics, 445(??):Article 110600, November 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121004952.

Rodriguez:2021:GLC

[RR21b] Ana Alonso Rodríguez and Francesca Rapetti. On a generalization of the Lebesgue's constant. *Journal of Computational Physics*, 428(??):Article 109964, March 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120307385.

Rettinger:2022:EFW

[RR22] Christoph Rettinger and Ulrich Rüde. An efficient four-way coupled lattice Boltzmann–discrete element method for fully resolved simulations of particle-laden flows. *Journal of Computational Physics*, 453(??):Article 110942, March 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122000043.

Reyes:2023:ROM

[RRBR+23] R. Reyes, O. Ruz, C. Bayona-Roa, E. Castillo, and A. Tello. Reduced order modeling for parametrized generalized Newtonian fluid flows. *Journal of Computational Physics*, 484(??):??, July 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912300181X.

Rueda-Ramirez:2021:SCD

[RRFK+21] Andrés M. Rueda-Ramírez, Esteban Ferrer, David A. Kopriva, Gonzalo Rubio, and Eusebio Valero. A statically condensed discontinuous Galerkin spectral element method on Gauss–Lobatto nodes for the compressible Navier–Stokes equations. *Journal of Computational Physics*, 426 (??):Article 109953, February 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120307270.

Rueda-Ramirez:2024:FDF

[RRG24] Andrés M. Rueda-Ramírez and Gregor J. Gassner. A flux-differencing formula for split-form summation by parts discretizations of non-conservative systems: Applications to subcell limiting for magneto-hydrodynamics. *Journal of Computational Physics*, 496(??):??, January 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123007027.

Rueda-Ramirez:2023:ESG

[RRHCG23] Andrés M. Rueda-Ramírez, Florian J. Hindenlang, Jesse Chan, and Gregor J. Gassner. Entropy-stable Gauss collocation methods for ideal magneto-hydrodynamics. *Journal of Computational Physics*, 475(??):??, February 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122009147.

Rueda-Ramirez:2021:ESN

[RRHH+21] Andrés M. Rueda-Ramírez, Sebastian Hennemann, Florian J. Hindenlang, Andrew R. Winters, and Gregor J. Gassner. An entropy stable nodal discontinuous Galerkin method for the resistive MHD equations. Part II: Subcell finite volume shock capturing. *Journal of Computational Physics*, 444(??):Article 110580, November 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121004757.

Ren:2023:PPI

[RRL+23] Pu Ren, Chengping Rao, Yang Liu, Zihan Ma, Qi Wang, Jian-Xun Wang, and Hao Sun. PhySR: Physics-informed deep super-resolution for spatiotemporal data. *Journal of Computational Physics*, 492(??):??, November 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123005338.

Renganathan:2023:CMC

[RRN23] S. Ashwin Renganathan, Vishwas Rao, and Ionel M. Navon. CAMERA: a method for cost-aware, adaptive, multifidelity, efficient reliability analysis. *Journal of Computational Physics*, 472(??):??, January 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122007616.

Rivero-Rodriguez:2021:ACB

[RRPSS21] Javier Rivero-Rodríguez, Miguel Pérez-Saborid, and Benoit Scheid. An alternative choice of the boundary condition for the arbitrary Lagrangian–Eulerian method. *Journal of Computational Physics*, 443(??):Article 110494, October 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121003892.

Ramani:2020:MMR

[RS20a] Raaghav Ramani and Steve Shkoller. A multiscale model for Rayleigh–Taylor and Richtmyer-Meshkov instabilities. *Journal of Computational Physics*, 405(??):Article 109177, March 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119308824.

Rapaka:2020:EPS

[RS20b] Narsimha Reddy Rapaka and Ravi Samtaney. An efficient Poisson solver for complex embedded boundary domains using the multi-grid and fast multipole methods. *Journal of Computational Physics*, 410(??):Article 109387, June 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120301613.

Ray:2020:RBC

[RS20c] Sudipta Ray and Sandeep Saha. A reconstruction-based Chebyshev-collocation method for the Poisson equation: an accurate treatment of the Gibbs–Wilbraham phenomenon on irregular interfaces. *Journal of Computational Physics*, 418(??):Article 109559, October 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120303338.

Ramani:2023:FDS

[RS23a] Raaghav Ramani and Steve Shkoller. A fast dynamic smooth adaptive meshing scheme with applications to compressible flow. *Journal of Computational Physics*, 490(??):??, October 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123003753.

Rosenberger:2023:NPE

[RS23b] H. Rosenberger and B. Sanderse. No pressure? Energy-consistent ROMs for the incompressible Navier–Stokes equations with time-dependent boundary conditions. *Journal of Computational Physics*, 491(??):??, October 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123005004.

Raghunathan:2024:NHA

[RS24] Dheeraj Raghunathan and Y. Sudhakar. Non-homogeneous anisotropic bulk viscosity for acoustic wave attenuation in weakly compressible methods. *Journal of Computational Physics*, 519(??):??, December 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912400682X.

Rocha:2020:MMM

[RSA+20] Franciane F. Rocha, Fabricio S. Sousa, Roberto F. Ausas, Gustavo C. Buscaglia, and Felipe Pereira. Multiscale mixed methods for two-phase flows in high-contrast porous media. *Journal of Computational Physics*, 409(??):Article 109316, May 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120300905.

Regazzoni:2022:CEM

[RSA+22] F. Regazzoni, M. Salvador, P. C. Africa, M. Fedele, L. Dedè, and A. Quarteroni. A cardiac electromechanical model coupled with a lumped-parameter model for closed-loop blood circulation. *Journal of Computational Physics*, 457(??):??, May 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122001450.

Romero:2020:MDL

[RSO20] Eloy Romero, Andreas Stathopoulos, and Kostas Orginos. Multigrid deflation for Lattice QCD. *Journal of Computational Physics*, 409(??):Article 109356, May 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999120301303`.

Rieckmann:2024:EDG

[RSSK24] Matthias Rieckmann, Martin Smuda, Peter Stephan, and Florian Kummer. The extended discontinuous Galerkin method for two-phase flows with evaporation. *Journal of Computational Physics*, 499(??):??, February 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999123008112`.

Ren:2021:SIB

[RSWD21] Yi Ren, Yi Shen, Pei Wang, and Hang Ding. Simulation of interaction between shocks and particle cloud using a second-order conservative sharp interface method. *Journal of Computational Physics*, 439(??):Article 110410, August 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999121003053`.

Romijn:2020:IRD

[RtTBI20] Lotte B. Romijn, Jan H. M. ten Thije Boonkkamp, and Wilbert L. IJzerman. Inverse reflector design for a point source and far-field target. *Journal of Computational Physics*, 408(??):Article 109283, May 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999120300577`.

Ranjan:2020:RAS

[RUG20] Rajesh Ranjan, S. Unnikrishnan, and Datta Gaitonde. A robust approach for stability analysis of complex flows using high-order Navier–Stokes solvers. *Journal of Computational Physics*, 403(??):Article 109076, February 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999119307818`.

Rodgers:2020:SAH

[RV20] Abram Rodgers and Daniele Venturi. Stability analysis of hierarchical tensor methods for time-dependent PDEs. *Journal of Computational Physics*, 409(??):Article 109341, May 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120301157.

Remmerswaal:2022:PIR

[RV22] Ronald A. Remmerswaal and Arthur E. P. Veldman. Parabolic interface reconstruction for 2D volume of fluid methods. *Journal of Computational Physics*, 469(??):??, November 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122005356.

Ryan:2022:FVA

[RW22] Paul M. Ryan and Charles W. Wolgemuth. A finite volume algorithm for the dynamics of filaments, rods, and beams. *Journal of Computational Physics*, 466(??):??, October 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122004375.

Renard:2021:LSA

[RWBS21] Florian Renard, Gauthier Wissocq, Jean-François Boussuge, and Pierre Sagaut. A linear stability analysis of compressible hybrid lattice Boltzmann methods. *Journal of Computational Physics*, 446(??):Article 110649, December 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121005441.

Reddy:2023:SCI

[RWdBAG23] Sohail Reddy, Maciej Waruszewski, Felipe A. V. de Braganca Alves, and Francis X. Giraldo. Schur complement IMplicit–EXplicit formulations for discontinuous Galerkin non-hydrostatic atmospheric models. *Journal of Computational Physics*, 491(??):??, October 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123004564.

Reynaud:2022:CFH

[RWDG22] J. Reynaud, P.-E. Weiss, S. Deck, and P. Guillen. A comprehensive framework for high fidelity computations of two-species compressible turbulent flows. *Journal of Computational Physics*, 462(??):??, August 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999122002844`.

Rains:2024:COD

[RWH+24] Jacob Rains, Yi Wang, Alec House, Andrew L. Kaminsky, Nathan A. Tison, and Vamshi M. Korivi. Constrained optimized dynamic mode decomposition with control for physically stable systems with exogeneous inputs. *Journal of Computational Physics*, 496(??):??, January 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S002199912300699X`.

Ren:2023:HOP

[RWQX23] Yupeng Ren, Kailiang Wu, Jianxian Qiu, and Yulong Xing. On high order positivity-preserving well-balanced finite volume methods for the Euler equations with gravitation. *Journal of Computational Physics*, 492(??):??, November 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999123005247`.

Roudenko:2021:DSG

[RWY21] Svetlana Roudenko, Zhongming Wang, and Kai Yang. Dynamics of solutions in the generalized Benjamin–Ono equation: a numerical study. *Journal of Computational Physics*, 445(??):Article 110570, November 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999121004654`.

Rathinam:2024:SFR

[RY24] Muruhan Rathinam and Mingkai Yu. Stochastic filtering of reaction networks partially observed in time snapshots. *Journal of Computational Physics*, 515(??):??, October 15,

2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124005138.

Ren:2023:FAF

[RZ23] Yiming Ren and Shan Zhao. A FFT accelerated fourth order finite difference method for solving three-dimensional elliptic interface problems. *Journal of Computational Physics*, 477(??):??, March 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123000190.

Rezavand:2020:WCS

[RZH20] Massoud Rezavand, Chi Zhang, and Xiangyu Hu. A weakly compressible SPH method for violent multi-phase flows with high density ratio. *Journal of Computational Physics*, 402(??):Article 109092, February 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119307971.

Sabelfeld:2020:SSA

[Sab20] Karl Sabelfeld. Stochastic simulation algorithms for solving narrow escape diffusion problems by introducing a drift to the target. *Journal of Computational Physics*, 410(??):Article 109406, June 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120301807.

Sanchez:2024:NRR

[SAB+24] I. Barrio Sanchez, A. S. Almgren, J. B. Bell, M. T. Henry de Frahan, and W. Zhang. A new re-redistribution scheme for weighted state redistribution with adaptive mesh refinement. *Journal of Computational Physics*, 504(??):??, May 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124001281.

Sacchetti:2022:SSM

[Sac22] Andrea Sacchetti. Spectral splitting method for nonlinear Schrödinger equations with quadratic potential. *Journal of*

Computational Physics, 459(??):??, June 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122002169.

Stanziola:2021:HES

[SACT21] Antonio Stanziola, Simon R. Arridge, Ben T. Cox, and Bradley E. Treeby. A Helmholtz equation solver using unsupervised learning: Application to transcranial ultrasound. *Journal of Computational Physics*, 441(??): Article 110430, September 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121003259.

Sauvage:2024:STF

[SAD24a] Bastien Sauvage, Frédéric Alauzet, and Alain Dervieux. A space and time fixed point mesh adaptation method. *Journal of Computational Physics*, 519(??):??, December 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124006375.

Stiernstrom:2024:ABI

[SAD24b] Vidar Stiernström, Martin Almquist, and Eric M. Dunham. Adjoint-based inversion for stress and frictional parameters in earthquake modeling. *Journal of Computational Physics*, 519(??):??, December 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124006958.

Spencer:2022:ANI

[SAH+22] J. Andrew Spencer, Brett Adair, Eric D. Held, Jeong-Young Ji, and Joseph R. Jepson. Accurate numerical, integral methods for computing drift-kinetic Trubnikov–Rosenbluth potentials. *Journal of Computational Physics*, 450(??):Article 110862, February 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121007579.

Shi:2020:PNM

[SAL+20] Xiaolei Shi, Tanmay Agrawal, Chao-An Lin, Feng-Nan Hwang, and Tzu-Hsuan Chiu. A parallel nonlinear multigrid solver for unsteady incompressible flow simulation on multi-GPU cluster. *Journal of Computational Physics*, 414(??):Article 109447, August 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120302217.

Stiernstrom:2023:BOS

[SAM23] Vidar Stiernström, Martin Almquist, and Ken Mattsson. Boundary-optimized summation-by-parts operators for finite difference approximations of second derivatives with variable coefficients. *Journal of Computational Physics*, 491(??):??, October 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123004710.

Sanderse:2020:NLS

[San20] B. Sanderse. Non-linearly stable reduced-order models for incompressible flow with energy-conserving finite volume methods. *Journal of Computational Physics*, 421(??):Article 109736, November 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120305106.

Shen:2022:CHO

[SAP22] Hua Shen, Rasha Al Jahdali, and Matteo Parsani. A class of high-order weighted compact central schemes for solving hyperbolic conservation laws. *Journal of Computational Physics*, 466(??):??, October 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122004326.

Saravia:2021:FVF

[Sar21a] Martín Saravia. A finite volume formulation for magnetostatics of discontinuous media within a multi-region OpenFOAM framework. *Journal of Computational Physics*, 433(??):Article 110089, May 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120308639.

Sarna:2021:PSL

[Sar21b] Neeraj Sarna. A positive and stable L2-minimization based moment method for the Boltzmann equation of gas dynamics. *Journal of Computational Physics*, 440 (??):Article 110428, September 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121003235.

Sharma:2021:OMI

[SAS+21] Ashesh Sharma, Shreyas Ananthan, Jayanarayanan Sitaraman, Stephen Thomas, and Michael A. Sprague. Overset meshes for incompressible flows: On preserving accuracy of underlying discretizations. *Journal of Computational Physics*, 428(??):Article 109987, March 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120307610.

Saye:2022:HOQ

[Say22] Robert I. Saye. High-order quadrature on multi-component domains implicitly defined by multivariate polynomials. *Journal of Computational Physics*, 448(??):Article 110720, January 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912100615X.

Schumm:2023:NMS

[SB23] Ryan D. Schumm and Paul C. Bressloff. A numerical method for solving snapping out Brownian motion in 2D bounded domains. *Journal of Computational Physics*, 493(??):??, November 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123005740.

Schmidmayer:2020:AMF

[SBC20] Kevin Schmidmayer, Spencer H. Bryngelson, and Tim Colonius. An assessment of multicomponent flow models and interface capturing schemes for spherical bubble dynamics. *Journal of Computational Physics*, 402 (??):Article 109080, February 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999119307855`.

Song:2024:MRM

[SBCL24] Huailing Song, Yuming Ba, Dongqin Chen, and Qiuqi Li. A model reduction method for parametric dynamical systems defined on complex geometries. *Journal of Computational Physics*, 506(??):??, June 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999124001724`.

Sanderse:2021:NPF

[SBH21] B. Sanderse, J. F. H. Buist, and R. A. W. M. Henkes. A novel pressure-free two-fluid model for one-dimensional incompressible multiphase flow. *Journal of Computational Physics*, 426(??):Article 109919, February 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999120306938`.

Stammer:2023:MEM

[SBJ+23] Pia Stammer, Lucas Burigo, Oliver Jäkel, Martin Frank, and Niklas Wahl. Multivariate error modeling and uncertainty quantification using importance (re-)weighting for Monte Carlo simulations in particle transport. *Journal of Computational Physics*, 473(??):??, January 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999122007884`.

Sharan:2022:HOD

[SBL22] Nek Sharan, Peter T. Brady, and Daniel Livescu. High-order dimensionally-split Cartesian embedded boundary method for non-dissipative schemes. *Journal of Computational*

Physics, 464(??):??, September 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912200403X.

Shiea:2020:NFV

[SBVM20] Mohsen Shiea, Antonio Buffo, Marco Vanni, and Daniele L. Marchisio. A novel finite-volume TVD scheme to overcome non-realizability problem in quadrature-based moment methods. *Journal of Computational Physics*, 409 (??):Article 109337, May 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912030111X.

Svolos:2020:USD

[SBVW20] Lampros Svolos, Luc Berger-Vergiat, and Haim Waisman. Updating strategy of a domain decomposition preconditioner for parallel solution of dynamic fracture problems. *Journal of Computational Physics*, 422(??):Article 109746, December 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120305209.

Shallcross:2022:ECB

[SC22a] Gregory S. Shallcross and Jesse Capecelatro. An explicit characteristic-based immersed boundary method for compressible flows. *Journal of Computational Physics*, 449 (??):Article 110804, January 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121006999.

Stanier:2022:CIP

[SC22b] A. Stanier and L. Chacón. A conservative implicit-PIC scheme for the hybrid kinetic-ion fluid-electron plasma model on curvilinear meshes. *Journal of Computational Physics*, 459(??):??, June 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122002066.

Strafella:2022:LFS

[SC22c] L. Strafella and D. Chapon. LightAMR format standard and lossless compression algorithms for adaptive mesh refinement grids: RAMSES use case. *Journal of Computational Physics*, 470(??):??, December 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999122006398`.

Sturdevant:2022:EFG

[SC22d] Benjamin J. Sturdevant and Luis Chacón. Eliminating finite-grid instabilities in gyrokinetic particle-in-cell simulations. *Journal of Computational Physics*, 464(??):??, September 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999122003928`.

Shin:2023:PIV

[SC23] Hyomin Shin and Minseok Choi. Physics-informed variational inference for uncertainty quantification of stochastic differential equations. *Journal of Computational Physics*, 487(??):??, August 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999123002784`.

Scapin:2020:VFM

[SCB20] Nicolò Scapin, Pedro Costa, and Luca Brandt. A volume-of-fluid method for interface-resolved simulations of phase-changing two-fluid flows. *Journal of Computational Physics*, 407(??):Article 109251, April 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999120300255`.

Shukla:2020:WAD

[SCdHJ20] Khemraj Shukla, Jesse Chan, Maarten V. de Hoop, and Priyank Jaiswal. A weight-adjusted discontinuous Galerkin method for the poroelastic wave equation: Penalty fluxes and micro-heterogeneities. *Journal of Computational Physics*, 403(??):Article 109061, February 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

URL http://www.sciencedirect.com/science/article/pii/S0021999119307661.

Stanier:2020:CPH

[SCL20] A. Stanier, L. Chacón, and A. Le. A cancellation problem in hybrid particle-in-cell schemes due to finite particle size. *Journal of Computational Physics*, 420 (??):Article 109705, November 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120304794.

Shen:2024:PFM

[SCM24] Changxiao Nigel Shen, Antoine Cerfon, and Sriramkrishnan Muralikrishnan. A particle-in-Fourier method with semi-discrete energy conservation for non-periodic boundary conditions. *Journal of Computational Physics*, 519(??):??, December 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124006387.

Chen:2022:ADP

[sCpLL+22] Shu sheng Chen, Jin ping Li, Zheng Li, Wu Yuan, and Zheng hong Gao. Anti-dissipation pressure correction under low Mach numbers for Godunov-type schemes. *Journal of Computational Physics*, 456(??):??, May 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122000894.

Schroeder:2022:LDF

[SCS22] Craig Schroeder, Ritoban Roy Chowdhury, and Tamar Shinar. Local divergence-free polynomial interpolation on MAC grids. *Journal of Computational Physics*, 468(??):??, November 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122005629.

Shi:2024:RHD

[SCZ+24] Qingyuan Shi, Yongyong Cai, Chijie Zhuang, Bo Lin, Dan Wu, Rong Zeng, and Weizhu Bao. A robust hybridizable discontinuous Galerkin scheme with harmonic averaging technique for steady state of real-world semiconductor devices.

Journal of Computational Physics, 519(??):??, December 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124006703.

Stoyanovskaya:2021:FMS

[SDA+21] Olga Stoyanovskaya, Maxim Davydov, Maxim Arendarenko, Elizaveta Isaenko, Tamara Markelova, and Valeriy Snytnikov. Fast method to simulate dynamics of two-phase medium with intense interaction between phases by smoothed particle hydrodynamics: Gas-dust mixture with polydisperse particles, linear drag, one-dimensional tests. *Journal of Computational Physics*, 430(??):Article 110035, April 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120308093.

Stinis:2024:SGA

[SDA24] P. Stinis, C. Daskalakis, and P. J. Atzberger. SDYN–GANs: Adversarial learning methods for multistep generative models for general order stochastic dynamics. *Journal of Computational Physics*, 519(??):??, December 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124006909.

Semenova:2021:CSS

[SDKL21] Anastassiya Semenova, Sergey A. Dyachenko, Alexander O. Korotkevich, and Pavel M. Lushnikov. Comparison of split-step and Hamiltonian integration methods for simulation of the nonlinear Schrödinger type equations. *Journal of Computational Physics*, 427(??):Article 110061, February 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120308354.

Shetabivash:2020:MLS

[SDP20] H. Shetabivash, A. Dolatabadi, and M. Paraschivoiu. A multiple level-set approach for modelling containerless freezing process. *Journal of Computational Physics*, 415(??): Article 109527, August 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL

http://www.sciencedirect.com/science/article/pii/S0021999120303016.

Steinstraesser:2024:PTI

[SdSPS24] João Guilherme Caldas Steinstraesser, Pedro da Silva Peixoto, and Martin Schreiber. Parallel-in-time integration of the shallow water equations on the rotating sphere using Parareal and MGRIT. *Journal of Computational Physics*, 496(??):??, January 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123006861.

Stephany:2024:WPL

[SE24] Robert Stephany and Christopher Earls. Weak-PDE-LEARN: a weak form based approach to discovering PDEs from noisy, limited data. *Journal of Computational Physics*, 506(??):??, June 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124001992.

Sangam:2021:DNA

[SEG21a] Afeintou Sangam, Élise Estibals, and Hervé Guillard. Derivation and numerical approximation of two-temperature Euler plasma model. *Journal of Computational Physics*, 444(??):Article 110565, November 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121004605.

Setzwein:2021:IHO

[SEG21b] Florian Setzwein, Peter Ess, and Peter Gerlinger. An implicit high-order k-exact finite-volume approach on vertex-centered unstructured grids for incompressible flows. *Journal of Computational Physics*, 446(??):Article 110629, December 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121005246.

Setzwein:2022:AND

[SEG22] Florian Setzwein, Peter Ess, and Peter Gerlinger. Adaptive numerical dissipation control for high-order k-exact reconstruction schemes on vertex-centered unstructured grids using artificial neural networks. *Journal of Computational Physics*, 471(??):??, December 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122006969.

Sellountos:2022:FMB

[Sel22] Euripides J. Sellountos. Fast multipole boundary element method (FMM/BEM) for the solution of the Navier–Stokes in primitive variables based on the Burton and Miller formulation in two-dimensions. *Journal of Computational Physics*, 471(??):??, December 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122006787.

Semenikhin:2021:IAN

[Sem21] Igor Semenikhin. Improving accuracy of the numerical solution of Maxwell's equations by processing edge singularities of the electromagnetic field. *Journal of Computational Physics*, 441(??):Article 110440, September 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121003351.

Serezhkin:2023:HHR

[Ser23] A. Serezhkin. HLLEPJ and HLLCEPJ Riemann solvers for the Wilkins model of elastoplasticity. *Journal of Computational Physics*, 492(??):??, November 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123005144.

Skene:2021:PTA

[SES21] C. S. Skene, M. F. Eggl, and P. J. Schmid. A parallel-in-time approach for accelerating direct-adjoint studies. *Journal of Computational Physics*, 429(??):Article 110033, March 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912030807X.

Sevilla:2021:IHM

[Sev21] Ruben Sevilla. An implicit HDG method for linear convection-diffusion with dual time stepping. *Journal of Computational Physics*, 434(??):Article 110201, June 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121000966.

Sewerin:2024:EMC

[Sew24] Fabian Sewerin. A Eulerian Monte Carlo method for the numerical solution of the multivariate population balance equation. *Journal of Computational Physics*, 509(??):??, July 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124002730.

Strahan:2023:PRE

[SFDW23] John Strahan, Justin Finkel, Aaron R. Dinner, and Jonathan Weare. Predicting rare events using neural networks and short-trajectory data. *Journal of Computational Physics*, 488(??):??, September 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123002474.

Solan-Fustero:2022:PBR

[SFGNMGN22] P. Solán-Fustero, J. L. Gracia, A. Navas-Montilla, and P. García-Navarro. A POD-based ROM strategy for the prediction in time of advection-dominated problems. *Journal of Computational Physics*, 471(??):??, December 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122007355.

Solan-Fustero:2021:AAD

[SFNMF+21] P. Solán-Fustero, A. Navas-Montilla, E. Ferrer, J. Manzanero, and P. García-Navarro. Application of approximate dispersion-diffusion analyses to under-resolved Burgers turbulence using high resolution WENO and UWC schemes. *Journal of Computational Physics*, 435(??):Article 110246, June 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121001418.

Solovsky:2020:DEI

[SFP+20] Jakub Solovský, Radek Fucík, Michael R. Plampin, Tissa H. Illangasekare, and Jirí Mikyska. Dimensional effects of interphase mass transfer on attenuation of structurally trapped gaseous carbon dioxide in shallow aquifers. *Journal of Computational Physics*, 405(??):Article 109178, March 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999119308836`.

Svard:2024:ESF

[SG24] Magnus Svärd and Anita Gjesteland. Entropy stable far-field boundary conditions for the compressible Navier–Stokes equations. *Journal of Computational Physics*, 508(??):??, July 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999124002808`.

Sahut:2021:NSB

[SGB+21a] Guillaume Sahut, Giovanni Ghigliotti, Guillaume Balarac, Manuel Bernard, Vincent Moureau, and Philippe Marty. Numerical simulation of boiling on unstructured grids. *Journal of Computational Physics*, 432(??):Article 110161, May 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S002199912100053X`.

Schneider:2021:MAR

[SGB+21b] Kleiton A. Schneider, José M. Gallardo, Dinshaw S. Balsara, Boniface Nkonga, and Carlos Parés. Multidimensional approximate Riemann solvers for hyperbolic nonconservative systems. Applications to shallow water systems. *Journal of Computational Physics*, 444(??):Article 110547, November 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999121004423`.

Strelow:2023:PIN

[SGLP23] Erik Laurin Strelow, Alf Gerisch, Jens Lang, and Marc E. Pfetsch. Physics informed neural networks: a case study for gas transport problems. *Journal of Computational Physics*, 481(??):??, May 15, 2023. CODEN JCTPAH.

ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123001365.

Saunders:2021:NAE

[SGM21] William Robert Saunders, James Grant, and Eike Hermann Müller. A new algorithm for electrostatic interactions in Monte Carlo simulations of charged particles. *Journal of Computational Physics*, 430(??):Article 110099, April 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120308731.

Song:2024:RCF

[SGM+24] Hang Song, Aditya S. Ghate, Kristen V. Matsuno, Jacob R. West, Akshay Subramaniam, and Sanjiva K. Lele. A robust compact finite difference framework for simulations of compressible turbulent flows. *Journal of Computational Physics*, 519(??):??, December 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124006673.

Saunders:2020:FES

[SGMT20] William Robert Saunders, James Grant, Eike Hermann Müller, and Ian Thompson. Fast electrostatic solvers for kinetic Monte Carlo simulations. *Journal of Computational Physics*, 410(??):Article 109379, June 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120301534.

Selcuk:2021:FDM

[SGPW21] Can Selçuk, Arthur R. Ghigo, Stéphane Popinet, and Anthony Wachs. A fictitious domain method with distributed Lagrange multipliers on adaptive quad/octrees for the direct numerical simulation of particle-laden flows. *Journal of Computational Physics*, 430(??):Article 109954, April 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120307282.

Shashkin:2023:SPF

[SGT23] Vladimir V. Shashkin, Gordey S. Goyman, and Mikhail A. Tolstykh. Summation-by-parts finite-difference shallow water model on the cubed-sphere grid. Part I: Non-staggered grid. *Journal of Computational Physics*, 474(??):??, February 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122008609.

Schneider:2023:CSG

[SGW+23] Martin Schneider, Dennis Gläser, Kilian Weishaupt, Edward Coltman, Bernd Flemisch, and Rainer Helmig. Coupling staggered-grid and vertex-centered finite-volume methods for coupled porous-medium free-flow problems. *Journal of Computational Physics*, 482(??):??, June 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123001377.

Steinberg:2022:MFI

[SH22] Elad Steinberg and Shay I. Heizler. Multi-frequency implicit semi-analog Monte-Carlo (ISMC) radiative transfer solver in two-dimensions (without teleportation). *Journal of Computational Physics*, 450(??):Article 110806, February 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121007014.

Sadr:2023:VRD

[SH23a] Mohsen Sadr and Nicolas G. Hadjiconstantinou. A variance-reduced direct Monte Carlo simulation method for solving the Boltzmann equation over a wide range of rarefaction. *Journal of Computational Physics*, 472(??):??, January 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122007409.

Sadr:2023:VRP

[SH23b] Mohsen Sadr and Nicolas G. Hadjiconstantinou. Variance reduced particle solution of the Fokker–Planck equation with application to rarefied gas and plasma dynamics. *Journal of*

Computational Physics, 492(??):??, November 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123004977.

Sutti:2024:PML

[SH24] Marco Sutti and Jan S. Hesthaven. Perfectly matched layers for the Boltzmann equation: Stability and sensitivity analysis. *Journal of Computational Physics*, 509(??):??, July 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124002961.

ShangGuan:2021:GPS

[Sha21] DanHua ShangGuan. A general purpose strategy for realizing the zero-variance importance sampling and calculating the unknown integration constant. *Journal of Computational Physics*, 436(??):Article 110311, July 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121002060.

Shashkov:2023:AMB

[Sha23] Mikhail Shashkov. An adaptive moments-based interface reconstruction using intersection of the cell with one half-plane, two half-planes and a circle. *Journal of Computational Physics*, 494(??):??, December 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123005995.

Sadr:2024:WPE

[SHG24] Mohsen Sadr, Nicolas G. Hadjiconstantinou, and M. Hossein Gorji. Wasserstein-penalized entropy closure: a use case for stochastic particle methods. *Journal of Computational Physics*, 511(??):??, August 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124003152.

Shi:2023:MPP

[Shi23] Yi Shi. A maximum principle preserving implicit Monte Carlo method for frequency-dependent radiative transfer equations. *Journal of Computational Physics*, 495(??): ??, December 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123006472.

Shiroto:2024:SPA

[Shi24] Takashi Shiroto. A structure-preserving algorithm for Vlasov–Darwin system conserving charge, canonical momentum, and Hamiltonian. *Journal of Computational Physics*, 514(??):??, October 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124005151.

Siegel:2023:GTA

[SHJ+23] Jonathan W. Siegel, Qingguo Hong, Xianlin Jin, Wenrui Hao, and Jinchao Xu. Greedy training algorithms for neural networks and applications to PDEs. *Journal of Computational Physics*, 484(??):??, July 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123001791.

Shen:2020:ESF

[SHL+20] Lingyue Shen, Huaxiong Huang, Ping Lin, Zilong Song, and Shixin Xu. An energy stable C^{0} finite element scheme for a quasi-incompressible phase-field model of moving contact line with variable density. *Journal of Computational Physics*, 405(??):Article 109179, March 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119308848.

Song:2024:GIS

[SHL+24] Jian Song, Haibao Hu, Guanghua Li, Heng Zhang, and Feng Ren. Generalized interpolation-supplemented cascaded lattice Boltzmann method for noise radiated from a circular cylinder. *Journal of Computational Physics*, 517(??):??, November 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124005679.

Schwarzmeier:2023:CFS

[SHM+23a] Christoph Schwarzmeier, Markus Holzer, Travis Mitchell, Moritz Lehmann, Fabian Häusl, and Ulrich Rüde. Comparison of free-surface and conservative Allen–Cahn phase-field lattice Boltzmann method. *Journal of Computational Physics*, 473(??):??, January 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122008166.

Shands:2023:MMC

[SHM23b] Emerson Shands, Joshua Hanopy, and Jim E. Morel. A modified S_n method for calculating the uncollided flux from a point source without ray effects. *Journal of Computational Physics*, 488(??):??, September 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123003121. See corrigendum [SHM25].

Shin:2024:CBH

[SHM24] Minwoo Shin, Cory D. Hauck, and Ryan G. McClarren. A collision-based hybrid method for the BGK equation. *Journal of Computational Physics*, 501(??):??, March 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124000330.

Shands:2025:CMS

[SHM25] Emerson Shands, Joshua Hanophy, and Jim E. Morel. Corrigendum to "A modified S_n method for calculating the uncollided flux from a point source without ray effects" [Journal of Computational Physics, **488** (2023), 1-1 / 112217]. *Journal of Computational Physics*, 533(??):??, July 15, 2025. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999125002918. See [SHM23b].

Scullard:2020:ASS

[SHS+20] Christian R. Scullard, Abigail Hickok, Justyna O. Sotiris, Bilyana M. Tzolova, R. Loek Van Heyningen, and Frank R. Graziani. Adaptive spectral solution method for the Landau and Lenard-Balescu equations. *Journal of Computational*

Physics, 402(??):Article 109110, February 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119308150.

Sugaya:2022:TFS

[SI22] Keisuke Sugaya and Taro Imamura. Turbulent flow simulations of the common research model on Cartesian grids using recursive fitting approach. *Journal of Computational Physics*, 467(??):??, October 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122005228.

Simonnet:2023:CNE

[Sim23] Eric Simonnet. Computing non-equilibrium trajectories by a deep learning approach. *Journal of Computational Physics*, 491(??):??, October 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123004448.

Singh:2021:AEA

[Sin21] Mehakpreet Singh. Accurate and efficient approximations for generalized population balances incorporating coagulation and fragmentation. *Journal of Computational Physics*, 435(??):Article 110215, June 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121001108.

Sierra:2021:ABS

[SJGC21] J. Sierra, P. Jolivet, F. Giannetti, and V. Citro. Adjoint-based sensitivity analysis of periodic orbits by the Fourier–Galerkin method. *Journal of Computational Physics*, 440(??):Article 110403, September 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121002989.

Shukla:2021:PPI

[SJK21] Khemraj Shukla, Ameya D. Jagtap, and George Em Karniadakis. Parallel physics-informed neural networks via domain decomposition. *Journal of Computational Physics*, 447 (??):Article 110683, December 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121005787.

Sharma:2023:FDM

[SK23a] Arjun Sharma and Donald L. Koch. Finite difference method in prolate spheroidal coordinates for freely suspended spheroidal particles in linear flows of viscous and viscoelastic fluids. *Journal of Computational Physics*, 495(??):??, December 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912300654X.

Shashkov:2023:MBI

[SK23b] Mikhail Shashkov and Eugene Kikinzon. Moments-based interface reconstruction, remap and advection. *Journal of Computational Physics*, 479(??):??, April 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123000931.

Singh:2024:CNI

[SK24a] Amritpal Singh and Neeraj Kumar. Coupled nodal integral-immersed boundary method (NI–IBM) for simulating convection–diffusion physics. *Journal of Computational Physics*, 519(??):??, December 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124006429.

Su:2024:AFC

[SK24b] Hang Su and Eric E. Keaveny. Accelerating the force-coupling method for hydrodynamic interactions in periodic domains. *Journal of Computational Physics*, 510(??):??, August 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124003097.

Singh:2022:TDM

[SKCM22] S. Singh, A. Karchani, T. Chourushi, and R. S. Myong. A three-dimensional modal discontinuous Galerkin method for the second-order Boltzmann–Curtiss-based constitutive model of rarefied and microscale gas flows. *Journal of Computational Physics*, 457(??):??, May 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122001140.

Schnake:2024:SGD

[SKE+24] Stefan Schnake, Coleman Kendrick, Eirik Endeve, Miroslav Stoyanov, Steven Hahn, Cory D. Hauck, David L. Green, Phil Snyder, and John Canik. Sparse-grid discontinuous Galerkin methods for the Vlasov–Poisson–Lenard–Bernstein model. *Journal of Computational Physics*, 510(??):??, August 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124003024.

Sandhu:2021:NSB

[SKP+21] Rimple Sandhu, Mohammad Khalil, Chris Pettit, Dominique Poirel, and Abhijit Sarkar. Nonlinear sparse Bayesian learning for physics-based models. *Journal of Computational Physics*, 426(??):Article 109728, February 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120305027.

Sarna:2020:SAT

[SKT20] Neeraj Sarna, Harshit Kapadia, and Manuel Torrilhon. Simultaneous-approximation-term based boundary discretization for moment equations of rarefied gas dynamics. *Journal of Computational Physics*, 407(??):Article 109243, April 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120300176.

Srivastava:2023:FID

[SKT23] Apoorv Srivastava, Wei Kang, and Daniel M. Tartakovsky. Feature-informed data assimilation. *Journal of Computational Physics*, 494(??):??, December 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123005946.

Shima:2021:PSP

[SKTK21] Nao Shima, Yuichi Kuya, Yoshiharu Tamaki, and Soshi Kawai. Preventing spurious pressure oscillations in split convective form discretization for compressible flows. *Journal of Computational Physics*, 427(??):Article 110060, February 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999120308342`.

Salloum:2020:PES

[SL20a] Samer Salloum and Issam Lakkis. Proper evaluation of spherical harmonics-based expressions for the velocity and vortex stretching vectors in three-dimensional grid-free vortex methods. *Journal of Computational Physics*, 418(??):Article 109603, October 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999120303776`.

Schneider:2020:FOC

[SL20b] Florian Schneider and Tobias Leibner. First-order continuous- and discontinuous-Galerkin moment models for a linear kinetic equation: Model derivation and realizability theory. *Journal of Computational Physics*, 416(??): Article 109547, September 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999120303211`.

Salloum:2022:AEC

[SL22a] Samer Salloum and Issam Lakkis. An adaptive error-controlled hybrid fast solver for regularized vortex methods. *Journal of Computational Physics*, 468(??):??, November 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999122005666`.

Schneider:2022:FOC

[SL22b] Florian Schneider and Tobias Leibner. First-order continuous- and discontinuous-Galerkin moment models for a linear kinetic equation: Realizability-preserving splitting scheme and numerical analysis. *Journal of Computa-*

tional Physics, 456(??):??, May 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122001024.

Shin:2022:ECS

[SL22c] Jaemin Shin and June-Yub Lee. Energy conserving successive multi-stage method for the linear wave equation. *Journal of Computational Physics*, 458(??):??, June 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122001607.

Shin:2023:ECS

[SL23] Jaemin Shin and June-Yub Lee. Energy-conserving successive multi-stage method for the linear wave equation with forcing terms. *Journal of Computational Physics*, 489(??):??, September 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123003509.

Shang:2023:FTM

[SLBH23] Xinglong Shang, Zhengyuan Luo, Bofeng Bai, and Guoqing Hu. A front-tracking method for simulating interfacial flows with particles and soluble surfactants. *Journal of Computational Physics*, 493(??):??, November 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123005715.

Saade:2023:MSC

[SLF23a] Youssef Saade, Detlef Lohse, and Daniel Fuster. A multigrid solver for the coupled pressure-temperature equations in an all-Mach solver with VoF. *Journal of Computational Physics*, 476(??):??, March 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122009287.

Shu:2023:PID

[SLF23b] Dule Shu, Zijie Li, and Amir Barati Farimani. A physics-informed diffusion model for high-fidelity flow field reconstruction. *Journal of Computational Physics*, 478(??):??, April 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123000670.

Stiernstrom:2021:RBA

[SLNM21] Vidar Stiernström, Lukas Lundgren, Murtazo Nazarov, and Ken Mattsson. A residual-based artificial viscosity finite difference method for scalar conservation laws. *Journal of Computational Physics*, 430(??):Article 110100, April 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120308743.

Sun:2021:ASVb

[SLOZ21a] P.-N. Sun, D. Le Touzé, G. Oger, and A.-M. Zhang. An accurate SPH volume adaptive scheme for modeling strongly-compressible multiphase flows. Part 1: Numerical scheme and validations with basic 1D and 2D benchmarks. *Journal of Computational Physics*, 426(??):Article 109937, February 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120307117.

Sun:2021:ASVa

[SLOZ21b] P.-N. Sun, D. Le Touzé, G. Oger, and A.-M. Zhang. An accurate SPH volume adaptive scheme for modeling strongly-compressible multiphase flows. Part 2: Extension of the scheme to cylindrical coordinates and simulations of 3D axisymmetric problems with experimental validations. *Journal of Computational Physics*, 426(??):Article 109936, February 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120307105.

Sun:2022:TVB

[SLQW22] Zhiyuan Sun, Jun Liu, Jianzhen Qian, and Pei Wang. On the tensor viscosity based on Gauss quadrature: a comparison of robustness, efficiency, and connection with hourglass control. *Journal of Computational Physics*, 466(??):??, October 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122004545.

Schlottke-Lakemper:2021:PHD

[SLWRG21] Michael Schlottke-Lakemper, Andrew R. Winters, Hendrik Ranocha, and Gregor J. Gassner. A purely hyperbolic discontinuous Galerkin approach for self-gravitating gas dynamics. *Journal of Computational Physics*, 442(??):Article 110467, October 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121003624.

Sakakibara:2021:FDC

[SM21a] Koya Sakakibara and Yuto Miyatake. A fully discrete curve-shortening polygonal evolution law for moving boundary problems. *Journal of Computational Physics*, 424 (??):Article 109857, January 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120306318.

Subramanian:2021:MEP

[SM21b] Abhinav Subramanian and Sankaran Mahadevan. Model error propagation from experimental to prediction configuration. *Journal of Computational Physics*, 443(??): Article 110529, October 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121004241.

Subramanian:2022:NIE

[SM22] Abhinav Subramanian and Sankaran Mahadevan. Non-intrusive estimation of model error and discrepancy in dynamics models. *Journal of Computational Physics*, 471(??):??, December 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122006805.

Schalkers:2024:EFS

[SM24] Merel A. Schalkers and Matthias Möller. Efficient and fail-safe quantum algorithm for the transport equation. *Journal of Computational Physics*, 502(??):??, April 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124000652.

Shiroto:2022:MEC

[SMAY22] Takashi Shiroto, Akinobu Matsuyama, Nobuyuki Aiba, and Masatoshi Yagi. A mass-energy-conserving discontinuous Galerkin scheme for the isotropic multispecies Rosenbluth–Fokker–Planck equation. *Journal of Computational Physics*, 449(??):Article 110813, January 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121007087.

Sirignano:2020:DDL

[SMF20] Justin Sirignano, Jonathan F. MacArt, and Jonathan B. Freund. DPM: a deep learning PDE augmentation method with application to large-eddy simulation. *Journal of Computational Physics*, 423(??):Article 109811, December 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120305854.

Scherr:2023:VFB

[SMK23] Robert Scherr, Matthias Markl, and Carolin Körner. Volume of fluid based modeling of thermocapillary flow applied to a free surface lattice Boltzmann method. *Journal of Computational Physics*, 492(??):??, November 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123005363.

Song:2020:NEP

[SML20] Jung Heon Song, Matthias Maier, and Mitchell Luskin. Nonlinear eigenvalue problems for coupled Helmholtz equations modeling gradient-index graphene waveguides. *Journal of Computational Physics*, 423(??):Article 109871, December 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120306458.

Suss:2023:HLB

[SMLM23] Alexandre Suss, Ivan Mary, Thomas Le Garrec, and Simon Marié. A hybrid lattice Boltzmann–Navier–Stokes method for unsteady aerodynamic and aeroacoustic computations. *Journal of Computational Physics*, 485(??):??, July 15, 2023.

CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123001936.

Singh:2022:NTD

[SMR22] Ankit Singh, Vikas Maurya, and Manoj K. Rajpoot. New two-derivative implicit-explicit Runge–Kutta methods for stiff reaction–diffusion systems. *Journal of Computational Physics*, 471(??):??, December 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122006738.

Singh:2022:DFV

[SMRW22] Mehakpreet Singh, Themis Matsoukas, Vivek Ranade, and Gavin Walker. Discrete finite volume formulation for multidimensional fragmentation equation and its convergence analysis. *Journal of Computational Physics*, 464(??):??, September 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122004302.

Sirignano:2023:PCM

[SMS23] Justin Sirignano, Jonathan MacArt, and Konstantinos Spiliopoulos. PDE-constrained models with neural network terms: Optimization and global convergence. *Journal of Computational Physics*, 481(??):??, May 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123001110.

Saez-Mischlich:2022:PHO

[SMSAGG22] G. Saez-Mischlich, J. Sierra-Ausin, G. Grondin, and J. Gressier. On the properties of high-order least-squares finite-volume schemes. *Journal of Computational Physics*, 457(??):??, May 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912200105X.

Saberi:2022:RAV

[SMV22] S. Saberi, G. Meschke, and A. Vogel. A restricted additive Vanka smoother for geometric multigrid. *Journal of*

Computational Physics, 459(??):??, June 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122001851.

Song:2022:SPL

[SMW+22] Hang Song, Kristen V. Matsuno, Jacob R. West, Akshay Subramaniam, Aditya S. Ghate, and Sanjiva K. Lele. Scalable parallel linear solver for compact banded systems on heterogeneous architectures. *Journal of Computational Physics*, 468(??):??, November 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122005058.

Shiroto:2022:CME

[SMY22] Takashi Shiroto, Akinobu Matsuyama, and Masatoshi Yagi. A charge-momentum-energy-conserving 1D3V hybrid Lagrangian–Eulerian method for Vlasov–Maxwell system. *Journal of Computational Physics*, 469(??):??, November 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122005848.

Svard:2021:CES

[SN21] Magnus Svärd and Jan Nordström. Convergence of energy stable finite-difference schemes with interfaces. *Journal of Computational Physics*, 429(??):Article 110020, March 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120307944.

Sun:2023:NSD

[SNW23] Shiwei Sun, Gen Nakamura, and Haibing Wang. Numerical studies of domain sampling methods for inverse boundary value problems by one measurement. *Journal of Computational Physics*, 485(??):??, July 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123001948.

St-Onge:2022:NAR

[SOBP22] D. A. St-Onge, M. Barnes, and F. I. Parra. A novel approach to radially global gyrokinetic simulation using the flux-tube code `stella`. *Journal of Computational Physics*, 468(??):??, November 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122005605.

Simonis:2022:TLE

[SOG+22] Stephan Simonis, Daniel Oberle, Maximilian Gaedtke, Patrick Jenny, and Mathias J. Krause. Temporal large eddy simulation with lattice Boltzmann methods. *Journal of Computational Physics*, 454(??):Article 110991, April 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122000535.

Southworth:2024:OSM

[SOPB24] Ben S. Southworth, Samuel Olivier, H. K. Park, and Tommaso Buvoli. One-sweep moment-based semi-implicit-explicit integration for gray thermal radiation transport. *Journal of Computational Physics*, 517(??):??, November 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124005977.

Sahu:2020:ALE

[SOSM20] Amaresh Sahu, Yannick A. D. Omar, Roger A. Sauer, and Kranthi K. Mandadapu. Arbitrary Lagrangian–Eulerian finite element method for curved and deforming surfaces: I. general theory and application to fluid interfaces. *Journal of Computational Physics*, 407(??):Article 109253, April 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120300279.

Santelli:2021:FDS

[SOV21] L. Santelli, P. Orlandi, and R. Verzicco. A finite-difference scheme for three-dimensional incompressible flows in spherical coordinates. *Journal of Computational Physics*, 424 (??):Article 109848, January 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

URL http://www.sciencedirect.com/science/article/pii/S0021999120306227.

Sousedik:2022:SGM

[SP22] Bedrich Sousedík and Randy Price. A stochastic Galerkin method with adaptive time-stepping for the Navier–Stokes equations. *Journal of Computational Physics*, 468(??): ??, November 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122005186.

Su:2023:FOA

[SP23] Xin Su and Sai-Mang Pun. Fast online adaptive enrichment for poroelasticity with high contrast. *Journal of Computational Physics*, 487(??):??, August 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123002668.

Sun:2023:IAD

[SPAC23] P. N. Sun, C. Pilloton, M. Antuono, and A. Colagrossi. Inclusion of an acoustic damper term in weakly-compressible SPH models. *Journal of Computational Physics*, 483(??):??, June 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123001511.

Sandim:2020:SRB

[SPdF20] Marcos Sandim, Afonso Paiva, and Luiz Henrique de Figueiredo. Simple and reliable boundary detection for meshfree particle methods using interval analysis. *Journal of Computational Physics*, 420(??):Article 109702, November 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120304769.

Saibaba:2021:RAA

[SPdS+21] Arvind K. Saibaba, Pranjal Prasad, Eric de Sturler, Eric Miller, and Misha E. Kilmer. Randomized approaches to accelerate MCMC algorithms for Bayesian inverse problems. *Journal of Computational Physics*, 440 (??):Article 110391, September 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL

http://www.sciencedirect.com/science/article/pii/S0021999121002862.

Schussnig:2021:RSF

[SPF21] Richard Schussnig, Douglas R. Q. Pacheco, and Thomas-Peter Fries. Robust stabilised finite element solvers for generalised Newtonian fluid flows. *Journal of Computational Physics*, 442(??):Article 110436, October 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121003314.

Stahl:2023:CST

[SPGG23] Spencer L. Stahl, Chitrarth Prasad, Hemanth Goparaju, and Datta Gaitonde. Conditional space-time POD extensions for stability and prediction analysis. *Journal of Computational Physics*, 492(??):??, November 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123005284.

Southworth:2024:IER

[SPTC24] Ben S. Southworth, HyeongKae Park, Svetlana Tokareva, and Marc Charest. Implicit-explicit Runge–Kutta for radiation hydrodynamics. I: Gray diffusion. *Journal of Computational Physics*, 518(??):??, December 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124005874.

Shi:2022:IST

[SPZ22] A. Shi, P.-O. Persson, and M. J. Zahr. Implicit shock tracking for unsteady flows by the method of lines. *Journal of Computational Physics*, 454(??):Article 110906, April 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121008019.

Song:2020:SCS

[SQSS20] Mingzhan Song, Xu Qian, Tianlong Shen, and Songhe Song. Stochastic conformal schemes for damped stochastic Klein–Gordon equation with additive noise. *Journal of Computational Physics*, 411(??):Article 109300, June 15, 2020. CO-

DEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120300747.

Shen:2020:CSI

[SRD20] Yi Shen, Yi Ren, and Hang Ding. A 3D conservative sharp interface method for simulation of compressible two-phase flows. *Journal of Computational Physics*, 403 (??):Article 109107, February 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119308125.

Schwander:2021:COS

[SRH21] Lukas Schwander, Deep Ray, and Jan S. Hesthaven. Controlling oscillations in spectral methods by local artificial viscosity governed by neural networks. *Journal of Computational Physics*, 431(??):Article 110144, April 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912100036X.

Shivanand:2024:SMS

[SRM24] Sharana Kumar Shivanand, Bojana Rosić, and Hermann G. Matthies. Stochastic modelling of symmetric positive definite material tensors. *Journal of Computational Physics*, 505(??):??, May 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124001323.

Shahmardi:2021:FEH

[SRTB21] Armin Shahmardi, Marco Edoardo Rosti, Outi Tammisola, and Luca Brandt. A fully Eulerian hybrid immersed boundary-phase field model for contact line dynamics on complex geometries. *Journal of Computational Physics*, 443(??):Article 110468, October 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121003636.

Shahane:2021:HOA

[SRV21] Shantanu Shahane, Anand Radhakrishnan, and Surya Pratap Vanka. A high-order accurate meshless method for solution of incompressible fluid flow problems. *Journal of Computational Physics*, 445(??):Article 110623, November 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121005180.

Shi:2022:CPN

[SS22a] Yanyan Shi and Yajuan Sun. Contact-PIC numerical methods for simulating Vlasov–Poisson–Fokker–Planck problem. *Journal of Computational Physics*, 459(??):??, June 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912200170X.

Sousa:2022:CUQ

[SS22b] Victor C. B. Sousa and Carlo Scalo. Corrigendum to "A unified Quasi-Spectral Viscosity (QSV) approach to shock capturing and large-eddy simulation" [J. Comput. Phys. **455** (2022) 111139]. *Journal of Computational Physics*, 471(??):??, December 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122006696. See [SS22d].

Sousa:2022:LSV

[SS22c] Victor C. B. Sousa and Carlo Scalo. A Legendre spectral viscosity (LSV) method applied to shock capturing for high-order flux reconstruction schemes. *Journal of Computational Physics*, 460(??):??, July 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122002194.

Sousa:2022:UQS

[SS22d] Victor C. B. Sousa and Carlo Scalo. A unified Quasi-Spectral Viscosity (QSV) approach to shock capturing and large-eddy simulation. *Journal of Computational Physics*, 459(??):??, June 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122002017. See corrigendum [SS22b].

Schwarz:2023:MTC

[SS23] Philip Schwarz and Romuald Skoda. A mass transfer cavitation model for the numerical flow simulation of binary alkane mixture segregation. *Journal of Computational Physics*, 491(??):??, October 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123004771.

Soler:2020:NCF

[SSG+20] J. A. Soler, F. Schwander, G. Giorgiani, J. Liandrat, P. Tamain, and E. Serre. A new conservative finite-difference scheme for anisotropic elliptic problems in bounded domain. *Journal of Computational Physics*, 405(??):Article 109093, March 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119307983.

Scillitoe:2021:UQD

[SSG21] Ashley Scillitoe, Pranay Seshadri, and Mark Girolami. Uncertainty quantification for data-driven turbulence modelling with Mondrian forests. *Journal of Computational Physics*, 430(??):Article 110116, April 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121000085.

Schlachter:2020:WEN

[SSK20] Louisa Schlachter, Florian Schneider, and Oliver Kolb. Weighted essentially non-oscillatory stochastic Galerkin approximation for hyperbolic conservation laws. *Journal of Computational Physics*, 419(??):Article 109663, October 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912030437X.

Skaras:2021:STS

[SSMA21] Timothy Skaras, Torrey Saxton, Chad Meyer, and Tariq D. Aslam. Super-time-stepping schemes for parabolic equations with boundary conditions. *Journal of Computational Physics*, 425(??):Article 109879, January 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

URL http://www.sciencedirect.com/science/article/pii/S0021999120306537.

Salimi:2024:VFM

[SSP+24] Salar Zamani Salimi, Nicolò Scapin, Elena-Roxana Popescu, Pedro Costa, and Luca Brandt. A Volume-of-Fluid method for multicomponent droplet evaporation with Robin boundary conditions. *Journal of Computational Physics*, 514(??):??, October 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124004601.

Sengupta:2020:GSA

[SSPV20] Soumyo Sengupta, Tapan K. Sengupta, Jyothi Kumar Puttam, and Keshava Suman Vajjala. Global spectral analysis for convection-diffusion-reaction equation in one and two-dimensions: Effects of numerical anti-diffusion and dispersion. *Journal of Computational Physics*, 408 (??):Article 109310, May 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912030084X.

Shi:2020:APU

[SSS20] Yi Shi, Peng Song, and WenJun Sun. An asymptotic preserving unified gas kinetic particle method for radiative transfer equations. *Journal of Computational Physics*, 420(??):Article 109687, November 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120304617.

Sundaram:2022:NOH

[SSS22] Prasannabalaji Sundaram, Aditi Sengupta, and Tapan K. Sengupta. A non-overlapping high accuracy parallel subdomain closure for compact scheme: Onset of Rayleigh–Taylor instability by ultrasonic waves. *Journal of Computational Physics*, 470(??):??, December 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122006556.

Sokolov:2023:HRF

[SST+23] Igor V. Sokolov, Haomin Sun, Gabor Toth, Zhenguang Huang, Valeriy Tenishev, Lulu Zhao, Jozsef Kota, Ofer Cohen, and Tamas I. Gombosi. High resolution finite volume method for kinetic equations with Poisson brackets. *Journal of Computational Physics*, 476(??):??, March 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123000189.

Shkolnikov:2024:DLS

[SSTD24] Mykhaylo Shkolnikov, H. Mete Soner, and Valentin Tissot-Daguette. Deep level-set method for Stefan problems. *Journal of Computational Physics*, 503(??):??, April 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124000779.

Schneider:2022:EKI

[SSW22] Tapio Schneider, Andrew M. Stuart, and Jin-Long Wu. Ensemble Kalman inversion for sparse learning of dynamical systems from time-averaged data. *Journal of Computational Physics*, 470(??):??, December 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122006210.

Sun:2022:MSD

[SSX22] Jiawei Sun, Chi-Wang Shu, and Yulong Xing. Multi-symplectic discontinuous Galerkin methods for the stochastic Maxwell equations with additive noise. *Journal of Computational Physics*, 461(??):??, July 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122002613.

Shi:2023:EAP

[SSX23] Yi Shi, Peng Song, and Tao Xiong. An efficient asymptotic preserving Monte Carlo method for radiative transfer equations. *Journal of Computational Physics*, 493(??):??, November 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123005788.

Soize:2024:PCB

[ST24] Christian Soize and Quy-Dong To. Polynomial-chaos-based conditional statistics for probabilistic learning with heterogeneous data applied to atomic collisions of helium on graphite substrate. *Journal of Computational Physics*, 496(??):??, January 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123006770.

Smyl:2021:LCN

[STB+21] Danny Smyl, Tyler N. Tallman, Jonathan A. Black, Andreas Hauptmann, and Dong Liu. Learning and correcting non-Gaussian model errors. *Journal of Computational Physics*, 432(??):Article 110152, May 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121000449.

Shou:2021:MAE

[STC+21] Yinsi Shou, Valeriy Tenishev, Yuxi Chen, Gabor Toth, and Natalia Ganushkina. Magnetohydrodynamic with Adaptively Embedded Particle-in-Cell model: MHD-AEPIC. *Journal of Computational Physics*, 446(??):Article 110656, December 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121005519.

Stein:2022:SAS

[Ste22] David B. Stein. Spectrally accurate solutions to inhomogeneous elliptic PDE in smooth geometries using function intension. *Journal of Computational Physics*, 470(??):??, December 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122006568.

Schaefer:2017:SGA

[STEK17] Ido Schaefer, Hillel Tal-Ezer, and Ronnie Kosloff. Semi-global approach for propagation of the time-dependent Schrödinger equation for time-dependent and nonlinear problems. *Journal of Computational Physics*, 343(??):368–413, August 15, 2017. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999117302887. See corrigendum [STEK22].

Schaefer:2022:CSG

[STEK22] Ido Schaefer, Hillel Tal-Ezer, and Ronnie Kosloff. Corrigendum to "Semi-global approach for propagation of the time-dependent Schrödinger equation for time-dependent and nonlinear problems" [j. comput. phys. **343** (2017) 368–413]. *Journal of Computational Physics*, 463(??):??, August 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912200362X. See [STEK17].

Sadr:2020:GPR

[STG20] Mohsen Sadr, Manuel Torrilhon, and M. Hossein Gorji. Gaussian process regression for maximum entropy distribution. *Journal of Computational Physics*, 418(??): Article 109644, October 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120304186.

Stiller:2020:SDC

[Sti20] Jörg Stiller. A spectral deferred correction method for incompressible flow with variable viscosity. *Journal of Computational Physics*, 423(??):Article 109840, December 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120306148.

Saetta:2024:UQA

[STI24] Ettore Saetta, Renato Tognaccini, and Gianluca Iaccarino. Uncertainty quantification in autoencoders predictions: Applications in aerodynamics. *Journal of Computational Physics*, 506(??):??, June 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124002006.

Schoeller:2021:MSP

[STWK21] Simon F. Schoeller, Adam K. Townsend, Timothy A. Westwood, and Eric E. Keaveny. Methods for suspensions of passive and active filaments. *Journal of Computational Physics*, 424(??):Article 109846, January 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120306203.

Shu:2024:PRC

[STZZ24] Qingzhou Shu, Qinglin Tang, Shaobo Zhang, and Yong Zhang. A preconditioned Riemannian conjugate gradient method for computing the ground states of arbitrary-angle rotating Bose–Einstein condensates. *Journal of Computational Physics*, 512(??):??, September 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124003796.

Sukharev:2023:EPS

[Suk23] Maxim Sukharev. Efficient parallel strategy for molecular plasmonics — a numerical tool for integrating Maxwell-Schrödinger equations in three dimensions. *Journal of Computational Physics*, 477(??):??, March 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123000153.

Shahane:2023:SIM

[SV23] Shantanu Shahane and Surya Pratap Vanka. A semi-implicit meshless method for incompressible flows in complex geometries. *Journal of Computational Physics*, 472(??):??, January 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122007781.

Svard:2021:ESB

[Svä21] Magnus Svärd. Entropy stable boundary conditions for the Euler equations. *Journal of Computational Physics*, 426(??):Article 109947, February 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912030721X.

Svard:2022:LES

[Svä22] Magnus Svärd. Large Eddy Simulations by approximate weak entropy solutions. *Journal of Computational Physics*, 448(??):Article 110737, January 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912100632X.

Svard:2024:CFV

[Svä24] Magnus Svärd. A convergent finite-volume scheme for the diffusive compressible Euler model-resolved and under-resolved flows. *Journal of Computational Physics*, 518(??): ??, December 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124005710.

Schoutrop:2021:MTP

[SvDtTB21] Chris Schoutrop, Jan van Dijk, and Jan ten Thije Boonkkamp. Multicomponent transport in plasmas; exploiting stoichiometry. *Journal of Computational Physics*, 428(??): Article 109979, March 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120307531.

Schulze:2024:HOF

[SVS24] Lennart J. Schulze, Sachin K. T. Veettil, and Ivo F. Sbalzarini. A high-order fully Lagrangian particle level-set method for dynamic surfaces. *Journal of Computational Physics*, 515(??):??, October 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124005102.

Schimming:2021:NME

[SVW21] Cody D. Schimming, Jorge Viñals, and Shawn W. Walker. Numerical method for the equilibrium configurations of a Maier–Saupe bulk potential in a Q-tensor model of an anisotropic nematic liquid crystal. *Journal of Computational Physics*, 441(??):Article 110441, September 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121003363.

Semenov:2022:SEM

[SW22] I. L. Semenov and K.-D. Weltmann. A spectral element method for modelling streamer discharges in low-temperature atmospheric-pressure plasmas. *Journal of Computational Physics*, 465(??):??, September 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122004405.

Spiteri:2023:FSR

[SW23] Raymond J. Spiteri and Siqi Wei. Fractional-step Runge–Kutta methods: Representation and linear stability analysis. *Journal of Computational Physics*, 476(??):??, March 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122009639.

Shankar:2021:EHO

[SWF21] Varun Shankar, Grady B. Wright, and Aaron L. Fogelson. An efficient high-order meshless method for advection-diffusion equations on time-varying irregular domains. *Journal of Computational Physics*, 445(??):Article 110633, November 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121005283.

Schneider:2020:CSG

[SWG+20] Martin Schneider, Kilian Weishaupt, Dennis Gläser, Wietse M. Boon, and Rainer Helmig. Coupling staggered-grid and MPFA finite volume methods for free flow/porous-medium flow problems. *Journal of Computational Physics*, 401(??):Article 109012, January 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119307181.

Sadr:2021:CKC

[SWG21] Mohsen Sadr, Qian Wang, and M. Hossein Gorji. Coupling kinetic and continuum using data-driven maximum entropy distribution. *Journal of Computational Physics*, 444(??):Article 110542, November 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

URL http://www.sciencedirect.com/science/article/pii/S002199912100437X.

Shen:2022:RCC

[SWHJ22] Zhihao Shen, Gang Wang, Duruo Huang, and Feng Jin. A resolved CFD–DEM coupling model for modeling two-phase fluids interaction with irregularly shaped particles. *Journal of Computational Physics*, 448(??):Article 110695, January 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121005908.

Sato:2021:CDO

[SWM21] Hiroki Sato, T.-H. Watanabe, and S. Maeyama. Contour dynamics for one-dimensional Vlasov–Poisson plasma with the periodic boundary. *Journal of Computational Physics*, 445(??):Article 110626, November 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121005210.

Song:2024:LAP

[SWY+24] Yanjie Song, He Wang, He Yang, Maria Luisa Taccari, and Xiaohui Chen. Loss-attentional physics-informed neural networks. *Journal of Computational Physics*, 501(??):??, March 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124000305.

Sun:2020:SPD

[SX20] Zheng Sun and Yulong Xing. On structure-preserving discontinuous Galerkin methods for Hamiltonian partial differential equations: Energy conservation and multi-symplecticity. *Journal of Computational Physics*, 419(??):Article 109662, October 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120304368.

Shen:2023:MDS

[SXZ+23] Yi Shen, Xiao Xu, Jun Zhang, Jing Liu, and Zhaoming Zhang. The Meshless Direct Simulation Monte Carlo method. *Journal of Computational Physics*, 481(??):??, May

15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123001341.

Sheng:2021:PPF

[SY21] Hailong Sheng and Chao Yang. PFNN: a penalty-free neural network method for solving a class of second-order boundary-value problems on complex geometries. *Journal of Computational Physics*, 428(??):Article 110085, March 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120308597.

Seraj:2023:DTS

[SYAM23] Sabet Seraj, Anil Yildirim, Joshua L. Anibal, and Joaquim R. R. A. Martins. Dissipation and time step scaling strategies for low and high Mach number flows. *Journal of Computational Physics*, 491(??):??, October 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123004539.

Shao:2023:GVL

[SYC+23] Changxiao Shao, Shian Yuan, Min Chai, Tai Jin, and Kun Luo. A generalized variational level set method without frequent reinitialization for simulations of gas–liquid flows. *Journal of Computational Physics*, 495(??):??, December 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123006538.

Shi:2024:FSP

[SYJ+24] Lijuan Shi, Haijian Yang, Zemin Ji, Lei Jiang, and Chao Yang. Field-split preconditioned active-set reduced-space algorithm for complex black oil reservoir simulation at large-scale. *Journal of Computational Physics*, 517(??):??, November 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124006107.

Shao:2023:GCL

[SYL23] Changxiao Shao, Shian Yuan, and Kun Luo. A generalized coupled level set/volume-of-fluid/ghost fluid method for detailed simulation of gas–liquid flows. *Journal of Computational Physics*, 487(??):??, August 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S002199912300253X`.

Sakurai:2019:VPI

[SYOS19] Teluo Sakurai, Katsunori Yoshimatsu, Naoya Okamoto, and Kai Schneider. Volume penalization for inhomogeneous Neumann boundary conditions modeling scalar flux in complicated geometry. *Journal of Computational Physics*, 390(??):452–469, August 1, 2019. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999119302414`. See critique [TNB21] and corrigendum [SYOS21].

Sakurai:2021:CVP

[SYOS21] Teluo Sakurai, Katsunori Yoshimatsu, Naoya Okamoto, and Kai Schneider. Corrigendum to "Volume penalization for inhomogeneous Neumann boundary conditions modeling scalar flux in complicated geometry" [J. Comput. Phys. **390** (2019) 452–469]. *Journal of Computational Physics*, 443(??):Article 110497, October 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999121003922`.

Song:2023:NAO

[SYY23] Yongcun Song, Xiaoming Yuan, and Hangrui Yue. A numerical approach to the optimal control of thermally convective flows. *Journal of Computational Physics*, 494(??):??, December 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999123005533`.

Su:2021:UFO

[SZ21] Chunmei Su and Xiaofei Zhao. A uniformly first-order accurate method for Klein–Gordon–Zakharov system in simultaneous high-plasma-frequency and subsonic limit regime. *Journal of Computational Physics*, 428(??):Article 110064, March 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print),

1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912030838X.

Song:2024:TSI

[SZKY24] Jin Song, Ming Zhong, George Em Karniadakis, and Zhenya Yan. Two-stage initial-value iterative physics-informed neural networks for simulating solitary waves of nonlinear wave equations. *Journal of Computational Physics*, 505(??):??, May 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124001669.

S:2019:AMH

[SZN19] Vevek U. S, B. Zang, and T. H. New. Adaptive mapping for high order WENO methods. *Journal of Computational Physics*, 381(??):162–188, March 15, 2019. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119300154. See corrigendum [SZN20].

S:2020:CAM

[SZN20] Vevek U. S, B. Zang, and T. H. New. Corrigendum to "Adaptive mapping for high order WENO methods" [j. comput. phys. **381** (2019) 162–188]. *Journal of Computational Physics*, 414(??):Article 109492, August 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120302667. See [SZN19].

Sun:2023:FSP

[SZQS23] Jingwei Sun, Hong Zhang, Xu Qian, and Songhe Song. A family of structure-preserving exponential time differencing Runge–Kutta schemes for the viscous Cahn–Hilliard equation. *Journal of Computational Physics*, 492(??):??, November 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123005090.

Su:2020:CWF

[SZW+20] Wei Su, Lianhua Zhu, Peng Wang, Yonghao Zhang, and Lei Wu. Can we find steady-state solutions to multiscale rarefied gas flows within dozens of iterations? *Journal of Computational Physics*, 407(??):Article 109245, April 15, 2020.

CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S002199912030019X`.

Tapley:2022:CGM

[TACO22] Benjamin K. Tapley, Helge I. Andersson, Elena Celledoni, and Brynjulf Owren. Computational geometric methods for preferential clustering of particle suspensions. *Journal of Computational Physics*, 448(??):Article 110725, January 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999121006203`.

Takahashi:2023:FTD

[Tak23] Toru Takahashi. A fast time-domain boundary element method for three-dimensional electromagnetic scattering problems. *Journal of Computational Physics*, 482(??):??, June 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999123001481`.

Trappler:2021:RCN

[TAVD21] Victor Trappler, Élise Arnaud, Arthur Vidard, and Laurent Debreu. Robust calibration of numerical models based on relative regret. *Journal of Computational Physics*, 426(??):Article 109952, February 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999120307269`.

Tazhimbetov:2023:SFG

[TAWD23] Nurbek Tazhimbetov, Martin Almquist, Jonatan Werpers, and Eric M. Dunham. Simulation of flexural-gravity wave propagation for elastic plates in shallow water using an energy-stable finite difference method with weakly enforced boundary and interface conditions. *Journal of Computational Physics*, 493(??):??, November 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S002199912300565X`.

Tominec:2021:URF

[TB21] Igor Tominec and Eva Breznik. An unfitted RBF-FD method in a least-squares setting for elliptic PDEs on complex geometries. *Journal of Computational Physics*, 436(??):Article 110283, July 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121001789.

Tekbas:2023:FDT

[TB23] Kenan Tekbas and Jean-Pierre Bérenger. Finite-difference time-domain (FDTD) method with non-homogeneous cells filled with voxels. *Journal of Computational Physics*, 489(??):??, September 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123003613.

Tavelli:2024:NCE

[TB24] M. Tavelli and W. Boscheri. A new class of efficient high order semi-Lagrangian IMEX discontinuous Galerkin methods on staggered unstructured meshes. *Journal of Computational Physics*, 515(??):??, October 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124005370.

Tremblin:2024:MDR

[TBB+24] Pascal Tremblin, Rémi Bourgeois, Solène Bulteau, Samuel Kokh, Thomas Padioleau, Maxime Delorme, Antoine Strugarek, Matthias González, and Allan Sacha Brun. A multi-dimensional, robust, and cell-centered finite-volume scheme for the ideal MHD equations. *Journal of Computational Physics*, 519(??):??, December 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124007034.

Tregan:2020:CID

[TBD+20] J.-M. Tregan, S. Blanco, J. Dauchet, M. El Hafi, R. Fournier, L. Ibarrart, P. Lapeyre, and N. Villefranque. Convergence issues in derivatives of Monte Carlo null-collision integral formulations: a solution. *Journal of Computational*

Physics, 413(??):Article 109463, July 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120302370.

Tissot:2020:OCS

[TBG20] Gilles Tissot, Robin Billard, and Gwénaël Gabard. Optimal cavity shape design for acoustic liners using Helmholtz equation with visco-thermal losses. *Journal of Computational Physics*, 402(??):Article 109048, February 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119307533.

Tang:2022:FSS

[TBM22] Jet Hoe Tang, Romain Brossier, and Ludovic Métivier. Fully scalable solver for frequency-domain visco-elastic wave equations in 3D heterogeneous media: a controllability approach. *Journal of Computational Physics*, 468(??):??, November 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122005769.

Trask:2020:CCS

[TBP20] Nathaniel Trask, Pavel Bochev, and Mauro Perego. A conservative, consistent, and scalable meshfree mimetic method. *Journal of Computational Physics*, 409(??):Article 109187, May 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119308927.

Tartakovsky:2021:PIM

[TBSH21] A. M. Tartakovsky, D. A. Barajas-Solano, and Q. He. Physics-informed machine learning with conditional Karhunen–Loève expansions. *Journal of Computational Physics*, 426(??):Article 109904, February 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120306781.

Tipireddy:2020:CKL

[TBST20] Ramakrishna Tipireddy, David A. Barajas-Solano, and Alexandre M. Tartakovsky. Conditional Karhunen–Loève expansion for uncertainty quantification and active learning in partial differential equation models. *Journal of Computational Physics*, 418(??):Article 109604, October 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120303788.

Taghizadeh:2022:EPI

[TBW22] Ehsan Taghizadeh, Helen M. Byrne, and Brian D. Wood. Explicit physics-informed neural networks for nonlinear closure: the case of transport in tissues. *Journal of Computational Physics*, 449(??):Article 110781, January 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121006768.

Tushar:2023:DPC

[TC23] Tushar and Souvik Chakraborty. Deep Physics Corrector: a physics enhanced deep learning architecture for solving stochastic differential equations. *Journal of Computational Physics*, 479(??):??, April 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123000992.

Tangtartharakul:2021:PIP

[TCA21] Kavin Tangtartharakul, Guangye Chen, and Alexey Arefiev. Particle integrator for particle-in-cell simulations of ultra-high intensity laser-plasma interactions. *Journal of Computational Physics*, 434(??):Article 110233, June 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121001285.

Tang:2022:ASF

[TCK+22] Qi Tang, Luis Chacón, Tzanio V. Kolev, John N. Shadid, and Xian-Zhu Tang. An adaptive scalable fully implicit algorithm based on stabilized finite element for reduced visco-resistive MHD. *Journal of Computational Physics*, 454(??):Article 110967, April 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122000298.

Tavelli:2020:STA

[TCR+20] Maurizio Tavelli, Simone Chiocchetti, Evgeniy Romenski, Alice-Agnes Gabriel, and Michael Dumbser. Space-time adaptive ADER discontinuous Galerkin schemes for nonlinear hyperelasticity with material failure. *Journal of Computational Physics*, 422(??):Article 109758, December 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999120305325`.

Tan:2022:SHO

[TCS22] Meiqi Tan, Juan Cheng, and Chi-Wang Shu. Stability of high order finite difference and local discontinuous Galerkin schemes with explicit-implicit-null time-marching for high order dissipative and dispersive equations. *Journal of Computational Physics*, 464(??):??, September 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S002199912200376X`.

Tan:2024:NSD

[TCW24] Zhijun Tan, Jianjun Chen, and Weiyi Wang. A novel surface-derivative-free of jumps AIIM with triangulated surfaces for 3D Helmholtz interface problems. *Journal of Computational Physics*, 506(??):??, June 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999124001967`.

Tang:2024:GNS

[TD24] Haoyu Tang and Louis J. Durlofsky. Graph network surrogate model for subsurface flow optimization. *Journal of Computational Physics*, 512(??):??, September 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999124003814`.

Tro:2023:SOD

[TEA+23] Sara Tro, Tyco Mera Evans, Tariq D. Aslam, Eduardo Lozano, and David B. Culp. A second-order distributed memory parallel fast sweeping method for the eikonal equation. *Journal of Computational Physics*, 474(??):??, February 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print),

1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122008488.

tenEikelder:2024:DFV

[tES24] M. F. P. ten Eikelder and D. Schillinger. The divergence-free velocity formulation of the consistent Navier–Stokes Cahn–Hilliard model with non-matching densities, divergence-conforming discretization, and benchmarks. *Journal of Computational Physics*, 513(??):??, September 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124003978.

Tschisgale:2020:IBM

[TF20] Silvio Tschisgale and Jochen Fröhlich. An immersed boundary method for the fluid-structure interaction of slender flexible structures in viscous fluid. *Journal of Computational Physics*, 423(??):Article 109801, December 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120305751.

Tang:2022:ECM

[TFCH22] Zhuochao Tang, Zhuojia Fu, Meng Chen, and Jingfang Huang. An efficient collocation method for long-time simulation of heat and mass transport on evolving surfaces. *Journal of Computational Physics*, 463(??):??, August 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122003722.

Takagi:2022:NHO

[TFWX22] Shinichi Takagi, Lin Fu, Hiro Wakimura, and Feng Xiao. A novel high-order low-dissipation TENO–THINC scheme for hyperbolic conservation laws. *Journal of Computational Physics*, 452(??):Article 110899, March 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121007944.

Tourbier:2024:CMT

[TGB+24] Alexis Tourbier, Lionel Gamet, Philippe Béard, Typhène Michel, Joelle Aubin, and Hrvoje Jasak. A consistent methodology to transport a passive scalar with the geometric Volume-of-Fluid method isoAdvector. *Journal of Computational Physics*, 513(??):??, September 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124004479.

Tkachenko:2023:ELA

[TGM23] Sergey Tkachenko, Sergey Gavrilyuk, and Jacques Massoni. Extended Lagrangian approach for the numerical study of multidimensional dispersive waves: Applications to the Serre–Green–Naghdi equations. *Journal of Computational Physics*, 477(??):??, March 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122009640.

Tsiolakis:2022:PST

[TGS+22] Vasileios Tsiolakis, Matteo Giacomini, Ruben Sevilla, Carsten Othmer, and Antonio Huerta. Parametric solutions of turbulent incompressible flows in OpenFOAM via the proper generalised decomposition. *Journal of Computational Physics*, 449(??):Article 110802, January 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121006975.

Hart:2022:PPG

[tH22] Maarten 't Hart. The projection point geodesic grid algorithm for meshing the sphere. *Journal of Computational Physics*, 454(??):Article 110993, April 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122000559.

Troescher:2023:FIH

[TH23] Nicholas Troescher and Jonathan Higdon. A fully-implicit hybridized discontinuous Galerkin spectral element method for two phase flow in petroleum reservoirs. *Journal of Computational Physics*, 474(??):??, February 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122008877.

Theillard:2021:VPR

[The21] Maxime Theillard. A volume-preserving reference map method for the level set representation. *Journal of Computational Physics*, 442(??):Article 110478, October 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999121003739`.

Trask:2022:EEP

[THH22] Nathaniel Trask, Andy Huang, and Xiaozhe Hu. Enforcing exact physics in scientific machine learning: a data-driven exterior calculus on graphs. *Journal of Computational Physics*, 456(??):??, May 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999122000316`.

Taverniers:2021:MIE

[THKT21] Søren Taverniers, Eric J. Hall, Markos A. Katsoulakis, and Daniel M. Tartakovsky. Mutual information for explainable deep learning of multiscale systems. *Journal of Computational Physics*, 444(??):Article 110551, November 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999121004460`.

Tonicello:2024:HOD

[TI24] Niccolò Tonicello and Matthias Ihme. A high-order diffused-interface approach for two-phase compressible flow simulations using a discontinuous Galerkin framework. *Journal of Computational Physics*, 508(??):??, July 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999124002328`.

Tao:2022:AES

[TJ22] Molei Tao and Shi Jin. Accurate and efficient simulations of Hamiltonian mechanical systems with discontinuous potentials. *Journal of Computational Physics*, 450 (??):Article 110846, February 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999121007415`.

Tao:2021:AHO

[TJC21] Zhanjing Tao, Yan Jiang, and Yingda Cheng. An adaptive high-order piecewise polynomial based sparse grid collocation method with applications. *Journal of Computational Physics*, 433(??):Article 109770, May 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120305441.

Thacher:2023:HOC

[TJM23] Will Thacher, Hans Johansen, and Daniel Martin. A high order Cartesian grid, finite volume method for elliptic interface problems. *Journal of Computational Physics*, 491(??):??, October 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123004461.

Trang:2024:PMN

[TJS+24] Cong Bang Trang, Lukáš Jakabčin, Thomas Sayet, Eric Blond, Emmanuel de Bilbao, and Athanasios Batakis. A percolation model for numerical simulations of 2D non-gravity impregnation in porous media. *Journal of Computational Physics*, 518(??):??, December 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124005448.

Thirumalaisamy:2023:EPS

[TKGB23] Ramakrishnan Thirumalaisamy, Kaustubh Khedkar, Pieter Ghysels, and Amneet Pal Singh Bhalla. An effective preconditioning strategy for volume penalized incompressible/ low Mach multiphase flow solvers. *Journal of Computational Physics*, 490(??):??, October 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123004205.

Tamaki:2022:CAE

[TKK22] Yoshiharu Tamaki, Yuichi Kuya, and Soshi Kawai. Comprehensive analysis of entropy conservation property of non-dissipative schemes for compressible flows: KEEP scheme redefined. *Journal of Computational Physics*, 468(??):

??, November 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122005563.

Tiwari:2022:MAL

[TKR22] Sudarshan Tiwari, Axel Klar, and Giovanni Russo. A meshfree arbitrary Lagrangian–Eulerian method for the BGK model of the Boltzmann equation with moving boundaries. *Journal of Computational Physics*, 458(??):??, June 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122001504.

Tang:2020:RAT

[TL20] Kejun Tang and Qifeng Liao. Rank adaptive tensor recovery based model reduction for partial differential equations with high-dimensional random inputs. *Journal of Computational Physics*, 409(??):Article 109326, May 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120301005.

Toosi:2021:GIE

[TL21] Siavash Toosi and Johan Larsson. The Germano identity error and the residual of the LES governing equation. *Journal of Computational Physics*, 443(??):Article 110544, October 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121004393.

Tetelin:2024:MMM

[TL24] Arthur Tételin and Clément Le Touze. A multislope MUSCL method for vectorial reconstructions. *Journal of Computational Physics*, 513(??):??, September 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124004340.

Touboul:2020:TDS

[TLB20] Marie Touboul, Bruno Lombard, and Cédric Bellis. Time-domain simulation of wave propagation across resonant meta-interfaces. *Journal of Computational Physics*, 414

(??):Article 109474, August 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120302485.

Tang:2020:DLB

[TLD20] Meng Tang, Yimin Liu, and Louis J. Durlofsky. A deep-learning-based surrogate model for data assimilation in dynamic subsurface flow problems. *Journal of Computational Physics*, 413(??):Article 109456, July 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120302308.

Tseng:2023:CCP

[TLHL23] Yu-Hau Tseng, Te-Sheng Lin, Wei-Fan Hu, and Ming-Chih Lai. A cusp-capturing PINN for elliptic interface problems. *Journal of Computational Physics*, 491(??):??, October 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123004540.

Li:2022:TAP

[tLjTbZ22] Zhao ting Li, Xiang ji Tang, and Hong bo Zhang. Theoretical analysis of pseudospectral convergence based on total variation and a related mesh refinement method. *Journal of Computational Physics*, 463(??):??, August 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122003291.

Tang:2023:WWF

[TLKK23] Mengyi Tang, Wenjing Liao, Rachel Kuske, and Sung Ha Kang. WeakIdent: Weak formulation for identifying differential equation using narrow-fit and trimming. *Journal of Computational Physics*, 483(??):??, June 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912300164X.

Tlupova:2022:DDS

[Tlu22] Svetlana Tlupova. A domain decomposition solution of the Stokes–Darcy system in 3D based on boundary integrals. *Journal of Computational Physics*, 450(??): Article 110824, February 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121007191.

Till:2020:FAC

[TLWM20] Andrew T. Till, Kendra P. Long, James S. Warsa, and Jim E. Morel. Formulations and analysis of Compton scattering for deterministic thermal radiation transport. *Journal of Computational Physics*, 400(??):Article 108990, January 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119306953.

Taunay:2023:QBM

[TM23] Pierre-Yves C. R. Taunay and Michael E. Mueller. Quadrature-based moment methods for kinetic plasma simulations. *Journal of Computational Physics*, 473(??):??, January 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912200763X.

Temizer:2020:NBN

[TMG20] I. Temizer, P. Motamarri, and V. Gavini. NURBS-based non-periodic finite element framework for Kohn–Sham density functional theory calculations. *Journal of Computational Physics*, 410(??):Article 109364, June 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120301388.

Teissier:2024:CEF

[TMM24] Jean-Mathieu Teissier, Raquel Mäusle, and Wolf-Christian Müller. Cost-efficient finite-volume high-order schemes for compressible magnetohydrodynamics. *Journal of Computational Physics*, 515(??):??, October 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124005357.

Taylor:2023:PBC

[TN23] Seth Taylor and Jean-Christophe Nave. A projection-based Characteristic Mapping method for tracer transport on the sphere. *Journal of Computational Physics*, 477(??):??, March 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122009688.

Thirumalaisamy:2021:CVP

[TNB21] Ramakrishnan Thirumalaisamy, Nishant Nangia, and Amneet Pal Singh Bhalla. Critique on "Volume penalization for inhomogeneous Neumann boundary conditions modeling scalar flux in complicated geometry". *Journal of Computational Physics*, 433(??):Article 110163, May 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121000553. See [SYOS19].

Tsoutsanis:2023:SNS

[TNF23] Panagiotis Tsoutsanis, Xesus Nogueira, and Lin Fu. A short note on a 3D spectral analysis for turbulent flows on unstructured meshes. *Journal of Computational Physics*, 474(??):??, February 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122008671.

Truong:2024:TNS

[TOB+24] Duc P. Truong, Mario I. Ortega, Ismael Boureima, Gianmarco Manzini, Kim Ø. Rasmussen, and Boian S. Alexandrov. Tensor networks for solving the time-independent Boltzmann neutron transport equation. *Journal of Computational Physics*, 507(??):??, June 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912400192X.

Toh:2023:CTO

[Toh23] Yi Han Toh. Compact third-order accurate, positive preserving and divergence-free scheme. *Journal of Computational Physics*, 475(??):??, February 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122009603.

Taniguchi:2024:NTD

[TOS24] Nobutaka Taniguchi, Yuya Ohmichi, and Kojiro Suzuki. Nonlinear transient disturbance growth analysis for the compressible external flow and application to a flow around circular cylinder. *Journal of Computational Physics*, 516(??):??, November 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124006223.

Toth:2023:TTV

[Tot23] Gabor Toth. Total of time variation diminishing principle for conservation laws. *Journal of Computational Physics*, 494(??):??, December 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123006290.

Towers:2020:SAL

[Tow20] John D. Towers. A splitting algorithm for LWR traffic models with flux discontinuous in the unknown. *Journal of Computational Physics*, 421(??):Article 109722, November 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120304964.

Thirumalaisamy:2022:HNR

[TPB22] Ramakrishnan Thirumalaisamy, Neelesh A. Patankar, and Amneet Pal Singh Bhalla. Handling Neumann and Robin boundary conditions in a fictitious domain volume penalization framework. *Journal of Computational Physics*, 448(??):Article 110726, January 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121006215.

Thomann:2020:ASS

[TPK20] Andrea Thomann, Gabriella Puppo, and Christian Klingenberg. An all speed second order well-balanced IMEX relaxation scheme for the Euler equations with gravity. *Journal of Computational Physics*, 420(??):Article 109723, November 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print),

1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120304976.

Tiwari:2022:FRC

[TPPA22] Awanish Kumar Tiwari, Ambuj Pandey, Jagabandhu Paul, and Akash Anand. A fast rapidly convergent method for approximation of convolutions with applications to wave scattering and some other problems. *Journal of Computational Physics*, 459(??):??, June 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122001814.

Tsilifis:2020:SPC

[TPSN20] Panagiotis Tsilifis, Iason Papaioannou, Daniel Straub, and Fabio Nobile. Sparse Polynomial Chaos expansions using variational relevance vector machines. *Journal of Computational Physics*, 416(??):Article 109498, September 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120302722.

Tu:2022:LSS

[TPYX22] Yihui Tu, Qiyuan Pang, Haizhao Yang, and Zhenli Xu. Linear-scaling selected inversion based on hierarchical interpolative factorization for self Green's function for modified Poisson–Boltzmann equation in two dimensions. *Journal of Computational Physics*, 461(??):??, July 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121007889.

Tano:2021:SNA

[TR21] Mauricio E. Tano and Jean C. Ragusa. Sweep-Net: an artificial neural network for radiation transport solves. *Journal of Computational Physics*, 426(??):Article 109757, February 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120305313.

Tranquilli:2022:DVS

[TRC22] Paul Tranquilli, Lee Ricketson, and Luis Chacón. A deterministic verification strategy for electrostatic particle-in-cell algorithms in arbitrary spatial dimensions using the method of manufactured solutions. *Journal of Computational Physics*, 448(??):Article 110751, January 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912100646X.

Todorova:2020:QAC

[TS20] Blaga N. Todorova and René Steijl. Quantum algorithm for the collisionless Boltzmann equation. *Journal of Computational Physics*, 409(??):Article 109347, May 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120301212.

Turner:2024:HOS

[TSM24] Jacob M. Turner, Jung Hee Seo, and Rajat Mittal. A high-order sharp-interface immersed boundary solver for high-speed flows. *Journal of Computational Physics*, 500(??):??, March 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123008446.

Tsoutsanis:2023:SSA

[Tso23] Panagiotis Tsoutsanis. Stencil selection algorithms for WENO schemes on unstructured meshes. *Journal of Computational Physics*, 475(??):??, February 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119305248.

Thari:2022:ATB

[TSP22] A. Thari, M. Staufer, and G. J. Page. Asynchronous task based Eulerian–Lagrangian parallel solver for combustion applications. *Journal of Computational Physics*, 458(??):??, June 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122001656.

Treleaven:2020:APM

[TSS+20] N. C. W. Treleaven, M. Staufer, A. Spencer, A. Garmory, and G. J. Page. Application of the PODFS method to inlet turbulence generated using the digital filter technique. *Journal of Computational Physics*, 415(??):Article 109541, August 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999120303156`.

Torres-Sanchez:2020:ATF

[TSSOA20] Alejandro Torres-Sánchez, Daniel Santos-Oliván, and Marino Arroyo. Approximation of tensor fields on surfaces of arbitrary topology based on local Monge parametrizations. *Journal of Computational Physics*, 405(??):Article 109168, March 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999119308733`.

Toro:2020:LDC

[TSTH20] E. F. Toro, B. Saggiorato, S. Tokareva, and A. Hidalgo. Low-dissipation centred schemes for hyperbolic equations in conservative and non-conservative form. *Journal of Computational Physics*, 416(??):Article 109545, September 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999120303193`.

Taverniers:2020:EDM

[TT20] Søren Taverniers and Daniel M. Tartakovsky. Estimation of distributions via multilevel Monte Carlo with stratified sampling. *Journal of Computational Physics*, 419 (??):Article 109572, October 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999120303466`.

Takhirov:2022:ENF

[TT22a] Aziz Takhirov and Catalin Trenchea. Efficient nonlinear filter stabilization of the Leray–α model. *Journal of Computational Physics*, 471(??):??, December 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999122007318`.

Tan:2022:GCL

[TT22b] Zengqiang Tan and Huazhong Tang. A general class of linear unconditionally energy stable schemes for the gradient flows. *Journal of Computational Physics*, 464(??):??, September 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912200434X.

Tan:2023:GCL

[TT23] Zengqiang Tan and Huazhong Tang. A general class of linear unconditionally energy stable schemes for the gradient flows, II. *Journal of Computational Physics*, 495(??):??, December 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123006691.

Tsai:2024:VAM

[TT24] Richard Tsai and Axel G. R. Turnquist. A volumetric approach to Monge's optimal transport on surfaces. *Journal of Computational Physics*, 517(??):??, November 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124006004.

Tugulan:2022:TDW

[TTP22] Claudia Tugulan, Olga Trichtchenko, and Emilian Parau. Three-dimensional waves under ice computed with novel preconditioning methods. *Journal of Computational Physics*, 459(??):??, June 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122001917.

Thari:2021:PLB

[TTSP21] A. Thari, N. C. W. Treleaven, M. Staufer, and G. J. Page. Parallel load-balancing for combustion with spray for large-scale simulation. *Journal of Computational Physics*, 434(??):Article 110187, June 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121000826.

Takahashi:2022:NEA

[TTY22] Akihiko Takahashi, Yoshifumi Tsuchida, and Toshihiro Yamada. A new efficient approximation scheme for solving high-dimensional semilinear PDEs: Control variate method for deep BSDE solver. *Journal of Computational Physics*, 454(??):Article 110956, April 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999122000183`.

Torres:2024:CBD

[TUCT24] Loric Torres, Annafederica Urbano, Catherine Colin, and Sébastien Tanguy. On the coupling between direct numerical simulation of nucleate boiling and a micro-region model at the contact line. *Journal of Computational Physics*, 497(??):??, January 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999123006976`.

Turnquist:2024:AMM

[Tur24] Axel G. R. Turnquist. Adaptive mesh methods on compact manifolds via Optimal Transport and Optimal Information Transport. *Journal of Computational Physics*, 500(??):??, March 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999123008215`.

Terekhov:2022:FVM

[TV22] Kirill M. Terekhov and Yuri V. Vassilevski. Finite volume method for coupled subsurface flow problems, II: Poroelasticity. *Journal of Computational Physics*, 462(??):??, August 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S002199912200287X`.

Toth:2024:CWS

[TvdH24a] Gábor Tóth and Bart van der Holst. Corrigendum to "Weak solutions for extended magnetohydrodynamics using linear combination of entropies" [journal of computational physics, 508, 113036]. *Journal of Computational Physics*, 514(??):??, October 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

URL http://www.sciencedirect.com/science/article/pii/S0021999124004637. See [TvdH24b].

Toth:2024:WSE

[TvdH24b] Gábor Tóth and Bart van der Holst. Weak solutions for extended magnetohydrodynamics using linear combination of entropies. *Journal of Computational Physics*, 508(??):??, July 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124002857. See corrigendum [TvdH24a].

Tominec:2022:URB

[TVL+22] Igor Tominec, Pierre-Frédéric Villard, Elisabeth Larsson, Víctor Bayona, and Nicola Cacciani. An unfitted radial basis function generated finite difference method applied to thoracic diaphragm simulations. *Journal of Computational Physics*, 469(??):??, November 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122005587.

Tong:2020:HOA

[TWF+20] Fenghua Tong, Weilong Wang, Xinlong Feng, Jianping Zhao, and Zhilin Li. How to obtain an accurate gradient for interface problems? *Journal of Computational Physics*, 405(??):Article 109070, March 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119307752.

Tang:2022:ADD

[TWL22] Kejun Tang, Xiaoliang Wan, and Qifeng Liao. Adaptive deep density approximation for Fokker–Planck equations. *Journal of Computational Physics*, 457(??):??, May 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122001425.

Tian:2024:MPP

[TWS24] Hao Tian, Xiaofang Wang, and Zhiqiang Sheng. A maximum principle preserving meshfree method for anisotropic diffusion equations. *Journal of Computational Physics*, 518

(??):??, December 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124005941.

Tan:2022:EPP

[TWY22a] Zhijun Tan, Jingwen Wu, and Junxiang Yang. Efficient and practical phase-field method for the incompressible multi-component fluids on 3D surfaces with arbitrary shapes. *Journal of Computational Physics*, 467(??):??, October 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912200506X.

Tu:2022:NAS

[TWY+22b] Houwang Tu, Yongxian Wang, Chunmei Yang, Xiaodong Wang, Shuqing Ma, Wenbin Xiao, and Wei Liu. A novel algorithm to solve for an underwater line source sound field based on coupled modes and a spectral method. *Journal of Computational Physics*, 468(??):??, November 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912200540X.

Tang:2023:PDA

[TWY23] Kejun Tang, Xiaoliang Wan, and Chao Yang. DAS-PINNs: a deep adaptive sampling method for solving high-dimensional partial differential equations. *Journal of Computational Physics*, 476(??):??, March 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122009317.

Tu:2022:MMM

[TWZG22] Xiongbiao Tu, Qiao Wang, Haonan Zheng, and Liang Gao. Meshless methods for magnetohydrodynamics with vector potential. *Journal of Computational Physics*, 470(??):??, December 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122006581.

Tong:2021:SNN

[TXH+21] Yunjin Tong, Shiying Xiong, Xingzhe He, Guanghan Pan, and Bo Zhu. Symplectic neural networks in Taylor series form for Hamiltonian systems. *Journal of Computational Physics*, 437(??):Article 110325, July 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121002205.

Taddei:2024:NOO

[TXZ24] Tommaso Taddei, Xuejun Xu, and Lei Zhang. A non-overlapping optimization-based domain decomposition approach to component-based model reduction of incompressible flows. *Journal of Computational Physics*, 509(??):??, July 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124002870.

Tang:2024:SHD

[TY24a] Xun Tang and Lexing Ying. Solving high-dimensional Fokker–Planck equation with functional hierarchical tensor. *Journal of Computational Physics*, 511(??):??, August 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124003590.

Treister:2024:HSL

[TY24b] Eran Treister and Rachel Yovel. A hybrid shifted Laplacian multigrid and domain decomposition preconditioner for the elastic Helmholtz equations. *Journal of Computational Physics*, 497(??):??, January 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123007179.

Till:2023:ITM

[TYBW23] A. T. Till, R. A. Yessayan, K. G. Budge, and R. T. Wollaeger. Improved treatment of multi-material cells in thermal radiation transport codes. *Journal of Computational Physics*, 486(??):??, August 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123002115.

Tong:2023:CRB

[TYC23] Wei Tong, Ruifang Yan, and Guoxian Chen. On a class of robust bound-preserving MUSCL–Hancock schemes. *Journal of Computational Physics*, 474(??):??, February 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999122008683`.

Tong:2024:CBP

[TYC24] Wei Tong, Ruifang Yan, and Guoxian Chen. A class of bound-preserving MUSCL–Hancock schemes in two dimensions. *Journal of Computational Physics*, 498(??):??, February 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999123007635`.

Teng:2020:CSC

[TZ20] Yihua Teng and Dongxiao Zhang. Comprehensive study and comparison of equilibrium and kinetic models in simulation of hydrate reaction in porous media. *Journal of Computational Physics*, 404(??):Article 109094, March 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999119307995`.

Tang:2021:SIF

[TZ21] Min Tang and Xiaojiang Zhang. Semi-implicit front capturing schemes for the degenerate nonlinear radiative diffusion equation. *Journal of Computational Physics*, 436(??):Article 110290, July 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999121001856`.

Tan:2024:DPP

[TZ24a] Yan Tan and Jun Zhu. Distinct-positivity-preserving methods for fifth-order finite volume ALW-MR-WENO schemes with a bigger sufficient CFL number for extreme problems. *Journal of Computational Physics*, 510(??):??, August 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999124003425`.

Tartakovsky:2024:PIM

[TZ24b] Alexandre M. Tartakovsky and Yifei Zong. Physics-informed machine learning method with space-time Karhunen–Loève expansions for forward and inverse partial differential equations. *Journal of Computational Physics*, 499(??):??, February 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999123008185`.

Tian:2020:CMP

[TZM+20] Baolin Tian, Junsheng Zeng, Baoqing Meng, Qian Chen, Xiaohu Guo, and Kun Xue. Compressible multiphase particle-in-cell method (CMP-PIC) for full pattern flows of gas-particle system. *Journal of Computational Physics*, 418(??):Article 109602, October 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999120303764`.

Taus:2020:SSP

[TZNHD20] Matthias Taus, Leonardo Zepeda-Núñez, Russell J. Hewett, and Laurent Demanet. L-Sweeps: a scalable, parallel preconditioner for the high-frequency Helmholtz equation. *Journal of Computational Physics*, 420(??):Article 109706, November 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999120304800`.

Tan:2025:LER

[TZSQ25] Yan Tan, Jun Zhu, Chi-Wang Shu, and Jianxian Qiu. Letter to Editor: Regarding the numerical results in “A novel finite-difference converged ENO scheme for steady-state simulations of Euler equations”, by Tian Liang and Lin Fu, Journal of Computational Physics, **519** (2024), 113386. *Journal of Computational Physics*, 522(??):??, February 1, 2025. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999124008684`. See [LF24d].

Urbano:2022:SIC

[UBT22] A. Urbano, M. Bibal, and S. Tanguy. A semi implicit compressible solver for two-phase flows of real fluids. *Journal of*

Computational Physics, 456(??):??, May 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122000961.

Usabiaga:2022:NMS

[UD22] Florencio Balboa Usabiaga and Blaise Delmotte. A numerical method for suspensions of articulated bodies in viscous flows. *Journal of Computational Physics*, 464(??):??, September 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122004272.

Ulibarrena:2024:HAS

[UHZ+24] Veronica Saz Ulibarrena, Philipp Horn, Simon Portegies Zwart, Elena Sellentin, Barry Koren, and Maxwell X. Cai. A hybrid approach for solving the gravitational N-body problem with artificial neural networks. *Journal of Computational Physics*, 496(??):??, January 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123006915.

Uilhoorn:2020:NIG

[Uil20] F. E. Uilhoorn. Numerical issues in gas flow dynamics with hydraulic shocks using high order finite volume WENO schemes. *Journal of Computational Physics*, 404(??):Article 109137, March 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119308423.

Umeda:2023:NIR

[Ume23] Takayuki Umeda. A new integrator for relativistic E-cross-B motion of charged particles. *Journal of Computational Physics*, 472(??):??, January 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122007574.

Unfer:2021:TOA

[Unf21] Thomas Unfer. Third order asynchronous time integration for gas dynamics. *Journal of Computational Physics*, 440(??):Article 110434, September 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121003296.

Ubeda:2020:AGR

[USRH20] Eduard Ubeda, Ivan Sekulic, Juan M. Rius, and Alex Heldring. Accurate, grid-robust and versatile combined-field discretization for the electromagnetic scattering analysis of perfectly conducting targets. *Journal of Computational Physics*, 407(??):Article 109236, April 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120300103.

Upperman:2022:PPE

[UY22] Johnathon Upperman and Nail K. Yamaleev. Positivity-preserving entropy stable schemes for the 1-D compressible Navier–Stokes equations: First-order approximation. *Journal of Computational Physics*, 466(??):??, October 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912200417X.

Vabishchevich:2023:SSD

[Vab23] P. N. Vabishchevich. Subdomain solution decomposition method for nonstationary problems. *Journal of Computational Physics*, 472(??):??, January 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122007422.

Vasilyeva:2021:MDR

[VACE21] Maria Vasilyeva, Valentin Alekseev, Eric T. Chung, and Yalchin Efendiev. Multiscale dimension reduction for flow and transport problems in thin domain with reactive boundaries. *Journal of Computational Physics*, 442 (??):Article 110512, October 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

URL http://www.sciencedirect.com/science/article/pii/S0021999121004071.

Vadeboncoeur:2023:FPD

[VAK+23] Arnaud Vadeboncoeur, Ömer Deniz Akyildiz, Ieva Kazlauskaite, Mark Girolami, and Fehmi Cirak. Fully probabilistic deep models for forward and inverse problems in parametric PDEs. *Journal of Computational Physics*, 491(??):??, October 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123004643.

vantWout:2022:SEF

[van22] Elwin van 't Wout. Stable and efficient FEM-BEM coupling with OSRC regularisation for acoustic wave transmission. *Journal of Computational Physics*, 450(??): Article 110867, February 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121007622.

Vasilyeva:2023:EDS

[Vas23] Maria Vasilyeva. Efficient decoupling schemes for multiscale multicontinuum problems in fractured porous media. *Journal of Computational Physics*, 487(??):??, August 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123002292.

Vasilyeva:2024:IES

[Vas24] Maria Vasilyeva. Implicit-explicit schemes for decoupling multicontinuum problems in porous media. *Journal of Computational Physics*, 519(??):??, December 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124006739.

Villamizar:2022:HOL

[VBA22] Vianey Villamizar, Jacob C. Badger, and Sebastian Acosta. High order local farfield expansions absorbing boundary conditions for multiple scattering. *Journal of Computational Physics*, 460(??):??, July 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

URL http://www.sciencedirect.com/science/article/pii/S0021999122002492.

Villa:2023:MRM

[VBB+23] Andrea Villa, Giacomo Buccella, Luca Barbieri, Daniele Palladini, and Giovanni D'Avanzo. A multi-resolution method for internal partial discharge simulation. *Journal of Computational Physics*, 491(??):??, October 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123004576.

Vidal-Codina:2023:ORM

[VCCN+23] F. Vidal-Codina, C. Ciracì, N.-C. Nguyen, S.-H. Oh, and J. Peraire. Optical response of metallic nanostructures using quantum hydrodynamic theory and a hybridizable discontinuous Galerkin method. *Journal of Computational Physics*, 489(??):??, September 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123003558.

Vidal-Codina:2021:NHD

[VCNC+21] F. Vidal-Codina, N.-C. Nguyen, C. Ciracì, S.-H. Oh, and J. Peraire. A nested hybridizable discontinuous Galerkin method for computing second-harmonic generation in three-dimensional metallic nanostructures. *Journal of Computational Physics*, 429(??):Article 110000, March 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120307749.

Velasco:2020:KFO

[VCPGR20] J. L. Velasco, I. Calvo, F. I. Parra, and J. M. García-Regaña. KNOSOS: a fast orbit-averaging neoclassical code for stellarator geometry. *Journal of Computational Physics*, 418(??):Article 109512, October 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120302862.

vandenBos:2020:ASB

[vdBSB20] L. M. M. van den Bos, B. Sanderse, and W. A. A. M. Bierbooms. Adaptive sampling-based quadrature rules for efficient Bayesian prediction. *Journal of Computational Physics*, 417(??):Article 109537, September 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120303119.

vanderEijk:2023:TPF

[vdEW23] Martin van der Eijk and Peter Wellens. Two-phase free-surface flow interaction with moving bodies using a consistent, momentum preserving method. *Journal of Computational Physics*, 474(??):??, February 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122008592.

vanderEijk:2024:EBI

[vdEW24a] Martin van der Eijk and Peter Wellens. An efficient bilinear interface reconstruction algorithm and consistent multidimensional unsplit advection scheme for accurate capturing of highly-curved interfacial shapes on structured grids. *Journal of Computational Physics*, 498(??):??, February 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123007519.

vanderEijk:2024:EPB

[vdEW24b] Martin van der Eijk and Peter Wellens. An efficient pressure-based multiphase finite volume method for interaction between compressible aerated water and moving bodies. *Journal of Computational Physics*, 514(??):??, October 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124004169.

Volmer:2020:IIG

[VdGP20] Jasper C. Volmer, Tom W. J. de Geus, and Ron H. J. Peerlings. Improving the initial guess for the Newton–Raphson protocol in time-dependent simulations. *Journal of Computational Physics*, 420(??):Article 109721, November 1, 2020.

CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120304952.

vanDijk:2024:SFI

[vDHR24] W. van Dijk, W. B. J. Hakvoort, and B. Rosić. Sampling free iterative PCE filter for state and parameter estimation of nonlinear dynamical systems. *Journal of Computational Physics*, 511(??):??, August 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912400367X.

vanderWoude:2024:DBF

[vdWvBAA24] D. A. M. van der Woude, E. H. van Brummelen, E. Arlemark, and M. R. A. Abdelmalik. A ϕ-divergence based finite element moment method for the polyatomic ES-BGK Boltzmann equation. *Journal of Computational Physics*, 503(??):??, April 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124000627.

Vevek:2021:DDT

[VEC21] U. S. Vevek, B. Elhadidi, and W. L. Chan. A domain decomposition technique for small amplitude wave interactions with shock waves. *Journal of Computational Physics*, 437(??):Article 110326, July 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121002217.

Vermeire:2023:EPE

[Ver23] Brian C. Vermeire. Embedded paired explicit Runge–Kutta schemes. *Journal of Computational Physics*, 487(??):??, August 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123002541.

Vevek:2021:EAC

[Vev21] U. S. Vevek. An efficient algorithm for computing smoothness indicators for WENO schemes. *Journal of Computational Physics*, 446(??):Article 110619, December 1, 2021.

CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121005143.

Vu:2023:AMC

[VFBD23] Lam Vu, Alexandru Fikl, Daniel J. Bodony, and Olivier Desjardins. An adjoint method for control of liquid-gas flows using a sharp interface model. *Journal of Computational Physics*, 484(??):??, July 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123001523.

vanGestel:2023:ADG

[vGAtTBI23] Robert A. M. van Gestel, Martijn J. H. Anthonissen, Jan H. M. ten Thije Boonkkamp, and Wilbert L. IJzerman. An ADER discontinuous Galerkin method on moving meshes for Liouville's equation of geometrical optics. *Journal of Computational Physics*, 488(??):??, September 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123003030.

vanGestel:2024:HSL

[vGAtTBI24] Robert A. M. van Gestel, Martijn J. H. Anthonissen, Jan H. M. ten Thije Boonkkamp, and Wilbert L. IJzerman. A hybrid semi-Lagrangian DG and ADER–DG solver on a moving mesh for Liouville's equation of geometrical optics. *Journal of Computational Physics*, 498(??):??, February 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123007507.

vanGastelen:2024:ECN

[vGES24] T. van Gastelen, W. Edeling, and B. Sanderse. Energy-conserving neural network for turbulence closure modeling. *Journal of Computational Physics*, 508(??):??, July 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124002523.

Vauchel:2023:MEN

[VGG23] Nicolas Vauchel, Éric Garnier, and Thomas Gomez. A multi-element non-intrusive Polynomial Chaos method using agglomerative clustering based on the derivatives to study irregular and discontinuous Quantities of Interest. *Journal of Computational Physics*, 473(??):??, January 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122008269.

Vaughn:2021:TAG

[VGK21] Nathan Vaughn, Vikram Gavini, and Robert Krasny. Treecode-accelerated green iteration for Kohn–Sham density functional theory. *Journal of Computational Physics*, 430(??):Article 110101, April 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120308755.

vantWout:2022:FRP

[vHG+22] Elwin van 't Wout, Seyyed R. Haqshenas, Pierre Gélat, Timo Betcke, and Nader Saffari. Frequency-robust preconditioning of boundary integral equations for acoustic transmission. *Journal of Computational Physics*, 462(??):??, August 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122002911.

vanHooft:2022:FOA

[vHP22] J. Antoon van Hooft and Stéphane Popinet. A fourth-order accurate adaptive solver for incompressible flow problems. *Journal of Computational Physics*, 462(??):??, August 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122003138.

Vorozhtsov:2022:HOS

[VK22] Evgenii V. Vorozhtsov and Sergey P. Kiselev. Higher-order symplectic integration techniques for molecular dynamics problems. *Journal of Computational Physics*, 452(??):Article 110905, March 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

URL http://www.sciencedirect.com/science/article/pii/S0021999121008007.

Vorozhtsov:2024:EMF

[VK24] Evgenii V. Vorozhtsov and Sergey P. Kiselev. An efficient method of finding new symplectic schemes for Hamiltonian mechanics problems with the aid of parametric Gröbner bases. *Journal of Computational Physics*, 496(??):??, January 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123006964.

Velechovsky:2022:MMS

[VKR+22] Jan Velechovsky, Evgeny Kikinzon, Navamita Ray, Hoby Rakotoarivelo, Angela Herring, Mack Kenamond, Konstantin Lipnikov, Mikhail Shashkov, Rao Garimella, and Daniel Shevitz. Multi-material swept face remapping on polyhedral meshes. *Journal of Computational Physics*, 469(??):??, November 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122006155.

vanLeer:2024:HCP

[vL24] Bram van Leer. History of CFD. Part II: the poster. *Journal of Computational Physics*, 506(??):??, June 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124001980.

Vasilyeva:2020:LMP

[VLC+20] Maria Vasilyeva, Wing T. Leung, Eric T. Chung, Yalchin Efendiev, and Mary Wheeler. Learning macroscopic parameters in nonlinear multiscale simulations using nonlocal multicontinua upscaling techniques. *Journal of Computational Physics*, 412(??):Article 109323, July 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120300978.

Vasquez:2024:TFW

[VLC24] A. J. Castrillón Vásquez, L. F. Lozano, and G. Chapiro. The traveling foam wavefront in fractured porous medium.

Journal of Computational Physics, 519(??):??, December 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124006855.

vanLeer:2021:TUU

[vLN21] Bram van Leer and Hiroaki Nishikawa. Towards the ultimate understanding of MUSCL: Pitfalls in achieving third-order accuracy. *Journal of Computational Physics*, 446 (??):Article 110640, December 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121005350.

Vermeire:2020:OEP

[VLV20] Brian C. Vermeire, Niki A. Loppi, and Peter E. Vincent. Optimal embedded pair Runge–Kutta schemes for pseudo-time stepping. *Journal of Computational Physics*, 415(??):Article 109499, August 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120302734.

Vermaak:2022:TEE

[VM22] Jan I. C. Vermaak and Jim E. Morel. Transport error estimation using residual Monte Carlo. *Journal of Computational Physics*, 464(??):??, September 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122003680.

Vasques:2020:SAS

[VMBS20] R. Vasques, L. R. C. Moraes, R. C. Barros, and R. N. Slaybaugh. A spectral approach for solving the nonclassical transport equation. *Journal of Computational Physics*, 402(??):Article 109078, February 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119307831.

Vakilipour:2021:FCA

[VMO21] Shidvash Vakilipour, Masoud Mohammadi, and Scott Ormiston. A fully coupled ALE interface tracking method for a pressure-based finite volume solver. *Journal of Computational Physics*, 427(??):Article 110054, February 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120308287.

Vermeire:2021:AIE

[VN21] Brian C. Vermeire and Siavash Hedayati Nasab. Accelerated implicit-explicit Runge–Kutta schemes for locally stiff systems. *Journal of Computational Physics*, 429(??):Article 110022, March 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120307968.

vanNoordt:2022:IBM

[vNGB22] William van Noordt, Sparsh Ganju, and Christoph Brehm. An immersed boundary method for wall-modeled large-eddy simulation of turbulent high-Mach-number flows. *Journal of Computational Physics*, 470(??):??, December 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122006453.

Vergnaud:2023:IHO

[VOL23] A. Vergnaud, G. Oger, and D. Le Touzé. Investigations on a high order SPH scheme using WENO reconstruction. *Journal of Computational Physics*, 477(??):??, March 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122009524.

Veilleux:2022:SSD

[VPDD22] Adèle Veilleux, Guillaume Puigt, Hugues Deniau, and Guillaume Daviller. A stable Spectral Difference approach for computations with triangular and hybrid grids up to the 6^{th} order of accuracy. *Journal of Computational Physics*, 449(??):Article 110774, January 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121006690.

Vorobev:2020:PFM

[VPL20] A. Vorobev, S. Prokopev, and T. Lyubimova. Phase-field modelling of a liquid/liquid immiscible displacement through a network of capillaries. *Journal of Computational Physics*, 421(??):Article 109747, November 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120305210.

Vermaak:2021:MPT

[VRAM21] Jan I. C. Vermaak, Jean C. Ragusa, Marvin L. Adams, and Jim E. Morel. Massively parallel transport sweeps on meshes with cyclic dependencies. *Journal of Computational Physics*, 425(??):Article 109892, January 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120306665.

Vreman:2017:SOG

[Vre17] A. W. Vreman. A staggered overset grid method for resolved simulation of incompressible flow around moving spheres. *Journal of Computational Physics*, 333(??):269–296, March 15, 2017. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999116306817. See corrigendum [Vre21a].

Vreman:2020:IBO

[Vre20] A. W. Vreman. Immersed boundary and overset grid methods assessed for Stokes flow due to an oscillating sphere. *Journal of Computational Physics*, 423(??): Article 109783, December 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912030557X. See corrigendum [Vre21b].

Vreman:2021:CSO

[Vre21a] A. W. Vreman. Corrigendum to “A staggered overset grid method for resolved simulation of incompressible flow around moving spheres” [j. comput. phys. 333 (2017) 269–296]. *Journal of Computational Physics*, 435(??):Article 110302, June

15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121001972. See [Vre17].

Vreman:2021:CIB

[Vre21b] A. W. Vreman. Corrigendum to "Immersed boundary and overset grid methods assessed for Stokes flow due to an oscillating sphere" [j. comput. phys. 423 (2020) 109783]. *Journal of Computational Physics*, 435(??):Article 110286, June 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121001819. See [Vre20].

Valseth:2021:SFM

[VRK21a] Eirik Valseth, Albert Romkes, and Austin R. Kaul. A stable FE method for the space-time solution of the Cahn–Hilliard equation. *Journal of Computational Physics*, 441 (??):Article 110426, September 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121003211.

Viquerat:2021:DSO

[VRK+21b] Jonathan Viquerat, Jean Rabault, Alexander Kuhnle, Hassan Ghraieb, Aurélien Larcher, and Elie Hachem. Direct shape optimization through deep reinforcement learning. *Journal of Computational Physics*, 428(??):Article 110080, March 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120308548.

Villa:2021:UIL

[VSB+21] Andrea Villa, Roger Schurch, Luca Barbieri, Roberto Malgesini, and Giacomo Buccella. An uncoupled implementation of the local mean energy plasma model. *Journal of Computational Physics*, 447(??):Article 110674, December 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121005696.

Villa:2022:SSP

[VSB+22] Andrea Villa, Roger Schurch, Giacomo Buccella, Luca Barbieri, Christian Laurano, Roberto Malgesini, and Daniele

Palladini. Simulation of surface-plasma interaction with high surface conductivity. *Journal of Computational Physics*, 456(??):??, May 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122000912.

Vahab:2021:FSI

[VSS21] Mehdi Vahab, Mark Sussman, and Kourosh Shoele. Fluid-structure interaction of thin flexible bodies in multi-material multi-phase systems. *Journal of Computational Physics*, 429(??):Article 110008, March 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120307828.

Verma:2023:COD

[VT23] Abhijit Verma and Gaurav Tomar. A continuous one-domain framework for fluid flow in superposed clear and porous media. *Journal of Computational Physics*, 495(??):??, December 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123006496.

Valle:2020:EPL

[VTC20] N. Valle, F. X. Trias, and J. Castro. An energy-preserving level set method for multiphase flows. *Journal of Computational Physics*, 400(??):Article 108991, January 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119306965.

VanCappellen:2021:HOH

[VVL21] Maxim Van Cappellen, Maria Rosaria Vetrano, and Delphine Laboureur. Higher order hyperbolic quadrature method of moments for solving kinetic equations. *Journal of Computational Physics*, 436(??):Article 110280, July 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121001753.

Veiga:2021:AHO

[VVRWT21] Maria Han Veiga, David A. Velasco-Romero, Quentin Wenger, and Romain Teyssier. An arbitrary high-order spectral difference method for the induction equation. *Journal of Computational Physics*, 438(??):Article 110327, August 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121002229.

Villalon:2024:TRN

[VYL24] Elena Villalón, Qian Yang, and Carlos A. Sing Long. Tikhonov regularization as a nonparametric method for uncertainty quantification in aggregate data problems. *Journal of Computational Physics*, 513(??):??, September 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124003905.

Vandergrift:2024:PIS

[VZ24] Jakob Vandergrift and Matthew J. Zahr. Preconditioned iterative solvers for constrained high-order implicit shock tracking methods. *Journal of Computational Physics*, 514(??):??, October 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124004832.

Wenzel:2023:CIR

[WA23] Everett A. Wenzel and Marco Arienti. A conservative, interface-resolved, compressible framework for the modeling and simulation of liquid/gas phase change. *Journal of Computational Physics*, 477(??):??, March 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123000529.

Wissocq:2024:NLEb

[WA24a] Gauthier Wissocq and Rémi Abgrall. A new local and explicit kinetic method for linear and non-linear convection–diffusion problems with finite kinetic speeds: I. One-dimensional case. *Journal of Computational Physics*, 518(??):??, December 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124005813.

Wissocq:2024:NLEa

[WA24b] Gauthier Wissocq and Rémi Abgrall. A new local and explicit kinetic method for linear and non-linear convection–diffusion problems with finite kinetic speeds: II. Multi-dimensional case. *Journal of Computational Physics*, 516(??):??, November 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124006247.

Wang:2024:MRS

[WAA24] Wanli Wang, Stefan Adami, and Nikolaus A. Adams. A method to represent the strain hardening effect in the hyperelastic model within a fully Eulerian framework. *Journal of Computational Physics*, 518(??):??, December 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124005837.

Wong:2021:PPH

[WABK21] Man Long Wong, Jordan B. Angel, Michael F. Barad, and Cetin C. Kiris. A positivity-preserving high-order weighted compact nonlinear scheme for compressible gas-liquid flows. *Journal of Computational Physics*, 444(??):Article 110569, November 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121004642.

West:2024:HOL

[WAL24] Jacob R. West, Michael C. Adler, and Sanjiva K. Lele. A high-order, localized-artificial-diffusivity method for Eulerian simulation of multi-material elastic-plastic deformation with strain hardening. *Journal of Computational Physics*, 514(??):??, October 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124004546.

Wang:2022:CLA

[Wan22] Chushan Wang. Computing the least action ground state of the nonlinear Schrödinger equation by a normalized gradient flow. *Journal of Computational Physics*, 471(??):??, December 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122007380.

Wang:2023:SEL

[Wan23] Xiang Wang. Stabilized enhancement for large time computation using exponential spectral process method. *Journal of Computational Physics*, 482(??):??, June 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123001535.

Wu:2024:ISD

[WBH+24] Siyu Wu, Jinwei Bai, Xiaoming He, Ren Zhao, and Yong Cao. An immersed selective discontinuous Galerkin method in particle-in-cell simulation with adaptive Cartesian mesh and polynomial preserving recovery. *Journal of Computational Physics*, 498(??):??, February 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123007982.

Wallis:2021:FEG

[WBN21] Tim Wallis, Philip T. Barton, and Nikolaos Nikiforakis. A flux-enriched Godunov method for multi-material problems with interface slide and void opening. *Journal of Computational Physics*, 442(??):Article 110499, October 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121003946.

Wan:2022:CIM

[WBN22] Andy T. S. Wan, Alexander Bihlo, and Jean-Christophe Nave. Conservative integrators for many-body problems. *Journal of Computational Physics*, 466(??):??, October 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912200479X.

Wu:2023:RFD

[WC23] Bowei Wu and Min Hyung Cho. Robust fast direct integral equation solver for three-dimensional doubly periodic scattering problems with a large number of layers. *Journal of Computational Physics*, 495(??):??, December 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912300668X.

Wang:2020:ACR

[WCA+20] Y. D. Wang, T. Chung, R. T. Armstrong, J. McClure, T. Ramstad, and P. Mostaghimi. Accelerated computation of relative permeability by coupled morphological and direct multiphase flow simulation. *Journal of Computational Physics*, 401(??):Article 108966, January 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119306710.

Wimmer:2020:ECU

[WCB20] Golo A. Wimmer, Colin J. Cotter, and Werner Bauer. Energy conserving upwinded compatible finite element schemes for the rotating shallow water equations. *Journal of Computational Physics*, 401(??):Article 109016, January 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119307223.

Wei:2024:HIT

[WCBQ24] Yuxiao Wei, Jin Cheng, Robert Burridge, and Jianliang Qian. Hadamard integrator for time-dependent wave equations: Lagrangian formulation via ray tracing. *Journal of Computational Physics*, 497(??):??, January 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123007325.

Wang:2020:DMM

[WCC+20] Yating Wang, Siu Wun Cheung, Eric T. Chung, Yalchin Efendiev, and Min Wang. Deep multiscale model learning. *Journal of Computational Physics*, 406(??):Article 109071, April 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119307764.

Wang:2023:SME

[WCC23] Zhiwen Wang, Minxin Chen, and Jingrun Chen. Solving multiscale elliptic problems by sparse radial basis function neural networks. *Journal of Computational Physics*, 492(??):??, November 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123005478.

Wang:2021:GSF

[WCF+21] Yongheng Wang, Li Cai, Xiaobing Feng, Xiaoyu Luo, and Hao Gao. A ghost structure finite difference method for a fractional FitzHugh–Nagumo monodomain model on moving irregular domain. *Journal of Computational Physics*, 428(??):Article 110081, March 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912030855X.

Wang:2022:DLB

[WCF22] Yiran Wang, Eric Chung, and Shubin Fu. A deep learning based reduced order modeling for stochastic underground flow problems. *Journal of Computational Physics*, 467(??):??, October 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122005113.

Wang:2024:UES

[WCKS24] Xiuping Wang, Huangxin Chen, Jisheng Kou, and Shuyu Sun. An unconditionally energy-stable and orthonormality-preserving iterative scheme for the Kohn–Sham gradient flow based model. *Journal of Computational Physics*, 498(??):??, February 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123007659.

Wang:2020:ROD

[WCL+20] Min Wang, Siu Wun Cheung, Wing Tat Leung, Eric T. Chung, Yalchin Efendiev, and Mary Wheeler. Reduced-order deep learning for flow dynamics. the interplay between deep learning and model reduction. *Journal of Computational*

Physics, 401(??):Article 108939, January 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119306448.

Wang:2024:DGB

[WCL24] Zhongqian Wang, Eric Chung, and Zishang Li. A discontinuous Galerkin based multiscale method for heterogeneous elastic wave equations. *Journal of Computational Physics*, 518(??):??, December 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124005424.

Wang:2021:PIH

[WCM+21] Kun Wang, Yu Chen, Mohamed Mehana, Nicholas Lubbers, Kane C. Bennett, Qinjun Kang, Hari S. Viswanathan, and Timothy C. Germann. A physics-informed and hierarchically regularized data-driven model for predicting fluid flow through porous media. *Journal of Computational Physics*, 443(??):Article 110526, October 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121004216.

Wang:2023:MGA

[WCP23] Yuhang Wang, Guiyu Cao, and Liang Pan. Multiple-GPU accelerated high-order gas-kinetic scheme for direct numerical simulation of compressible turbulence. *Journal of Computational Physics*, 476(??):??, March 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122009627.

Wang:2020:TEB

[WCZ+20] Bo Wang, Duan Chen, Bo Zhang, Wenzhong Zhang, Min Hyung Cho, and Wei Cai. Taylor expansion based fast multipole method for 3-D Helmholtz equations in layered media. *Journal of Computational Physics*, 401(??):Article 109008, January 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119307144.

Wang:2022:SIM

[WCZ22] Nanzhe Wang, Haibin Chang, and Dongxiao Zhang. Surrogate and inverse modeling for two-phase flow in porous media via theory-guided convolutional neural network. *Journal of Computational Physics*, 466(??):??, October 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122004818.

Wentz:2023:GGM

[WD23] Jacqueline Wentz and Alireza Doostan. GenMod: a generative modeling approach for spectral representation of PDEs with random inputs. *Journal of Computational Physics*, 472(??):??, January 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122007549.

Wang:2021:FDR

[WDH+21] Yuepeng Wang, Xuemei Ding, Kun Hu, Fangxin Fang, I. M. Navon, and Guang Lin. Feasibility of DEIM for retrieving the initial field via dimensionality reduction. *Journal of Computational Physics*, 429(??):Article 110005, March 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120307798.

Westwood:2022:GDC

[WDK22] Timothy A. Westwood, Blaise Delmotte, and Eric E. Keaveny. A generalised drift-correcting time integration scheme for Brownian suspensions of rigid particles with arbitrary shape. *Journal of Computational Physics*, 467(??):??, October 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122004995.

Wan:2021:DDF

[WDL+21a] Zhong Yi Wan, Boyko Dodov, Christian Lessig, Henk Dijkstra, and Themistoklis P. Sapsis. A data-driven framework for the stochastic reconstruction of small-scale features with application to climate data sets. *Journal of Computational Physics*, 442(??):Article 110484, October 1, 2021. CODEN

JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912100379X.

Wang:2021:AHA

[WDL21b] Yating Wang, Wei Deng, and Guang Lin. An adaptive Hessian approximated stochastic gradient MCMC method. *Journal of Computational Physics*, 432(??):Article 110150, May 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121000425.

Wang:2021:BSL

[WDL21c] Yating Wang, Wei Deng, and Guang Lin. Bayesian sparse learning with preconditioned stochastic gradient MCMC and its applications. *Journal of Computational Physics*, 432(??):Article 110134, May 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121000267.

Wang:2022:CCL

[WDS22] Xun Wang, Zihuan Dai, and Zhijun Shen. A 2D cell-centered Lagrangian scheme based on multi-state Riemann solver with exactly divergence-free magnetic fields. *Journal of Computational Physics*, 467(??):??, October 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122005137.

Williams:2024:NSC

[WDUM24] Christopher Williams, Mario Di Renzo, Javier Urzay, and Parviz Moin. Navier–Stokes characteristic boundary conditions for high-enthalpy compressible flows in thermochemical non-equilibrium. *Journal of Computational Physics*, 509(??):??, July 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124002894.

Wang:2023:APP

[WF23] Ningyuan Wang and Daniel B. Forger. The asymmetric particle population density method for simulation of coupled noisy oscillators. *Journal of Computational Physics*, 488(??):??, September 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123002528.

Wang:2022:DIM

[WGB22] Xianchao Wang, Yukun Guo, and Sara Bousba. Direct imaging for the moment tensor point sources of elastic waves. *Journal of Computational Physics*, 448(??):Article 110731, January 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121006264.

Wiesenberger:2023:NEL

[WGH23] Matthias Wiesenberger, Raul Gerrú, and Markus Held. Numerical evaluation of line, surface and toroidal integrals on level sets of toroidally symmetric functions. *Journal of Computational Physics*, 491(??):??, October 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123005028.

Wang:2020:IBM

[WGS+20] Xiaolong Wang, Xiaobo Gong, Kazuyasu Sugiyama, Shu Takagi, and Huaxiong Huang. An immersed boundary method for mass transfer through porous biomembranes under large deformations. *Journal of Computational Physics*, 413(??):Article 109444, July 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120302187.

Wang:2023:RCR

[WGS23] Xun Wang, Hongping Guo, and Zhijun Shen. A robust and contact resolving Riemann solver for the two-dimensional ideal magnetohydrodynamics equations. *Journal of Computational Physics*, 487(??):??, August 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123002334.

Wang:2023:LBL

[WGSX23] Fan Wang, Xiang Gu, Jian Sun, and Zongben Xu. Learning-based local weighted least squares for algebraic multigrid method. *Journal of Computational Physics*, 493(??):??, November 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123005326.

Wolf:2022:EAD

[WGU+22] Sebastian Wolf, Martin Galis, Carsten Uphoff, Alice-Agnes Gabriel, Peter Moczo, David Gregor, and Michael Bader. An efficient ADER-DG local time stepping scheme for 3D HPC simulation of seismic waves in poroelastic media. *Journal of Computational Physics*, 455(??):??, April 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121007816.

Wang:2020:DLB

[WGY20] Lai Wang, Matthias K. Gobbert, and Meilin Yu. A dynamically load-balanced parallel p-adaptive implicit high-order flux reconstruction method for under-resolved turbulence simulation. *Journal of Computational Physics*, 417 (??):Article 109581, September 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120303557.

Wu:2021:DSL

[WGY+21] Yongyong Wu, Nan Gui, Xingtuan Yang, Jiyuan Tu, and Shengyao Jiang. A decoupled and stabilized lattice Boltzmann method for multiphase flow with large density ratio at high Reynolds and Weber numbers. *Journal of Computational Physics*, 426(??):Article 109933, February 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120307075.

Wang:2022:CSC

[WH22a] Jeremy C. H. Wang and Jean-Pierre Hickey. A class of structurally complete approximate Riemann solvers for trans- and supercritical flows with large gradients. *Journal of Computational Physics*, 468(??):??, November 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122005836.

Wang:2022:ESN

[WH22b] Junkai Wang and Qiaolin He. Energy-stable numerical method for compressible flow with generalized Navier boundary condition. *Journal of Computational Physics*, 459(??):??, June 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912200211X.

Wang:2024:EMF

[WH24] Luo-Hao Wang and Wei-Xi Huang. An efficient matrix factorization within the projection framework for ameliorating the surface tension time step constraint in interfacial flows. *Journal of Computational Physics*, 498(??):??, February 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123007738.

Wang:2020:ELI

[WHN+20] Liang Wang, Ammar H. Hakim, Jonathan Ng, Chuanfei Dong, and Kai Germaschewski. Exact and locally implicit source term solvers for multifluid-Maxwell systems. *Journal of Computational Physics*, 415(??):Article 109510, August 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120302849.

Wedel:2024:NPR

[WHRS24] Jana Wedel, Matjaz Hribersek, Jure Ravnik, and Paul Steinmann. A novel pseudo-rigid body approach to the non-linear dynamics of soft micro-particles in dilute viscous flow. *Journal of Computational Physics*, 519(??):??, December 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124006259.

Wu:2022:NCH

[WHS22] Ke Wu, Fukeng Huang, and Jie Shen. A new class of higher-order decoupled schemes for the incompressible Navier–Stokes equations and applications to rotating dynamics. *Journal of Computational Physics*, 458(??):??, June 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122001590.

Wilson:2024:NVO

[WJD24] Joshua P. Wilson, Cui-Cui Ji, and Weizhong Dai. A new variable-order fractional momentum operator for wave absorption when solving Schrödinger equations. *Journal of Computational Physics*, 511(??):??, August 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124003723.

Wang:2023:DEC

[WJHS23] Minmiao Wang, Pankaj Jagad, Anil N. Hirani, and Ravi Samtaney. Discrete exterior calculus discretization of two-phase incompressible Navier–Stokes equations with a conservative phase field method. *Journal of Computational Physics*, 488(??):??, September 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123003406.

Wei:2020:IEM

[WJKW20] Xiaoyu Wei, Shidong Jiang, Andreas Klöckner, and Xiao-Ping Wang. An integral equation method for the Cahn–Hilliard equation in the wetting problem. *Journal of Computational Physics*, 419(??):Article 109521, October 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120302953.

Whittaker:2024:TSD

[WJO24] Tim Whittaker, Romuald A. Janik, and Yaron Oz. Turbulence scaling from deep learning diffusion generative models. *Journal of Computational Physics*, 514(??):??, October

1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912400487X.

Wala:2020:OFA

[WK20] Matt Wala and Andreas Klöckner. Optimization of fast algorithms for global quadrature by expansion using target-specific expansions. *Journal of Computational Physics*, 403 (??):Article 108976, February 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119306813.

Wang:2021:SGD

[WK21a] Ting Wang and Jaroslaw Knap. Stochastic gradient descent for semilinear elliptic equations with uncertainties. *Journal of Computational Physics*, 426(??):Article 109945, February 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120307191.

Wu:2021:PIV

[WK21b] Chunlin Wu and Spyros A. Kinnas. Parallel implementation of a VIScous Vorticity Equation (VISVE) method in 3-D laminar flow. *Journal of Computational Physics*, 426(??):Article 109912, February 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120306860.

Wilhelm:2023:IPM

[WK23] R. Paul Wilhelm and Matthias Kirchhart. An interpolating particle method for the Vlasov–Poisson equation. *Journal of Computational Physics*, 473(??):??, January 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122007835.

Willers:2024:EBE

[WK24a] Clemens Willers and Oliver Kamps. Efficient Bayesian estimation of the generalized Langevin equation from data. *Journal of Computational Physics*, 497(??):??, January 15,

2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123007210.

Wu:2024:TGS

[WK24b] Long Wu and Jae Wook Kim. Towards a genuinely stable boundary closure for pentadiagonal compact finite difference schemes. *Journal of Computational Physics*, 504(??):??, May 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124001360.

Wu:2020:ESC

[WKA+20] Jin-Long Wu, Karthik Kashinath, Adrian Albert, Dragos Chirila, Prabhat, and Heng Xiao. Enforcing statistical constraints in generative adversarial networks for modeling chaotic dynamical systems. *Journal of Computational Physics*, 406(??):Article 109209, April 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119309143.

Wess:2024:MLD

[WKCS24] Markus Wess, Bernard Kapidani, Lorenzo Codecasa, and Joachim Schöberl. Mass lumping the dual cell method to arbitrary polynomial degree for acoustic and electromagnetic waves. *Journal of Computational Physics*, 513(??):??, September 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124004455.

Wei:2023:IEM

[WKK23] Xiaoyu Wei, Andreas Klöckner, and Robert C. Kirby. Integral equation methods for the Morse–Ingard equations. *Journal of Computational Physics*, 492(??):??, November 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123005119.

Wada:2024:NSI

[WKK24] Sho Wada, Reo Kai, and Ryoichi Kurose. A new semi-implicit pressure-based solver considering real gas effect.

Journal of Computational Physics, 501(??):??, March 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124000317.

Werdelmann:2021:APB

[WKKB21] Bastian Werdelmann, Rainer Koch, Werner Krebs, and Hans-Joerg Bauer. An approach for permeable boundary conditions in SPH. *Journal of Computational Physics*, 444(??):Article 110562, November 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121004575.

Waruszewski:2022:ESD

[WKW$^+$22] Maciej Waruszewski, Jeremy E. Kozdon, Lucas C. Wilcox, Thomas H. Gibson, and Francis X. Giraldo. Entropy stable discontinuous Galerkin methods for balance laws in non-conservative form: Applications to the Euler equations with gravity. *Journal of Computational Physics*, 468(??):??, November 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122005691.

Wang:2020:EDL

[WL20] Yating Wang and Guang Lin. Efficient deep learning techniques for multiphase flow simulation in heterogeneous porousc media. *Journal of Computational Physics*, 401 (??):Article 108968, January 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119306734.

Wu:2022:IIN

[WL22] Sidi Wu and Benzhuo Lu. INN: Interfaced neural networks as an accessible meshless approach for solving interface PDE problems. *Journal of Computational Physics*, 470(??):??, December 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122006507.

Wang:2024:MSN

[WL24a] Yongji Wang and Ching-Yao Lai. Multi-stage neural networks: Function approximator of machine precision. *Journal of Computational Physics*, 504(??):??, May 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124001141.

Wang:2024:DRR

[WL24b] Yueqi Wang and Guanglian Li. Dispersion relation reconstruction for 2D photonic crystals based on polynomial interpolation. *Journal of Computational Physics*, 498(??): ??, February 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123007544.

Wang:2021:HOE

[WLH21] Yulei Wang, Jian Liu, and Yang He. High order explicit Lorentz invariant volume-preserving algorithms for relativistic dynamics of charged particles. *Journal of Computational Physics*, 439(??):Article 110383, August 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121002783.

Wang:2023:EMC

[WLKR23] Xin Wang, Min Luo, Harshinie Karunarathna, and Dominic E. Reeve. An enhanced momentum conservation treatment for FDM simulation of two-phase flows with large density ratio. *Journal of Computational Physics*, 478(??):??, April 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912300044X.

Wu:2023:EBC

[WLL+23] Buchen Wu, Jinhua Lu, HsuChew Lee, Chang Shu, and Minping Wan. An explicit boundary condition-enforced immersed boundary-reconstructed thermal lattice Boltzmann flux solver for thermal-fluid-structure interaction problems with heat flux boundary conditions. *Journal of Computational Physics*, 485(??):??, July 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

URL http://www.sciencedirect.com/science/article/pii/S0021999123002012.

Wang:2020:ASB

[WLPK20] Ting Wang, Kenneth W. Leiter, Petr Plechác, and Jaroslaw Knap. Accelerated scale bridging with sparsely approximated Gaussian learning. *Journal of Computational Physics*, 403(??):Article 109049, February 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119307545.

Wang:2022:VIN

[WLS22] Yu Wang, Fang Liu, and Daniele E. Schiavazzi. Variational inference with NoFAS: Normalizing flow with adaptive surrogate for computationally expensive models. *Journal of Computational Physics*, 467(??):??, October 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122005162.

Wakimura:2024:HRB

[WLS+24] Hiro Wakimura, Tatsuin Li, Keh-Ming Shyue, Takayuki Aoki, and Feng Xiao. High-resolution boundary variation diminishing scheme for two-phase compressible flow with cavitation and evaporation. *Journal of Computational Physics*, 513(??):??, September 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124004133.

Wu:2024:LAS

[WLSS24] Jin-Long Wu, Matthew E. Levine, Tapio Schneider, and Andrew Stuart. Learning about structural errors in models of complex dynamical systems. *Journal of Computational Physics*, 513(??):??, September 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124004066.

Wang:2020:PAM

[WLW+20] Kun Wang, Jia Luo, Yizheng Wei, Keliu Wu, Jing Li, and Zhangxin Chen. Practical application of machine learning on fast phase equilibrium calculations in compositional reservoir simulations. *Journal of Computational Physics*, 401(??):Article 109013, January 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119307193.

Wang:2024:EFE

[WLW24] Jiancheng Wang, Maojun Li, and Cheng Wang. Efficient finite element schemes for a phase field model of two-phase incompressible flows with different densities. *Journal of Computational Physics*, 518(??):??, December 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124005795.

Wu:2021:ESD

[WLZ21] Simo Wu, Chun Liu, and Ludmil Zikatanov. Energetic stable discretization for non-isothermal electrokinetics model. *Journal of Computational Physics*, 425(??):Article 109889, January 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912030663X.

Wang:2024:IPF

[WLZ24a] Chenxi Wang, Ming-Chih Lai, and Zhen Zhang. An improved phase-field algorithm for simulating the impact of a drop on a substrate in the presence of surfactants. *Journal of Computational Physics*, 499(??):??, February 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123008173.

Wang:2024:AII

[WLZ+24b] Yuepeng Wang, Jie Li, Wenju Zhao, I. M. Navon, and Guang Lin. Accelerating inverse inference of ensemble Kalman filter via reduced-order model trained using adaptive sparse observations. *Journal of Computational Physics*, 496(??):??, January 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123006952.

Wu:2021:DVK

[WLZP21] Jun-Lin Wu, Zhi-Hui Li, Zi-Bin Zhang, and Ao-Ping Peng. On derivation and verification of a kinetic model for quantum vibrational energy of polyatomic gases in the gas-kinetic unified algorithm. *Journal of Computational Physics*, 435(??):Article 109938, June 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120307129.

Wagner:2021:BMI

[WMS21] Paul-Remo Wagner, Stefano Marelli, and Bruno Sudret. Bayesian model inversion using stochastic spectral embedding. *Journal of Computational Physics*, 436 (??):Article 110141, July 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121000334.

Wang:2020:DAG

[WMTQ20] Yazhou Wang, Dean Maxam, Kumar K. Tamma, and Guoliang Qin. Design/analysis of GEGS4-1 time integration framework with improved stability and solution accuracy for first-order transient systems. *Journal of Computational Physics*, 422(??):Article 109763, December 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120305374.

Wu:2024:EOS

[WMW+24] Conghai Wu, Ruixuan Ma, Yimin Wang, Shuaibin Han, and Shuhai Zhang. The enhanced optimized scheme for linear wave propagation. *Journal of Computational Physics*, 518(??):??, December 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124005266.

Wang:2021:IEM

[WNB21] Jun Wang, Ehssan Nazockdast, and Alex Barnett. An integral equation method for the simulation of doubly-periodic suspensions of rigid bodies in a shearing viscous flow. *Jour-*

nal of Computational Physics, 424(??):Article 109809, January 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120305830.

Wang:2020:MGK

[WNZ20] Yi Wang, Guoxi Ni, and Meina Zhang. A modified gas kinetic scheme for collisional SRS model with relativistic effect. *Journal of Computational Physics*, 416 (??):Article 109476, September 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120302503.

Wang:2021:DLF

[WP21] Sifan Wang and Paris Perdikaris. Deep learning of free boundary and Stefan problems. *Journal of Computational Physics*, 428(??):Article 109914, March 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120306884.

Wang:2023:LTI

[WP23] Sifan Wang and Paris Perdikaris. Long-time integration of parametric evolution equations with physics-informed DeepONets. *Journal of Computational Physics*, 475(??):??, February 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122009184.

Warne:2022:MMM

[WPBS22] David J. Warne, Thomas P. Prescott, Ruth E. Baker, and Matthew J. Simpson. Multifidelity multilevel Monte Carlo to accelerate approximate Bayesian parameter inference for partially observed stochastic processes. *Journal of Computational Physics*, 469(??):??, November 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122006052.

Wang:2020:DGA

[WQ20] Cunfu Wang and Xiaoping Qian. A density gradient approach to topology optimization under design-dependent boundary loading. *Journal of Computational Physics*, 411(??):Article 109398, June 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120301728.

Wang:2020:WMC

[WQZP20] Lihua Wang, Zhihao Qian, Yueting Zhou, and Yongbo Peng. A weighted meshfree collocation method for incompressible flows using radial basis functions. *Journal of Computational Physics*, 401(??):Article 108964, January 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119306692.

Wang:2023:ETE

[WR23a] Hongyu Wang and Christopher J. Roy. Error transport equations implementation for discontinuous Galerkin methods. *Journal of Computational Physics*, 474(??):??, February 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122008233.

Wang:2023:NMR

[WR23b] Yuzhu Wang and Sheik S. Rahman. Numerical modelling of reservoir at pore scale: a comprehensive review. *Journal of Computational Physics*, 472(??):??, January 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122007434.

Winges:2023:HSE

[WR23c] Johan Winges and Thomas Rylander. Huygens' surface excitation for the finite element method applied to Maxwell's equations — a construction based on Nitsche's method. *Journal of Computational Physics*, 488(??):??, September 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123003327.

Wu:2024:SCA

[WR24] Zhuohang Wu and Yu-Xin Ren. A shock capturing artificial viscosity scheme in consistent with the compact high-order finite volume methods. *Journal of Computational Physics*, 516(??):??, November 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124005394.

Wang:2020:AEC

[WRBK20] Zhao-Huan Wang, Sjoerd W. Rienstra, Chuan-Xing Bi, and Barry Koren. An accurate and efficient computational method for time-domain aeroacoustic scattering. *Journal of Computational Physics*, 412(??):Article 109442, July 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120302163.

Wang:2020:RNN

[WRH20] Qian Wang, Nicolò Ripamonti, and Jan S. Hesthaven. Recurrent neural network closure of parametric POD-Galerkin reduced-order models based on the Mori–Zwanzig formalism. *Journal of Computational Physics*, 410(??):Article 109402, June 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120301765.

Wissocq:2022:HLN

[WS22] Gauthier Wissocq and Pierre Sagaut. Hydrodynamic limits and numerical errors of isothermal lattice Boltzmann schemes. *Journal of Computational Physics*, 450 (??):Article 110858, February 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121007531.

Wang:2022:RAS

[WSAZ22] Siwen Wang, Yuanzhen Shao, Emil Alexov, and Shan Zhao. A regularization approach for solving the super-Gaussian Poisson–Boltzmann model with heterogeneous dielectric functions. *Journal of Computational Physics*, 464(??):??, September 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122004028.

Wang:2024:OBH

[WSG+24] Xinjie Wang, Maoquan Sun, Yundong Guo, Chunxin Yuan, Xiang Sun, Zhiqiang Wei, and Xiaogang Jin. Octree-based hierarchical sampling optimization for the volumetric super-resolution of scientific data. *Journal of Computational Physics*, 502(??):??, April 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124000536.

Weady:2022:FCM

[WSS22] Scott Weady, Michael J. Shelley, and David B. Stein. A fast Chebyshev method for the Bingham closure with application to active nematic suspensions. *Journal of Computational Physics*, 457(??):??, May 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121008329.

Wang:2024:UFM

[WSZ+24] Cheng Wang, Pengtao Sun, Yumiao Zhang, Jinchao Xu, Yan Chen, and Jiarui Han. A unified-field monolithic fictitious domain-finite element method for fluid-structure-contact interactions and applications to deterministic lateral displacement problems. *Journal of Computational Physics*, 510(??):??, August 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124003322.

Wimmer:2024:SPT

[WT24] Golo A. Wimmer and Xian-Zhu Tang. Structure preserving transport stabilized compatible finite element methods for magnetohydrodynamics. *Journal of Computational Physics*, 501(??):??, March 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124000263.

Walters:2022:CIF

[WTF22] Stephen J. Walters, Ross J. Turner, and Lawrence K. Forbes. Computing interfacial flows of viscous fluids. *Journal of*

Computational Physics, 471(??):??, December 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122006891.

Wang:2024:HOA

[WTW24] Jiangfu Wang, Huazhong Tang, and Kailiang Wu. High-order accurate positivity-preserving and well-balanced discontinuous Galerkin schemes for ten-moment Gaussian closure equations with source terms. *Journal of Computational Physics*, 519(??):??, December 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124006995.

Wang:2021:GPG

[WTX+21] Yazhou Wang, Kumar K. Tamma, Tao Xue, Dean Maxam, and Guoliang Qin. Generalized Petrov–Galerkin time finite element weighted residual methodology for designing high-order unconditionally stable algorithms with controllable numerical dissipation. *Journal of Computational Physics*, 430(??):Article 110097, April 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120308718.

Wissocq:2023:HLB

[WTZB23] Gauthier Wissocq, Said Taileb, Song Zhao, and Pierre Boivin. A hybrid lattice Boltzmann method for gaseous detonations. *Journal of Computational Physics*, 494(??):??, December 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123006204.

Wang:2023:IDS

[WTZZ23] Zhenming Wang, Linlin Tian, Jun Zhu, and Ning Zhao. An improved discontinuity sensor for high-order weighted essentially non-oscillatory scheme on triangular meshes. *Journal of Computational Physics*, 490(??):??, October 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123003947.

Wells:2023:NIF

[WVRLG23] David R. Wells, Ben Vadala-Roth, Jae H. Lee, and Boyce E. Griffith. A nodal immersed finite element-finite difference method. *Journal of Computational Physics*, 477(??):??, March 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999122009536`.

Wan:2020:CRO

[WW20a] Xiaoliang Wan and Shuangqing Wei. Coupling the reduced-order model and the generative model for an importance sampling estimator. *Journal of Computational Physics*, 408(??):Article 109281, May 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999120300553`.

Wang:2020:PDF

[WW20b] Chunmei Wang and Junping Wang. A primal-dual finite element method for first-order transport problems. *Journal of Computational Physics*, 417(??):Article 109571, September 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999120303454`.

Woodfield:2024:NLR

[WWC24] James Woodfield, Hilary Weller, and Colin J. Cotter. New limiter regions for multidimensional flows. *Journal of Computational Physics*, 515(??):??, October 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999124005345`.

Wang:2022:DLF

[WWFM22] Jia-Ji Wang, Chen Wang, Jian-Sheng Fan, and Y. L. Mo. A deep learning framework for constitutive modeling based on temporal convolutional network. *Journal of Computational Physics*, 449(??):Article 110784, January 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999121006793`.

Wang:2020:TCE

[WWG20] Tingchun Wang, Jialing Wang, and Boling Guo. Two completely explicit and unconditionally convergent Fourier pseudo-spectral methods for solving the nonlinear Schrödinger equation. *Journal of Computational Physics*, 404(??): Article 109116, March 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119308216.

Wang:2024:EGB

[WWJ24] Lai Wang, Freddie Witherden, and Antony Jameson. An efficient GPU-based h-adaptation framework via linear trees for the flux reconstruction method. *Journal of Computational Physics*, 502(??):??, April 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912400072X.

Wang:2024:LBM

[WWLX24] Fan Wang, Yating Wang, Wing Tat Leung, and Zongben Xu. Learning-based multi-continuum model for multiscale flow problems. *Journal of Computational Physics*, 514(??):??, October 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124004716.

Wu:2021:VHO

[WWLZ21] Conghai Wu, Ling Wu, Hu Li, and Shuhai Zhang. Very high order WENO schemes using efficient smoothness indicators. *Journal of Computational Physics*, 432(??):Article 110158, May 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121000504.

Wu:2022:FAQ

[WWN+22] Meng Wu, Xuhui Wang, Boniface Nkonga, Bernard Mourrain, Gang Xu, Qian Ni, and Yuan Liu. Flux-aligned quad mesh generation in magnetohydrodynamic simulation. *Journal of Computational Physics*, 466(??):??, October 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122004557.

Wang:2021:FIM

[WWYC21] Wanli Wang, Cheng Wang, Tonghui Yang, and Dongping Chen. A friction interface model for multi-material interactions in a Eulerian framework. *Journal of Computational Physics*, 433(??):Article 110057, May 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999120308317`.

Wu:2020:SIC

[WWZ20] Conghai Wu, Ling Wu, and Shuhai Zhang. A smoothness indicator constant for sine functions. *Journal of Computational Physics*, 419(??):Article 109661, October 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999120304356`.

Wang:2024:TSC

[WWZZ24a] Hanquan Wang, Jing Wang, Shaobo Zhang, and Yong Zhang. A time splitting Chebyshev–Fourier spectral method for the time-dependent rotating nonlocal Schrödinger equation in polar coordinates. *Journal of Computational Physics*, 498(??):??, February 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999123007751`.

Wu:2024:VLT

[WWZZ24b] Jiahao Wu, Yuxin Wu, Guihua Zhang, and Yang Zhang. Variable linear transformation improved physics-informed neural networks to solve thin-layer flow problems. *Journal of Computational Physics*, 500(??):??, March 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S002199912400010X`.

Wu:2020:DDD

[WX20] Kailiang Wu and Dongbin Xiu. Data-driven deep learning of partial differential equations in modal space. *Journal of Computational Physics*, 408(??):Article 109307, May 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999120300814`.

Wan:2022:HWS

[WX22] Yifei Wan and Yinhua Xia. A hybrid WENO scheme for steady-state simulations of Euler equations. *Journal of Computational Physics*, 463(??):??, August 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122003540.

Wang:2024:CME

[WX24a] Yifan Wang and Hehu Xie. Computing multi-eigenpairs of high-dimensional eigenvalue problems using tensor neural networks. *Journal of Computational Physics*, 506(??):??, June 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124001773.

Wei:2024:IBH

[WX24b] Lei Wei and Yinhua Xia. An indicator-based hybrid limiter in discontinuous Galerkin methods for hyperbolic conservation laws. *Journal of Computational Physics*, 498(??):??, February 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123007714.

Wei:2024:SSS

[WX24c] Lei Wei and Yinhua Xia. Steady-state simulation of Euler equations by the discontinuous Galerkin method with the hybrid limiter. *Journal of Computational Physics*, 515(??):??, October 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124005369.

Wang:2024:ASS

[WXTA24] Yazhou Wang, Xiaodai Xue, Kumar K. Tamma, and Nikolaus A. Adams. Algebraically stable SDIRK methods with controllable numerical dissipation for first/second-order time-dependent problems. *Journal of Computational Physics*, 508(??):??, July 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912400281X.

Wang:2022:DLI

[WXZ22] Zhongjian Wang, Jack Xin, and Zhiwen Zhang. DeepParticle: Learning invariant measure by a deep neural network minimizing Wasserstein distance on data generated from an interacting particle method. *Journal of Computational Physics*, 464(??):??, September 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122003710.

Wang:2022:IED

[WY22a] Tong Wang and Jun Yao. An improved embedded discrete fracture model and domain connectivity algorithms on 3D unstructured grids. *Journal of Computational Physics*, 459(??):??, June 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122002042.

Wang:2022:LBP

[WY22b] Tong Wang and Jun Yao. Load-balanced parallel simulations for embedded discrete fracture model on nonconforming staggered 3D unstructured grids. *Journal of Computational Physics*, 459(??):??, June 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122002108.

Wang:2024:PPF

[WYGG24] Yong Wang, Yanzhong Yao, Jiawei Guo, and Zhiming Gao. A practical PINN framework for multi-scale problems with multi-magnitude loss terms. *Journal of Computational Physics*, 510(??):??, August 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124003619.

Wang:2021:DFE

[WYHL21] Hao Wang, Wei Yang, Bin He, and Hongyu Liu. Design and finite element simulation of information-open cloaking devices. *Journal of Computational Physics*, 426 (??):Article 109944, February 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

URL http://www.sciencedirect.com/science/article/pii/S002199912030718X.

Wang:2022:WWP

[WYP22] Sifan Wang, Xinling Yu, and Paris Perdikaris. When and why PINNs fail to train: a neural tangent kernel perspective. *Journal of Computational Physics*, 449 (??):Article 110768, January 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912100663X.

Wen:2020:DLA

[WYS20] H. L. Wen, C. H. Yu, and Tony W. H. Sheu. On the development of LS-assisted VOF method for incompressible interfacial flows. *Journal of Computational Physics*, 406(??):Article 109188, April 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119308939.

Wang:2024:AAO

[WYZY24] Xili Wang, Pengfei Yin, Bo Zhang, and Chao Yang. AONN-2: an adjoint-oriented neural network method for PDE-constrained shape optimization. *Journal of Computational Physics*, 513(??):??, September 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124004091.

Wang:2020:MFM

[WZ20] Zhongjian Wang and Zhiwen Zhang. A mesh-free method for interface problems using the deep learning approach. *Journal of Computational Physics*, 400(??):Article 108963, January 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119306680.

Worku:2021:SAT

[WZ21a] Zelalem Arega Worku and David W. Zingg. Simultaneous approximation terms and functional accuracy for diffusion problems discretized with multidimensional summation-by-parts operators. *Journal of Computational Physics*, 445

(??):Article 110634, November 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121005295.

Wu:2021:PIT

[WZ21b] Shu-Lin Wu and Tao Zhou. Parallel implementation for the two-stage SDIRK methods via diagonalization. *Journal of Computational Physics*, 428(??):Article 110076, March 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120308500.

Wang:2022:FWM

[WZ22] Xiaoyi Wang and Jianfeng Zhang. Fast wave-mode separation in anisotropic elastic reverse time migration using the phase velocity-related Poynting vector. *Journal of Computational Physics*, 461(??):??, July 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122002625.

Wen:2023:GCM

[WZ23a] Tianshu Wen and Matthew J. Zahr. A globally convergent method to accelerate large-scale optimization using on-the-fly model hyperreduction: Application to shape optimization. *Journal of Computational Physics*, 484(??):??, July 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123001778.

Wilkening:2023:SQP

[WZ23b] Jon Wilkening and Xinyu Zhao. Spatially quasi-periodic bifurcations from periodic traveling water waves and a method for detecting bifurcations using signed singular values. *Journal of Computational Physics*, 478(??):??, April 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123000499.

Wang:2024:NPN

[WZ24a] Yifan Wang and Linlin Zhong. NAS-PINN: Neural architecture search-guided physics-informed neural network for solving PDEs. *Journal of Computational Physics*, 496(??):??, January 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123006988.

Worku:2024:ESM

[WZ24b] Zelalem Arega Worku and David W. Zingg. Entropy-split multidimensional summation-by-parts discretization of the Euler and compressible Navier–Stokes equations. *Journal of Computational Physics*, 502(??):??, April 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124000706.

Wu:2020:SSF

[WZBV20] Bowei Wu, Hai Zhu, Alex Barnett, and Shravan Veerapaneni. Solution of Stokes flow in complex nonsmooth 2D geometries via a linear-scaling high-order adaptive integral equation scheme. *Journal of Computational Physics*, 410(??):Article 109361, June 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120301352.

Wang:2021:FMM

[WZC21] Bo Wang, Wenzhong Zhang, and Wei Cai. Fast multipole method for 3-D Poisson–Boltzmann equation in layered electrolyte-dielectric media. *Journal of Computational Physics*, 439(??):Article 110379, August 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121002746.

Wang:2021:PFM

[WZCK21] Zhicheng Wang, Xiaoning Zheng, Chryssostomos Chryssostomidis, and George Em Karniadakis. A phase-field method for boiling heat transfer. *Journal of Computational Physics*, 435(??):Article 110239, June 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121001340.

Wiragunarsa:2024:TLS

[WZD+24] I. M. Wiragunarsa, L. R. Zuhal, T. Dirgantara, I. S. Putra, and E. Febrianto. Total Lagrangian smoothed particle hydrodynamics with an improved bond-based deformation gradient for large strain solid dynamics. *Journal of Computational Physics*, 518(??):??, December 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124005576.

Wang:2024:BPP

[WZG24] Haiyun Wang, Hongqiang Zhu, and Zhen Gao. A bound- and positivity-preserving discontinuous Galerkin method for solving the γ-based model. *Journal of Computational Physics*, 509(??):??, July 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124003115.

Wu:2024:SFG

[WZH24] Dong Wu, Chi Zhang, and Xiangyu Hu. An SPH formulation for general plate and shell structures with finite deformation and large rotation. *Journal of Computational Physics*, 510(??):??, August 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124003620.

Wang:2024:FOK

[WZHH24] Zhentong Wang, Bo Zhang, Oskar J. Haidn, and Xiangyu Hu. A fourth-order kernel for improving numerical accuracy and stability in Eulerian SPH for fluids and total Lagrangian SPH for solids. *Journal of Computational Physics*, 519(??):??, December 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124006338.

Wu:2021:CCI

[WZL21] Wenbin Wu, A-Man Zhang, and Moubin Liu. A cell-centered indirect arbitrary-Lagrangian–Eulerian discontinuous Galerkin scheme on moving unstructured triangular meshes with topological adaptability. *Journal of Computational Physics*, 438(??):Article 110368, August 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121002631.

Wang:2024:CPF

[WZM+24] Zhihua Wang, Wenqiang Zhang, Xuerui Mao, Kwing-So Choi, and Shuguang Li. A consistent phase-field model for three-phase flows with cylindrical/spherical interfaces. *Journal of Computational Physics*, 516(??):??, November 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912400545X.

Wang:2022:FDE

[WZSC22] Shufen Wang, Simin Zhou, Shuxun Shi, and Wenbin Chen. Fully decoupled and energy stable BDF schemes for a class of Keller–Segel equations. *Journal of Computational Physics*, 449(??):Article 110799, January 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912100694X.

Waschkowski:2022:MOC

[WZSK22] Fabian Waschkowski, Yaomin Zhao, Richard Sandberg, and Joseph Klewicki. Multi-objective CFD-driven development of coupled turbulence closure models. *Journal of Computational Physics*, 452(??):Article 110922, March 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121008172.

Wu:2024:SPE

[WZTL24] Sidi Wu, Aiqing Zhu, Yifa Tang, and Benzhuo Lu. Solving parametric elliptic interface problems via interfaced operator network. *Journal of Computational Physics*, 514(??):??, October 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124004662.

Wang:2021:LDF

[WZTZ21] Zhenming Wang, Jun Zhu, Linlin Tian, and Ning Zhao. A low dissipation finite difference nested multi-resolution WENO scheme for Euler/Navier–Stokes equations. *Journal of Computational Physics*, 429(??):Article 110006, March 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120307804.

Wang:2021:NIF

[WZW21] Quanxiang Wang, Zhiyue Zhang, and Liqun Wang. New immersed finite volume element method for elliptic interface problems with non-homogeneous jump conditions. *Journal of Computational Physics*, 427(??):Article 110075, February 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120308494.

Wang:2023:EHM

[WZWZ23] Zhenming Wang, Jun Zhu, Chunwu Wang, and Ning Zhao. An efficient hybrid multi-resolution WCNS scheme for solving compressible flows. *Journal of Computational Physics*, 477(??):??, March 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122009408.

Wei:2024:UGK

[WZX24] Yufeng Wei, Yajun Zhu, and Kun Xu. Unified gas-kinetic wave-particle methods VII: Diatomic gas with rotational and vibrational nonequilibrium. *Journal of Computational Physics*, 497(??):??, January 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123007052.

Wang:2023:DDM

[WZZ23] Zhongjian Wang, Wenlong Zhang, and Zhiwen Zhang. A data-driven model reduction method for parabolic inverse source problems and its convergence analysis. *Journal of Computational Physics*, 487(??):??, August 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (elec-

tronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123002516.

Xu:2020:BSD

[XBD+20] Huijuan Xu, Davide Baroli, Francesca Di Massimo, Annalisa Quaini, and Alessandro Veneziani. Backflow stabilization by deconvolution-based large eddy simulation modeling. *Journal of Computational Physics*, 404(??):Article 109103, March 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119308083.

Xia:2022:HOA

[XBH+22] Qing Xia, Jeffrey W. Banks, William D. Henshaw, Alexander V. Kildishev, Gregor Kovačič, Ludmila J. Prokopeva, and Donald W. Schwendeman. High-order accurate schemes for Maxwell's equations with nonlinear active media and material interfaces. *Journal of Computational Physics*, 456(??): ??, May 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122001139.

Xu:2021:AAT

[XBRL21] Shigang Xu, Qianzong Bao, Zhiming Ren, and Yang Liu. Applying an advanced temporal and spatial high-order finite-difference stencil to 3D seismic wave modeling. *Journal of Computational Physics*, 436(??):Article 110133, July 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121000255.

Xie:2020:FEI

[XC20] Dexuan Xie and Zhen Chao. A finite element iterative solver for a PNP ion channel model with Neumann boundary condition and membrane surface charge. *Journal of Computational Physics*, 423(??):Article 109915, December 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120306896.

Xie:2023:PNP

[XC23a] Dexuan Xie and Zhen Chao. A Poisson–Nernst–Planck single ion channel model and its effective finite element solver.

Journal of Computational Physics, 481(??):??, May 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123001389.

Xu:2023:EMI

[XC23b] Tiantian Xu and Jung-Il Choi. Efficient monolithic immersed boundary projection method for incompressible flows with heat transfer. *Journal of Computational Physics*, 477(??):??, March 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123000244.

Xu:2021:UGK

[XCL+21] Xiaocong Xu, Yipei Chen, Chang Liu, Zhihui Li, and Kun Xu. Unified gas-kinetic wave-particle methods V: Diatomic molecular flow. *Journal of Computational Physics*, 442(??):Article 110496, October 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121003910.

Xiong:2022:CAS

[XCL22] Junda Xiong, Xin Cai, and Jinglai Li. Clustered active-subspace based local Gaussian process emulator for high-dimensional and complex computer models. *Journal of Computational Physics*, 450(??):Article 110840, February 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912100735X.

Xu:2024:WSB

[XCM+24] Danjie Xu, Oriol Colomés, Alex Main, Kangan Li, Nabil M. Atallah, Nabil Abboud, and Guglielmo Scovazzi. A weighted shifted boundary method for immersed moving boundary simulations of Stokes' flow. *Journal of Computational Physics*, 510(??):??, August 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124003449.

Xu:2024:NAN

[XCW+24] Jingwen Xu, Zili Chen, Yu Wang, Shimin Yu, Hongyu Wang, Wei Jiang, and Ya Zhang. A numerical approach for non-linear transmission line analysis with bidirectional coupling to lumped-element and particle-in-cell models. *Journal of Computational Physics*, 509(??):??, July 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912400305X.

Xu:2020:DPD

[XCZ20] Hao Xu, Haibin Chang, and Dongxiao Zhang. DLGA-PDE: Discovery of PDEs with incomplete candidate library via combination of deep learning and genetic algorithm. *Journal of Computational Physics*, 418(??):Article 109584, October 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120303582.

Xu:2022:PCL

[XD22] Kailai Xu and Eric Darve. Physics constrained learning for data-driven inverse modeling from sparse observations. *Journal of Computational Physics*, 453(??):Article 110938, March 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121008330.

Xuan:2021:DLS

[XDCF21] Yao Xuan, Kris T. Delaney, Hector D. Ceniceros, and Glenn H. Fredrickson. Deep learning and self-consistent field theory: a path towards accelerating polymer phase discovery. *Journal of Computational Physics*, 443(??): Article 110519, October 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121004149.

Xie:2024:HOW

[XDL24] Xian Xie, Haiyun Dong, and Maojun Li. High order well-balanced asymptotic preserving IMEX RKDG schemes for the two-dimensional nonlinear shallow water equations. *Journal of Computational Physics*, 510(??):??, August 1,

2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124003413.

Xie:2021:AHO

[XDLX21] Bin Xie, Xi Deng, ShiJun Liao, and Feng Xiao. Arbitrary high-order non-oscillatory scheme on hybrid unstructured grids based on multi-moment finite volume method. *Journal of Computational Physics*, 424(??):Article 109841, January 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912030615X.

Xiao:2021:SKSb

[XF21a] Tianbai Xiao and Martin Frank. A stochastic kinetic scheme for multi-scale flow transport with uncertainty quantification. *Journal of Computational Physics*, 437 (??):Article 110337, July 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121002321.

Xiao:2021:SKSa

[XF21b] Tianbai Xiao and Martin Frank. A stochastic kinetic scheme for multi-scale plasma transport with uncertainty quantification. *Journal of Computational Physics*, 432 (??):Article 110139, May 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121000310.

Xiao:2021:UNN

[XF21c] Tianbai Xiao and Martin Frank. Using neural networks to accelerate the solution of the Boltzmann equation. *Journal of Computational Physics*, 443(??):Article 110521, October 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121004162.

Xiao:2023:RSP

[XF23] Tianbai Xiao and Martin Frank. RelaxNet: a structure-preserving neural network to approximate the Boltzmann collision operator. *Journal of Computational Physics*, 490

(??):??, October 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123004126.

Xiao:2021:LTL

[XFL21] Xufeng Xiao, Xinlong Feng, and Zhilin Li. The local tangential lifting method for moving interface problems on surfaces with applications. *Journal of Computational Physics*, 431(??):Article 110146, April 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121000383.

Xiong:2022:SMO

[XG22] Yunfeng Xiong and Xu Guo. A short-memory operator splitting scheme for constant-Q viscoelastic wave equation. *Journal of Computational Physics*, 449(??):Article 110796, January 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121006914.

Xie:2020:SOS

[XGCW+20] Changjian Xie, Carlos J. García-Cervera, Cheng Wang, Zhennan Zhou, and Jingrun Chen. Second-order semi-implicit projection methods for micromagnetics simulations. *Journal of Computational Physics*, 404(??):Article 109104, March 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119308095.

Xu:2023:NPP

[XGQ+23] Ke Xu, Zhenxun Gao, Zhansen Qian, Chongwen Jiang, and Chun-Hian Lee. Numerical path preserving Godunov schemes for hyperbolic systems. *Journal of Computational Physics*, 490(??):??, October 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123003923.

Xie:2024:STH

[XH24] Jiarong Xie and Bingshou He. Spatial-temporal high-order rotated-staggered-grid finite-difference scheme of elastic wave equations for TTI medium. *Journal of Compu-*

tational Physics, 498(??):??, February 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123007799.

Xing:2022:HMA

[XHC22] Xin Xing, Hua Huang, and Edmond Chow. A hierarchical matrix approach for computing hydrodynamic interactions. *Journal of Computational Physics*, 448(??):Article 110761, January 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121006562.

Xu:2024:MCM

[XHC24] Kerun Xu and Miranda Holmes-Cerfon. Monte Carlo on manifolds in high dimensions. *Journal of Computational Physics*, 506(??):??, June 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124001888.

Xu:2021:LCR

[XHD21] Kailai Xu, Daniel Z. Huang, and Eric Darve. Learning constitutive relations using symmetric positive definite neural networks. *Journal of Computational Physics*, 428(??):Article 110072, March 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120308469.

Xu:2023:HOP

[XHLH23] Jiaqi Xu, Hengshan Hu, Qing Huo Liu, and Bo Han. A high-order perfectly matched layer scheme for second-order spectral-element time-domain elastic wave modelling. *Journal of Computational Physics*, 491(??):??, October 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123004680.

Xu:2021:MEF

[XHS21] Fanxiang Xu, Hadi Hajibeygi, and Lambertus J. Sluys. Multiscale extended finite element method for deformable fractured porous media. *Journal of Computational Physics*, 436(??):Article 110287, July 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121001820.

Xu:2023:AME

[XHS23] Fanxiang Xu, Hadi Hajibeygi, and Lambertus J. Sluys. Adaptive multiscale extended finite element method (MS-XFEM) for the simulation of multiple fractures propagation in geological formations. *Journal of Computational Physics*, 486(??):??, August 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123002097.

Xie:2022:HFS

[XHX22] Bin Xie, Yichen Huang, and Feng Xiao. A high-fidelity solver based on hybrid numerical methods on unstructured grids for incompressible multiphase flows. *Journal of Computational Physics*, 463(??):??, August 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122003618.

Xu:2023:HDD

[XHY23] Ziyao Xu, Zhaoqin Huang, and Yang Yang. The hybrid-dimensional Darcy's law: a non-conforming reinterpreted discrete fracture model (RDFM) for single-phase flow in fractured media. *Journal of Computational Physics*, 473(??):??, January 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122008129.

Xu:2022:PFM

[XHZ22] Jiacheng Xu, Dan Hu, and Han Zhou. A phase-field method for elastic mechanics with large deformation. *Journal of Computational Physics*, 471(??):??, December 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122006933.

Xiong:2024:KNO

[XHZ+24] Wei Xiong, Xiaomeng Huang, Ziyang Zhang, Ruixuan Deng, Pei Sun, and Yang Tian. Koopman neural operator as a mesh-free solver of non-linear partial differential equations. *Journal of Computational Physics*, 513(??):??, September 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124004431.

Xiao:2021:FRK

[Xia21] Tianbai Xiao. A flux reconstruction kinetic scheme for the Boltzmann equation. *Journal of Computational Physics*, 447(??):Article 110689, December 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121005842.

Xia:2023:LBD

[Xia23] Qing Xia. Local-basis difference potentials method for elliptic PDEs in complex geometry. *Journal of Computational Physics*, 488(??):??, September 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123003418.

Xie:2022:EFE

[Xie22] Dexuan Xie. An efficient finite element iterative method for solving a nonuniform size modified Poisson–Boltzmann ion channel model. *Journal of Computational Physics*, 470(??):??, December 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122006180.

Xie:2024:EFE

[Xie24] Dexuan Xie. An efficient finite element solver for a nonuniform size-modified Poisson–Nernst–Planck ion channel model. *Journal of Computational Physics*, 519(??):??, December 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124006417.

Xia:2023:MEP

[XJL23] Qing Xia, Xiaoyu Jiang, and Yibao Li. A modified and efficient phase field model for the biological transport network. *Journal of Computational Physics*, 488(??):??, September 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123002875.

Xie:2020:CSS

[XJN+20] Bin Xie, Peng Jin, Hiroki Nakayama, ShiJun Liao, and Feng Xiao. A conservative solver for surface-tension-driven multiphase flows on collocated unstructured grids. *Journal of Computational Physics*, 401(??):Article 109025, January 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119307314.

Xu:2021:PAP

[XJS21] Xiaojing Xu, Song Jiang, and Wenjun Sun. A positive and asymptotic preserving filtered P_N method for the gray radiative transfer equations. *Journal of Computational Physics*, 444(??):Article 110546, November 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121004411.

Xu:2024:SSO

[XJS24] Xiaojing Xu, Song Jiang, and Wenjun Sun. Spatial second-order positive and asymptotic preserving filtered P_N schemes for nonlinear radiative transfer equations. *Journal of Computational Physics*, 508(??):??, July 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124002341.

Xing:2021:DCE

[XKZ21] Wei W. Xing, Robert M. Kirby, and Shandian Zhe. Deep coregionalization for the emulation of simulation-based spatial-temporal fields. *Journal of Computational Physics*, 428(??):Article 109984, March 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120307580.

Xing:2024:FSE

[XL24] Xin Xing and Lin Lin. Finite-size effects in periodic coupled cluster calculations. *Journal of Computational Physics*, 500(??):??, March 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124000044.

Xie:2022:AGM

[XLHB22] Yuxi Xie, Shaofan Li, Xuan Hu, and Dana Bishara. An adhesive Gurtin–Murdoch surface hydrodynamics theory of moving contact line and modeling of droplet wettability on soft substrates. *Journal of Computational Physics*, 456(??):??, May 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912200136X.

Xu:2024:DDB

[XLL24] Zhihang Xu, Qifeng Liao, and Jinglai Li. Domain-decomposed Bayesian inversion based on local Karhunen–Loève expansions. *Journal of Computational Physics*, 504(??):??, May 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124001050.

Xiao:2021:EES

[XLLH21] Cong Xiao, Olwijn Leeuwenburgh, Hai Xiang Lin, and Arnold Heemink. Efficient estimation of space varying parameters in numerical models using non-intrusive subdomain reduced order modeling. *Journal of Computational Physics*, 424(??):Article 109867, January 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120306410.

Xie:2022:CCI

[XLS22] Zhihua Xie, Pengzhi Lin, and Thorsten Stoesser. A conservative and consistent implicit Cartesian cut-cell method for moving geometries with reduced spurious pressure oscillations. *Journal of Computational Physics*, 459(??):??, June 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122001863.

Xu:2020:NEF

[XLT+20] Xinlu Xu, Fei Li, Frank S. Tsung, Thamine N. Dalichaouch, Weiming An, Han Wen, Viktor K. Decyk, Ricardo A. Fonseca, Mark J. Hogan, and Warren B. Mori. On numerical errors to the fields surrounding a relativistically moving particle in PIC codes. *Journal of Computational Physics*, 413(??):Article 109451, July 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120302254.

Xiao:2020:VSA

[XLXC20] Tianbai Xiao, Chang Liu, Kun Xu, and Qingdong Cai. A velocity-space adaptive unified gas kinetic scheme for continuum and rarefied flows. *Journal of Computational Physics*, 415(??):Article 109535, August 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120303090.

Xie:2021:EPL

[XLZ21] Jianqiang Xie, Dong Liang, and Zhiyue Zhang. Energy-preserving local mesh-refined splitting FDTD schemes for two dimensional Maxwell's equations. *Journal of Computational Physics*, 425(??):Article 109896, January 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120306707.

Xuan:2020:HOP

[XM20] Li-Jun Xuan and Joseph Majdalani. High-order point-value enhanced finite volume method for two-dimensional hyperbolic equations on unstructured meshes. *Journal of Computational Physics*, 423(??):Article 109756, December 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120305301.

Xiao:2022:SRP

[XMY22] Y. Xiao, P. J. Ming, and W. M. Yang. A scalable, robust parallel algorithm on handling of sliding non-conformal interfaces with an efficient supermesh method. *Journal of Computational Physics*, 471(??):??, December 15, 2022. CODEN

JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122007112.

Xu:2023:IPO

[XMZ+23] Xiao Xu, Xinjian Ma, Jun Zhang, Yan Shen, and Junyan Zhang. Information preservation optimization method based on the advection upstream splitting method in supersonic rarefied flow simulation. *Journal of Computational Physics*, 492(??):??, November 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123005296.

Xie:2020:TDC

[XS20] Zhihua Xie and Thorsten Stoesser. A three-dimensional Cartesian cut-cell/volume-of-fluid method for two-phase flows with moving bodies. *Journal of Computational Physics*, 416(??):Article 109536, September 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120303107.

Xu:2022:HOC

[XS22a] Ziyao Xu and Chi-Wang Shu. High order conservative positivity-preserving discontinuous Galerkin method for stationary hyperbolic equations. *Journal of Computational Physics*, 466(??):??, October 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122004727.

Xu:2022:TOM

[XS22b] Ziyao Xu and Chi-Wang Shu. Third order maximum-principle-satisfying and positivity-preserving Lax–Wendroff discontinuous Galerkin methods for hyperbolic conservation laws. *Journal of Computational Physics*, 470(??):??, December 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122006532.

Xu:2023:CPP

[XS23] Ziyao Xu and Chi-Wang Shu. On the conservation property of positivity-preserving discontinuous Galerkin methods for stationary hyperbolic equations. *Journal of Computational Physics*, 490(??):??, October 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123003996.

Xue:2021:NFE

[XSA+21] Tianju Xue, WaiChing Sun, Sigrid Adriaenssens, Yujie Wei, and Chuanqi Liu. A new finite element level set reinitialization method based on the shifted boundary method. *Journal of Computational Physics*, 438(??):Article 110360, August 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121002552.

Xia:2021:FDA

[XSC21] Mingtao Xia, Sihong Shao, and Tom Chou. A frequency-dependent p-adaptive technique for spectral methods. *Journal of Computational Physics*, 446(??):Article 110627, December 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121005222.

Xiao:2023:PCB

[XSF23] Tianbai Xiao, Steffen Schotthöfer, and Martin Frank. Predicting continuum breakdown with deep neural networks. *Journal of Computational Physics*, 489(??):??, September 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912300373X.

Xu:2020:LSI

[XSHH20] Jian-Jun Xu, Weidong Shi, Wei-Fan Hu, and Jun-Jie Huang. A level-set immersed interface method for simulating the electrohydrodynamics. *Journal of Computational Physics*, 400(??):Article 108956, January 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119306618.

Xiong:2022:HOA

[XSSS22] Tao Xiong, Wenjun Sun, Yi Shi, and Peng Song. High order asymptotic preserving discontinuous Galerkin methods for gray radiative transfer equations. *Journal of Computational Physics*, 463(??):??, August 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122003709.

Xu:2024:PFS

[Xu24] Xihua Xu. A parameter-free staggered-grid Lagrangian scheme for two-dimensional compressible flow problems. *Journal of Computational Physics*, 499(??):??, February 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912300815X.

Xian:2024:PDC

[XW24] Jianhua Xian and Ziqi Wang. A physics and data co-driven surrogate modeling method for high-dimensional rare event simulation. *Journal of Computational Physics*, 510(??):??, August 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124003188.

Xu:2024:OSP

[XWZH24] Zhaoyue Xu, Shizhao Wang, Xin-Lei Zhang, and Guowei He. Optimal sensor placement for ensemble-based data assimilation using gradient-weighted class activation mapping. *Journal of Computational Physics*, 514(??):??, October 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912400473X.

Xie:2020:FOK

[XY20a] Yaning Xie and Wenjun Ying. A fourth-order kernel-free boundary integral method for implicitly defined surfaces in three space dimensions. *Journal of Computational Physics*, 415(??):Article 109526, August 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120303004.

Xu:2020:HDR

[XY20b] Ziyao Xu and Yang Yang. The hybrid dimensional representation of permeability tensor: a reinterpretation of the discrete fracture model and its extension on nonconforming meshes. *Journal of Computational Physics*, 415 (??):Article 109523, August 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120302977.

Xia:2024:PFB

[XYKL24] Qing Xia, Junxiang Yang, Junseok Kim, and Yibao Li. On the phase field based model for the crystalline transition and nucleation within the Lagrange multiplier framework. *Journal of Computational Physics*, 513(??):??, September 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124004078.

Xu:2022:ITT

[XYL22] Liang Xu, Wubing Yang, and Tiegang Liu. An interface treatment for two-material multi-species flows involving thermally perfect gases with chemical reactions. *Journal of Computational Physics*, 448(??):Article 110707, January 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121006021.

Xia:2022:BMD

[XZ22] Yingzhi Xia and Nicholas Zabaras. Bayesian multiscale deep generative model for the solution of high-dimensional inverse problems. *Journal of Computational Physics*, 455(??):??, April 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122000705.

Xu:2021:GTT

[XZC21] Chunyuan Xu, Qinghong Zeng, and Juan Cheng. A Godunov-type tensor artificial viscosity for staggered Lagrangian hydrodynamics. *Journal of Computational Physics*, 426(??):Article 109666, February 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

URL http://www.sciencedirect.com/science/article/pii/S002199912030440X.

Xue:2023:TDS

[XZNZ23] Zhong-Han Xue, Shuo Zhao, Ming-Jiu Ni, and Jie Zhang. Three-dimensional sharp and conservative VOF method for the simulation of binary solidification. *Journal of Computational Physics*, 491(??):??, October 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123004758.

Xu:2021:WFT

[XZRW21] Rui Xu, Dongxiao Zhang, Miao Rong, and Nanzhe Wang. Weak form theory-guided neural network (TgNN-wf) for deep learning of subsurface single- and two-phase flow. *Journal of Computational Physics*, 436(??):Article 110318, July 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121002138.

Xu:2021:DLB

[XZW21] Hao Xu, Dongxiao Zhang, and Nanzhe Wang. Deep-learning based discovery of partial differential equations in integral form from sparse and noisy data. *Journal of Computational Physics*, 445(??):Article 110592, November 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121004873.

Xu:2022:ANN

[XZWH22] Zhaoyue Xu, Xinlei Zhang, Shizhao Wang, and Guowei He. Artificial neural network based response surface for data-driven dimensional analysis. *Journal of Computational Physics*, 459(??):??, June 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122002078.

Xue:2024:EDE

[XZZ24] Zhongqin Xue, Shuying Zhai, and Xuan Zhao. Energy dissipation and evolutions of the nonlocal Cahn–Hilliard model and space fractional variants using efficient variable-step BDF2 method. *Journal of Computational Physics*, 510(??):??, August 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124003206.

Yang:2021:WCN

[YA21] Kai Yang and Takayuki Aoki. Weakly compressible Navier–Stokes solver based on evolving pressure projection method for two-phase flow simulations. *Journal of Computational Physics*, 431(??):Article 110113, April 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912100005X.

Yan:2021:GOR

[Yan21a] Kai Yan. The global optimal reference field for the difference formulation in the implicit Monte Carlo radiation transport. *Journal of Computational Physics*, 435(??):Article 110258, June 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121001534.

Yang:2021:EES

[Yan21b] Xiaofeng Yang. Efficient and energy stable scheme for the hydrodynamically coupled three components Cahn–Hilliard phase-field model using the stabilized-invariant energy quadratization (S-IEQ) approach. *Journal of Computational Physics*, 438(??):Article 110342, August 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121002370.

Yang:2021:NFD

[Yan21c] Xiaofeng Yang. A novel fully-decoupled, second-order time-accurate, unconditionally energy stable scheme for a flow-coupled volume-conserved phase-field elastic bending energy model. *Journal of Computational Physics*, 432(??):Article 110015, May 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120307890.

Yanaoka:2023:ICN

[Yan23] Hideki Yanaoka. Influences of conservative and non-conservative Lorentz forces on energy conservation properties for incompressible magnetohydrodynamic flows. *Journal of Computational Physics*, 491(??):??, October 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123004679.

Ye:2020:LCB

[YAX20] Shuai Ye, Hengbin An, and Xinhai Xu. A local character based method for solving linear systems of radiation diffusion problems. *Journal of Computational Physics*, 407(??):Article 109218, April 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119309234.

Yu:2022:DFT

[YB22] Hsuan Ming Yu and Amartya S. Banerjee. Density functional theory method for twisted geometries with application to torsional deformations in group-IV nanotubes. *Journal of Computational Physics*, 456(??):??, May 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122000857.

Yildiran:2024:PBC

[YBC+24] Ibrahim Nasuh Yildiran, Nikolaos Beratlis, Francesco Capuano, Yue-Hin Loke, Kyle Squires, and Elias Balaras. Pressure boundary conditions for immersed-boundary methods. *Journal of Computational Physics*, 510(??):??, August 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124003061.

Yeung:2024:GPR

[YBST24] Yu-Hong Yeung, David A. Barajas-Solano, and Alexandre M. Tartakovsky. Gaussian process regression and conditional Karhunen–Loève models for data assimilation in inverse problems. *Journal of Computational Physics*, 502(??):??, April 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print),

1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124000378.

Yeung:2022:LRD

[YCC+22] Tak Shing Au Yeung, Ka Chun Cheung, Eric T. Chung, Shubin Fu, and Jianliang Qian. Learning rays via deep neural network in a ray-based IPDG method for high-frequency Helmholtz equations in inhomogeneous media. *Journal of Computational Physics*, 465(??):??, September 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122004429.

Yan:2020:HTM

[YcD20] Chao Yan and James G. M. c Donald. Hyperbolic turbulence models for moment closures. *Journal of Computational Physics*, 422(??):Article 109753, December 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120305271.

Yan:2023:HET

[YcD23] Chao Yan and James G. M. c Donald. Hyperbolic equivalent k-ϵ and k-ω turbulence models for moment-closures. *Journal of Computational Physics*, 476(??):??, March 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122009445.

Yang:2024:PFM

[YCD24] Jielin Yang, Ivan C. Christov, and Suchuan Dong. Phase field modeling and numerical algorithm for two-phase dielectric fluid flows. *Journal of Computational Physics*, 514(??):??, October 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124004777.

Yang:2021:FFE

[YCH21] Lei Yang, Jingrun Chen, and Guanghui Hu. A framework of the finite element solution of the Landau–Lifshitz–Gilbert equation on tetrahedral meshes. *Journal of Computational Physics*, 431(??):Article 110142, April 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

URL http://www.sciencedirect.com/science/article/pii/S0021999121000346.

Yan:2020:SCP

[YCM+20] Wen Yan, Eduardo Corona, Dhairya Malhotra, Shravan Veerapaneni, and Michael Shelley. A scalable computational platform for particulate Stokes suspensions. *Journal of Computational Physics*, 416(??):Article 109524, September 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120302989.

Yang:2020:RDE

[YD20] Zhiguo Yang and Suchuan Dong. A roadmap for discretely energy-stable schemes for dissipative systems based on a generalized auxiliary variable with guaranteed positivity. *Journal of Computational Physics*, 404(??):Article 109121, March 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119308265.

Yu:2022:MRL

[YDC22] Ke Yu, Benedikt Dorschner, and Tim Colonius. Multi-resolution lattice Green's function method for incompressible flows. *Journal of Computational Physics*, 459(??):??, June 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121007403.

Ying:2021:NBP

[YFLL21] Jinyong Ying, Ronghong Fan, Jiao Li, and Benzhuo Lu. A new block preconditioner and improved finite element solver of Poisson–Nernst–Planck equation. *Journal of Computational Physics*, 430(??):Article 110098, April 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912030872X.

Yatsuyanagi:2022:DFM

[YFY22] Shuto Yatsuyanagi, Takashi Furusawa, and Satoru Yamamoto. Double-flux model for supercritical multicomponent flows at low Mach numbers with preconditioning method. *Journal of Computational Physics*, 458(??):??, June

1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912200153X.

Yang:2021:MLT

[YG21] L. Minah Yang and Ian Grooms. Machine learning techniques to construct patched analog ensembles for data assimilation. *Journal of Computational Physics*, 443(??): Article 110532, October 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121004277.

Yadav:2024:ANN

[YG24] Sangeeta Yadav and Sashikumaar Ganesan. Artificial neural network-augmented stabilized finite element method. *Journal of Computational Physics*, 499(??):??, February 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123007970.

Yang:2021:CFE

[YGJ21a] L. Minah Yang, Ian Grooms, and Keith A. Julien. Corrigendum to "The fidelity of exponential and IMEX integrators for wave turbulence: Introduction of a new near-minimax integrating factor scheme" [J. Comput. Phys. **434** (2021) 109992]. *Journal of Computational Physics*, 439(??):Article 110372, August 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121002679. See [YGJ21b].

Yang:2021:FEI

[YGJ21b] L. Minah Yang, Ian Grooms, and Keith A. Julien. The fidelity of exponential and IMEX integrators for wave turbulence: Introduction of a new near-minimax integrating factor scheme. *Journal of Computational Physics*, 434(??):Article 109992, June 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912030766X. See corrigendum [YGJ21a].

Yu:2020:HOA

[YGL20] Fei Yu, Zhenlin Guo, and John Lowengrub. Higher-order accurate diffuse-domain methods for partial differential equations with Dirichlet boundary conditions in complex, evolving geometries. *Journal of Computational Physics*, 406(??):Article 109174, April 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119308794.

Yang:2020:HAC

[YGW+20] Weiqi Yang, Xiao-Jun Gu, Lei Wu, David R. Emerson, Yonghao Zhang, and Shuo Tang. A hybrid approach to couple the discrete velocity method and method of moments for rarefied gas flows. *Journal of Computational Physics*, 410(??):Article 109397, June 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120301716.

Yang:2022:NAF

[YH22a] Xiaofeng Yang and Xiaoming He. Numerical approximations of flow coupled binary phase field crystal system: Fully discrete finite element scheme with second-order temporal accuracy and decoupling structure. *Journal of Computational Physics*, 467(??):??, October 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122005101.

Yu:2022:MOR

[YH22b] Jian Yu and Jan S. Hesthaven. Model order reduction for compressible flows solved using the discontinuous Galerkin methods. *Journal of Computational Physics*, 468(??):??, November 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122005149.

Yu:2023:IET

[YH23] Ziheng Yu and Gary R. Hunt. Iterative eigenmode tracking for computing the saddle points of general dispersion relationships. *Journal of Computational Physics*, 493(??):??, November 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912300579X.

Yan:2022:GBD

[YHC+22] Bicheng Yan, Dylan Robert Harp, Bailian Chen, Hussein Hoteit, and Rajesh J. Pawar. A gradient-based deep neural network model for simulating multiphase flow in porous media. *Journal of Computational Physics*, 463(??):??, August 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122003394.

Yin:2023:APN

[YhCdJ+23] Jia Yin, Yang hao Chan, Felipe H. da Jornada, Diana Y. Qiu, Chao Yang, and Steven G. Louie. Analyzing and predicting non-equilibrium many-body dynamics via dynamic mode decomposition. *Journal of Computational Physics*, 477(??):??, March 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123000049.

Ye:2024:ECD

[YHSZ24] Boyang Ye, Jingwei Hu, Chi-Wang Shu, and Xinghui Zhong. Energy-conserving discontinuous Galerkin methods for the Vlasov–Ampère system with Dougherty–Fokker–Planck collision operator. *Journal of Computational Physics*, 514(??):??, October 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124004686.

Yamashita:2023:SAS

[YI23] Rei Yamashita and Hiroaki Ishikawa. A semi-adapted space marching method for fast sonic boom prediction. *Journal of Computational Physics*, 487(??):??, August 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123002656.

Yin:2021:FOC

[Yin21] Jia Yin. A fourth-order compact time-splitting method for the Dirac equation with time-dependent potentials. *Journal* of *Computational Physics*, 430(??):Article 110109, April 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121000012.

Ying:2022:ACL

[Yin22] Lexing Ying. Analytic continuation from limited noisy Matsubara data. *Journal of Computational Physics*, 469(??):??, November 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122006118.

Yan:2023:SMS

[YJH23] Qile Yan, Shixiao Willing Jiang, and John Harlim. Spectral methods for solving elliptic PDEs on unknown manifolds. *Journal of Computational Physics*, 486(??):??, August 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123002279.

Yang:2021:EMG

[YJK21] Hee Jun Yang, Kiwan Jeon, and Hyea Hyun Kim. Efficient mesh generation utilizing an adaptive body centered cubic mesh. *Journal of Computational Physics*, 436(??):Article 110292, July 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912100187X.

Yoo:2024:CSW

[YJK24] Hee Sang Yoo, Young Beom Jo, and Eung Soo Kim. Comparative study of WCSPH, EISPH and explicit incompressible-compressible SPH (EICSPH) for multi-phase flow with high density difference. *Journal of Computational Physics*, 506 (??):??, June 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124001797.

Ye:2023:IDP

[YJP23] Ting Ye, Baocai Jing, and Dingyi Pan. Intelligent dissipative particle dynamics: Bridging mesoscopic models from microscopic simulations via deep neural networks. *Journal of Computational Physics*, 475(??):??, February 15, 2023. CODEN

JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122009202.

Yang:2022:CPH

[YJSX22] Xiaojian Yang, Xing Ji, Wei Shyy, and Kun Xu. Comparison of the performance of high-order schemes based on the gas-kinetic and HLLC fluxes. *Journal of Computational Physics*, 448(??):Article 110706, January 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912100601X.

Yeo:2020:UME

[YK20a] Haram Yeo and Hyungson Ki. Unified momentum equation approach for fluid-structure interaction problems involving linear elastic structures. *Journal of Computational Physics*, 415(??):Article 109482, August 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120302564.

You:2020:DRM

[YK20b] Hojun You and Chongam Kim. Direct reconstruction method for discontinuous Galerkin methods on higher-order mixed-curved meshes II. Surface integration. *Journal of Computational Physics*, 416(??):Article 109514, September 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120302886.

Yang:2022:NAS

[YK22] Junxiang Yang and Junseok Kim. Numerical approximation of the square phase-field crystal dynamics on the three-dimensional objects. *Journal of Computational Physics*, 471(??):??, December 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912200715X.

Ye:2020:MRI

[YKdHC20] Ruichao Ye, Kundan Kumar, Maarten V. de Hoop, and Michel Campillo. A multi-rate iterative coupling scheme for simulating dynamic ruptures and seismic waves generation in the prestressed earth. *Journal of Computational Physics*, 405(??):Article 109098, March 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119308034.

Younes:2023:EDG

[YKFH23] Anis Younes, Behshad Koohbor, Marwan Fahs, and Hussein Hoteit. An efficient discontinuous Galerkin — mixed finite element model for variable density flow in fractured porous media. *Journal of Computational Physics*, 477(??):??, March 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123000323.

Ye:2024:DDR

[YKH24] Dongwei Ye, Valeria Krzhizhanovskaya, and Alfons G. Hoekstra. Data-driven reduced-order modelling for blood flow simulations with geometry-informed snapshots. *Journal of Computational Physics*, 497(??):??, January 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123007349.

Yang:2021:SPH

[YKLL21] Xiufeng Yang, Song-Charng Kong, Moubin Liu, and Qingquan Liu. Smoothed particle hydrodynamics with adaptive spatial resolution (SPH-ASR) for free surface flows. *Journal of Computational Physics*, 443(??):Article 110539, October 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121004344.

You:2021:CFT

[YL21a] Guoqiao You and Shingyu Leung. Computing the finite time Lyapunov exponent for flows with uncertainties. *Journal of Computational Physics*, 425(??):Article 109905, January 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120306793.

You:2021:EAC

[YL21b] Guoqiao You and Shingyu Leung. Eulerian algorithms for computing some Lagrangian flow network quantities. *Journal of Computational Physics*, 445(??):Article 110620, November 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121005155.

Yuan:2024:HEA

[YL24a] Xiaokai Yuan and Peijun Li. A highly efficient and accurate numerical method for the electromagnetic scattering problem with rectangular cavities. *Journal of Computational Physics*, 504(??):??, May 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124001190.

Yue:2024:NSC

[YL24b] Junhong Yue and Peijun Li. Numerical solution of the cavity scattering problem for flexural waves on thin plates: Linear finite element methods. *Journal of Computational Physics*, 497(??):??, January 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123007015.

Yang:2020:PFD

[YLK20] Junxiang Yang, Yibao Li, and Junseok Kim. A practical finite difference scheme for the Navier–Stokes equation on curved surfaces in $\mathbf{R}^3$. *Journal of Computational Physics*, 411(??):Article 109403, June 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120301777.

Yang:2023:MMP

[YLK23] Junxiang Yang, Yibao Li, and Junseok Kim. Modified multi-phase diffuse-interface model for compound droplets in contact with solid. *Journal of Computational Physics*, 491(??):??, October 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123004400.

Yao:2024:FST

[YLLG24] Peitao Yao, Gen Li, Yong Li, and Jinchen Gao. Free surface tension modelling using particle-grid hybrid method without considering gas particles. *Journal of Computational Physics*, 498(??):??, February 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123007696.

Yu:2023:CMF

[YLLO23] Jiajia Yu, Rongjie Lai, Wuchen Li, and Stanley Osher. Computational mean-field games on manifolds. *Journal of Computational Physics*, 484(??):??, July 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123001651.

Yang:2020:UMF

[YLNT20] Zongze Yang, Fawang Liu, Yufeng Nie, and Ian Turner. An unstructured mesh finite difference/finite element method for the three-dimensional time–space fractional Bloch–Torrey equations on irregular domains. *Journal of Computational Physics*, 408(??):Article 109284, May 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120300589.

Yin:2021:CFD

[YLS21] Ping Yin, Jacques Liandrat, and Wanqiang Shen. A comparison of the finite difference and multiresolution method for the elliptic equations with Dirichlet boundary conditions on irregular domains. *Journal of Computational Physics*, 434(??):Article 110207, June 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121001029.

Yang:2021:RSI

[YLW21] Zixuan Yang, Min Lu, and Shizhao Wang. A robust solver for incompressible high-Reynolds-number two-fluid flows with high density contrast. *Journal of Computational*

Physics, 441(??):Article 110474, September 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999121003697`.

Yushu:2020:IBM

[YM20] Dewen Yushu and Karel Matous. The image-based multiscale multigrid solver, preconditioner, and reduced order model. *Journal of Computational Physics*, 406(??):Article 109165, April 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999119308708`.

Yang:2021:HAM

[YM21] Chang Yang and Michel Mehrenberger. Highly accurate monotonicity-preserving semi-Lagrangian scheme for Vlasov–Poisson simulations. *Journal of Computational Physics*, 446(??):Article 110632, December 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999121005271`.

Yang:2021:BPB

[YMK21] Liu Yang, Xuhui Meng, and George Em Karniadakis. B-PINNs: Bayesian physics-informed neural networks for forward and inverse PDE problems with noisy data. *Journal of Computational Physics*, 425(??):Article 109913, January 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999120306872`.

Yamashita:2024:CTM

[YMS24] Shu Yamashita, Shintaro Matsushita, and Tetsuya Suekane. Conservative transport model for surfactant on the interface based on the phase-field method. *Journal of Computational Physics*, 516(??):??, November 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999124005400`.

Yin:2021:CMM

[YMY+21] Xi-Yuan Yin, Olivier Mercier, Badal Yadav, Kai Schneider, and Jean-Christophe Nave. A characteristic mapping method for the two-dimensional incompressible Euler equations. *Journal of Computational Physics*, 424(??):Article 109781, January 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120305556.

Yuan:2022:PAP

[YNDH22] Lei Yuan, Yi-Qing Ni, Xiang-Yun Deng, and Shuo Hao. A-PINN: Auxiliary physics informed neural networks for forward and inverse problems of nonlinear integro-differential equations. *Journal of Computational Physics*, 462(??):??, August 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122003229.

Yousefi:2020:NWB

[YNT20] Mohsen Hadadian Nejad Yousefi, Seyed Hossein Ghoreishi Najafabadi, and Emran Tohidi. A new WENO based Chebyshev spectral volume method for solving one- and two-dimensional conservation laws. *Journal of Computational Physics*, 403(??):Article 109055, February 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119307600.

Yang:2024:PGC

[YO24] Liu Yang and Stanley J. Osher. PDE generalization of in-context operator networks: a study on 1D scalar nonlinear conservation laws. *Journal of Computational Physics*, 519(??):??, December 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124006272.

Yee:2020:QPF

[YOH+20] Ben C. Yee, Samuel S. Olivier, Terry S. Haut, Milan Holec, Vladimir Z. Tomov, and Peter G. Maginot. A quadratic programming flux correction method for high-order DG discretizations of S_N transport. *Journal of Computational Physics*, 419(??):Article 109696, October 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120304708.

Yokoi:2024:FVC

[Yok24] Kensuke Yokoi. Full-variable Cartesian grid method for incompressible and multiphase flows. *Journal of Computational Physics*, 500(??):??, March 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123008458.

Yu:2022:IBM

[YP22] Hang Yu and Carlos Pantano. An immersed boundary method with implicit body force for compressible viscous flow. *Journal of Computational Physics*, 459(??):??, June 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122001875.

Yu:2024:RPI

[YP24] Hang Yu and Carlos Pantano. A regularized projection immersed boundary method for smooth boundary forces. *Journal of Computational Physics*, 496(??):??, January 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123006666.

Yang:2024:IHO

[YPX24] Yaqing Yang, Liang Pan, and Kun Xu. Implicit high-order gas-kinetic schemes for compressible flows on three-dimensional unstructured meshes I: Steady flows. *Journal of Computational Physics*, 505(??):??, May 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124001517.

Yushutin:2020:NMP

[YQO20] Vladimir Yushutin, Annalisa Quaini, and Maxim Olshanskii. Numerical modeling of phase separation on dynamic surfaces. *Journal of Computational Physics*, 407 (??):Article 109126, April 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119308319.

Yao:2022:VLP

[YR22] Wenqi Yao and Weiqing Ren. Vapor–liquid phase transition in fluctuating hydrodynamics: the most probable transition path and its computation. *Journal of Computational Physics*, 467(??):??, October 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999122004880`.

Yao:2021:TDM

[YRC+21] Hongbo Yao, Zhengyong Ren, Huang Chen, Jingtian Tang, Yuanao Li, and Xu Liu. Two-dimensional magnetotelluric finite element modeling by a hybrid Helmholtz-curl formulae system. *Journal of Computational Physics*, 443 (??):Article 110533, October 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999121004289`.

Yang:2022:CMF

[YRHN22] Lijing Yang, Milad Rakhsha, Wei Hu, and Dan Negrut. A consistent multiphase flow model with a generalized particle shifting scheme resolved via incompressible SPH. *Journal of Computational Physics*, 458(??):??, June 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999122001413`.

Yamamoto:2022:MCS

[YS22] Toshihiro Yamamoto and Hiroki Sakamoto. Monte Carlo sensitivity calculation in fixed source problems with the derivative source method. *Journal of Computational Physics*, 460(??):??, July 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999122002170`.

Yang:2023:ADN

[YSC23] Yunan Yang, Denis Silantyev, and Russel Caflisch. Adjoint DSMC for nonlinear spatially-homogeneous Boltzmann equation with a general collision model. *Journal of Computational Physics*, 488(??):??, September 1, 2023. CODEN

JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912300342X.

Yang:2021:HOT

[YSCM21] Zhiqiang Yang, Yi Sun, Junzhi Cui, and Qiang Ma. A high-order three-scale reduced homogenization for nonlinear heterogeneous materials with multiple configurations. *Journal of Computational Physics*, 425(??):Article 109900, January 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120306744.

Yin:2023:CMM

[YSN23] Xi-Yuan Yin, Kai Schneider, and Jean-Christophe Nave. A Characteristic Mapping Method for the three-dimensional incompressible Euler equations. *Journal of Computational Physics*, 477(??):??, March 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122009391.

Yazdanian:2020:FEB

[YSTK20] Hassan Yazdanian, Guilherme B. Saturnino, Axel Thielscher, and Kim Knudsen. Fast evaluation of the Biot–Savart integral using FFT for electrical conductivity imaging. *Journal of Computational Physics*, 411(??):Article 109408, June 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120301820.

Yang:2022:LFD

[YTK22] Junxiang Yang, Zhijun Tan, and Junseok Kim. Linear and fully decoupled scheme for a hydrodynamics coupled phase-field surfactant system based on a multiple auxiliary variables approach. *Journal of Computational Physics*, 452(??):Article 110909, March 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121008044.

Yang:2023:MDI

[YTWK23] Junxiang Yang, Zhijun Tan, Jian Wang, and Junseok Kim. Modified diffuse interface fluid model and its consistent energy-stable computation in arbitrary domains. *Journal of Computational Physics*, 488(??):??, September 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912300311X.

Yamaleev:2022:PPE

[YU22] Nail K. Yamaleev and Johnathon Upperman. Positivity-preserving entropy stable schemes for the 1-D compressible Navier–Stokes equations: High-order flux limiting. *Journal of Computational Physics*, 466(??):??, October 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122004168.

Yuan:2021:ESG

[Yua21] Huifang Yuan. An efficient spectral-Galerkin method for fractional reaction-diffusion equations in unbounded domains. *Journal of Computational Physics*, 428(??): Article 110083, March 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120308573.

Yadav:2024:TBC

[YV24] Samardhi Yadav and Vishal Vaibhav. Transparent boundary condition and its effectively local approximation for the Schrödinger equation on a rectangular computational domain. *Journal of Computational Physics*, 514(??):??, October 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124004911.

Yao:2022:NST

[YW22] Qingyun Yao and Haibing Wang. A numerical scheme for the time-fractional diffusion equation by layer potentials. *Journal of Computational Physics*, 448(??):Article 110763, January 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121006586.

Yuan:2024:DOM

[YW24] Ruifeng Yuan and Lei Wu. A design optimization method for rarefied and continuum gas flows. *Journal of Computational Physics*, 517(??):??, November 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124006144.

Yamazaki:2022:CMM

[YWCB22] Hiroe Yamazaki, Hilary Weller, Colin J. Cotter, and Philip A. Browne. Conservation with moving meshes over orography. *Journal of Computational Physics*, 461(??):??, July 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122002790.

Yang:2022:CNC

[YWClL22] Yin Yang, Jindi Wang, Yanping Chen, and Hong lin Liao. Compatible L^2 norm convergence of variable-step L1 scheme for the time-fractional MBE model with slope selection. *Journal of Computational Physics*, 467(??):??, October 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122005290.

Yuan:2024:PPI

[YWHC24] Biao Yuan, He Wang, Ana Heitor, and Xiaohui Chen. f-PICNN: a physics-informed convolutional neural network for partial differential equations with space-time domain. *Journal of Computational Physics*, 515(??):??, October 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124005321.

Yin:2021:SPD

[YWLL21] Baoli Yin, Jinfeng Wang, Yang Liu, and Hong Li. A structure preserving difference scheme with fast algorithms for high dimensional nonlinear space-fractional Schrödinger equations. *Journal of Computational Physics*, 425(??): Article 109869, January 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120306434.

Yamashita:2020:FFS

[YWN20] Rei Yamashita, Lukas Wutschitz, and Nikolaos Nikiforakis. A full-field simulation methodology for sonic boom modeling on adaptive Cartesian cut-cell meshes. *Journal of Computational Physics*, 408(??):Article 109271, May 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120300450.

Yang:2022:ECD

[YX22] Ruize Yang and Yulong Xing. Energy conserving discontinuous Galerkin method with scalar auxiliary variable technique for the nonlinear Dirac equation. *Journal of Computational Physics*, 463(??):??, August 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122003400.

Yan:2024:SSD

[YX24] Hongyong Yan and Teng Xu. Suppressing spatial dispersion of seismic finite-difference modeling with the improved pix2pix algorithm. *Journal of Computational Physics*, 511(??):??, August 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124003784.

Yu:2022:PFB

[YXL22] Qian Yu, Qing Xia, and Yibao Li. A phase field-based systematic multiscale topology optimization method for porous structures design. *Journal of Computational Physics*, 466(??):??, October 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122004454.

Yousefzadeh:2023:LSI

[YYB23] Mehrdad Yousefzadeh, Yinuo Yao, and Ilenia Battiato. A level-set immersed boundary method for reactive transport in complex topologies with moving interfaces. *Journal of Computational Physics*, 478(??):??, April 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

URL http://www.sciencedirect.com/science/article/pii/S0021999123000530.

You:2022:NKN

[YYD+22] Huaiqian You, Yue Yu, Marta D'Elia, Tian Gao, and Stewart Silling. Nonlocal kernel network (NKN): a stable and resolution-independent deep neural network. *Journal of Computational Physics*, 469(??):??, November 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122005988.

Yang:2023:ELB

[YYJ+23] G. C. Yang, S. C. Yang, L. Jing, C. Y. Kwok, and Y. D. Sobral. Efficient lattice Boltzmann simulation of free-surface granular flows with μ (i)-rheology. *Journal of Computational Physics*, 479(??):??, April 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123000517.

Yin:2020:NNS

[YYL20] Weishi Yin, Wenhong Yang, and Hongyu Liu. A neural network scheme for recovering scattering obstacles with limited phaseless far-field data. *Journal of Computational Physics*, 417(??):Article 109594, September 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120303685.

Yang:2022:MCS

[YYLY22] Hongtao Yang, Boyang Yu, Yonghai Li, and Guangwei Yuan. Monotonicity correction for second order element finite volume methods of anisotropic diffusion problems. *Journal of Computational Physics*, 449(??):Article 110759, January 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121006549.

Yin:2022:PFV

[YYM+22] Liang Yin, Chao Yang, Shi-Zhuang Ma, Ying Cai, and Keke Zhang. Parallel finite volume simulation of the spherical shell dynamo with pseudo-vacuum magnetic boundary conditions. *Journal of Computational Physics*, 451 (??):Article 110866, February 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121007610.

Yang:2021:HOS

[YYX21] Ruize Yang, Yang Yang, and Yulong Xing. High order sign-preserving and well-balanced exponential Runge–Kutta discontinuous Galerkin methods for the shallow water equations with friction. *Journal of Computational Physics*, 444(??):Article 110543, November 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121004381.

Yang:2021:FKB

[YZdCNS21] Minglei Yang, Guannan Zhang, Diego del Castillo-Negrete, and Miroslav Stoyanov. A Feynman–Kac based numerical method for the exit time probability of a class of transport problems. *Journal of Computational Physics*, 444 (??):Article 110564, November 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121004599.

Yang:2023:ACA

[YZH+23] Zihao Yang, Shaoqi Zheng, Fei Han, Xiaofei Guan, and Jieqiong Zhang. An adaptive coupling approach of local and non-local micromechanics. *Journal of Computational Physics*, 489(??):??, September 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123003728.

Yoon:2020:RMH

[YZK20] Hyun C. Yoon, Peng Zhou, and Jihoon Kim. Robust modeling of hysteretic capillary pressure and relative permeability for two phase flow in porous media. *Journal of Computational Physics*, 402(??):Article 108915, February 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119306205.

Yang:2023:MTN

[YZK23] Haijian Yang, Zhaoni Zhu, and Jisheng Kou. A minimum-type nonlinear complementarity simulator with constrained pressure residual (CPR) methods for wormhole propagation in carbonate acidization. *Journal of Computational Physics*, 473(??):??, January 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122007951.

Yang:2024:AAS

[YZL24] Jianbin Yang, Weifeng Zhao, and Ping Lin. An automatic approach for the stability analysis of multi-relaxation-time lattice Boltzmann models. *Journal of Computational Physics*, 519(??):??, December 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124006806.

Yang:2021:PRO

[YZSD21] L. M. Yang, X. Zhao, C. Shu, and Y. J. Du. Parametric reduced order modeling-based discrete velocity method for simulation of steady rarefied flows. *Journal of Computational Physics*, 430(??):Article 110037, April 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120308111.

Yin:2023:HEE

[YZW23] Tianai Yin, Xinghui Zhong, and Yanli Wang. Highly efficient energy-conserving moment method for the multi-dimensional Vlasov–Maxwell system. *Journal of Computational Physics*, 475(??):??, February 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122009263.

Yang:2023:NTS

[YZZ23] Tao Yang, Guoqing Zhao, and Qijun Zhao. Novel TENO schemes with improved accuracy order based on perturbed polynomial reconstruction. *Journal of Computational Physics*, 488(??):??, September 1, 2023. CODEN

JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123003145.

Yin:2024:HDB

[YZZ24] Tao Yin, Lu Zhang, and Xiaopeng Zhu. Helmholtz decomposition based windowed Green function methods for elastic scattering problems on a half-space. *Journal of Computational Physics*, 502(??):??, April 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124000676.

Yu:2022:CSL

[YZZZ22] Bing Yu, Xiangcheng Zheng, Pingwen Zhang, and Lei Zhang. Computing solution landscape of nonlinear space-fractional problems via fast approximation algorithm. *Journal of Computational Physics*, 468(??):??, November 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122005757.

Zerroukat:2020:SSL

[ZA20] M. Zerroukat and T. Allen. SLIC: a semi-Lagrangian implicitly corrected method for solving the compressible Euler equations. *Journal of Computational Physics*, 421 (??):Article 109739, November 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120305131.

Zhang:2021:IMF

[ZA21] Na Zhang and Ahmad S. Abushaikha. An implementation of mimetic finite difference method for fractured reservoirs using a fully implicit approach and discrete fracture models. *Journal of Computational Physics*, 446 (??):Article 110665, December 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912100560X.

Zoller:2023:PCS

[ZAA23] C. Zöller, N. A. Adams, and S. Adami. A partitioned continuous surface stress model for multiphase smoothed particle hydrodynamics. *Journal of Computational Physics*, 472(??):??, January 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999122007793`.

Zhang:2024:ITD

[ZABP+24] Haosen Zhang, Senyou An, Pablo R. Brito-Parada, Stephen J. Neethling, and Yanghua Wang. Investigation into three-dimensional dry foam modelling using the boundary integral method. *Journal of Computational Physics*, 499(??):??, February 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999123008197`.

Zhou:2020:CMP

[ZAMG20] Y. C. Zhou, David Argudo, Frank V. Marcoline, and Michael Grabe. A computational model of protein induced membrane morphology with geodesic curvature driven protein-membrane interface. *Journal of Computational Physics*, 422(??):Article 109755, December 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999120305295`.

Zhao:2020:RTM

[ZAW+20] Yaomin Zhao, Harshal D. Akolekar, Jack Weatheritt, Vittorio Michelassi, and Richard D. Sandberg. RANS turbulence model development using CFD-driven machine learning. *Journal of Computational Physics*, 411(??):Article 109413, June 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S002199912030187X`.

Zapata:2021:CLS

[ZB21a] Miguel Uh Zapata and Reymundo Itzá Balam. A conservative level-set/finite-volume method on unstructured grids based on a central interpolation scheme. *Journal of Computational Physics*, 444(??):Article 110576, November 1, 2021.

CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912100471X.

Zeifang:2021:DDH

[ZB21b] Jonas Zeifang and Andrea Beck. A data-driven high order sub-cell artificial viscosity for the discontinuous Galerkin spectral element method. *Journal of Computational Physics*, 441(??):Article 110475, September 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121003703.

Zhou:2021:AST

[ZB21c] Kun Zhou and S. Balachandar. An analysis of the spatio-temporal resolution of the immersed boundary method with direct forcing. *Journal of Computational Physics*, 424(??):Article 109862, January 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120306367.

Zhou:2024:SAW

[ZB24] Di Zhou and H. Jane Bae. Sensitivity analysis of wall-modeled large-eddy simulation for separated turbulent flow. *Journal of Computational Physics*, 506(??):??, June 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124001979.

Zhao:2021:IIU

[ZBB21] Hongbo Zhao, Richard D. Braatz, and Martin Z. Bazant. Image inversion and uncertainty quantification for constitutive laws of pattern formation. *Journal of Computational Physics*, 436(??):Article 110279, July 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121001741.

Zingaro:2024:EDF

[ZBP+24] Alberto Zingaro, Michele Bucelli, Roberto Piersanti, Francesco Regazzoni, Luca Dede', and Alfio Quarteroni. An electromechanics-driven fluid dynamics model for the simulation of the whole human heart. *Journal of Computational Physics*, 504(??):??, May 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124001347.

Zong:2024:RPI

[ZBST24] Yifei Zong, David Barajas-Solano, and Alexandre M. Tartakovsky. Randomized physics-informed machine learning for uncertainty quantification in high-dimensional inverse problems. *Journal of Computational Physics*, 519(??):??, December 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124006430.

Zhao:2023:MGM

[ZBY+23] Zhen-Xi Zhao, Giuseppe Bilotta, Qin-Er Yuan, Zhao-Xin Gong, and Hua Liu. Multi-GPU multi-resolution SPH framework towards massive hydrodynamics simulations and its applications in high-speed water entry. *Journal of Computational Physics*, 490(??):??, October 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123004345.

Zang:2020:WAN

[ZBYZ20] Yaohua Zang, Gang Bao, Xiaojing Ye, and Haomin Zhou. Weak adversarial networks for high-dimensional partial differential equations. *Journal of Computational Physics*, 411(??):Article 109409, June 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120301832.

Zhang:2022:FBN

[ZC22a] Wenzhong Zhang and Wei Cai. FBSDE based neural network algorithms for high-dimensional quasilinear parabolic PDEs. *Journal of Computational Physics*, 470(??):??, December 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122006192.

Zhu:2022:CEL

[ZC22b] Feng Zhu and Jiubing Cheng. Corrigendum to “An extension of least squares redatuming: Simultaneous reconstruction of overburden reflectivities and virtual data” [J. Comput. Phys. **461** (2022) 111159]. *Journal of Computational Physics*, 464(??):??, September 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122004338. See [ZC22c].

Zhu:2022:ELS

[ZC22c] Feng Zhu and Jiubing Cheng. An extension of least-squares redatuming: Simultaneous reconstruction of overburden reflectivities and virtual data. *Journal of Computational Physics*, 461(??):??, July 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122002212. See corrigendum [ZC22b].

Zhang:2023:APC

[ZC23] Fan Zhang and Jian Cheng. Analysis on physical-constraint-preserving high-order discontinuous Galerkin method for solving Kapila’s five-equation model. *Journal of Computational Physics*, 492(??):??, November 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123005120.

Zhu:2024:BCE

[ZCC+24] Xiaojue Zhu, Yibo Chen, Kai Leong Chong, Detlef Lohse, and Roberto Verzicco. A boundary condition-enhanced direct-forcing immersed boundary method for simulations of three-dimensional phoretic particles in incompressible flows. *Journal of Computational Physics*, 509(??):??, July 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124002778.

Zhang:2023:RDS

[ZCCN23] Jiexing Zhang, Qingjie Cui, Yibing Chen, and Guoxi Ni. Residual distribution schemes for steady radiative transfer equations on unstructured meshes. *Journal of Computational Physics*, 488(??):??, September 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123002644.

Zhan:2022:WFG

[ZCH22] Hongfei Zhan, Zhenning Cai, and Guanghui Hu. The Wigner function of ground state and one-dimensional numerics. *Journal of Computational Physics*, 449(??): Article 110780, January 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121006756.

Zhu:2024:PMR

[ZCK+24] Guixun Zhu, Yongdong Cui, Boo Cheong Khoo, Siming Zheng, Zongbing Yu, and Yelin Gao. A parallel multi-resolution Smoothed Particle Hydrodynamics model with local time stepping. *Journal of Computational Physics*, 508(??):??, July 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124002882.

Zhang:2020:RDG

[ZCL20] Fan Zhang, Jian Cheng, and Tiegang Liu. A reconstructed discontinuous Galerkin method for incompressible flows on arbitrary grids. *Journal of Computational Physics*, 418(??):Article 109580, October 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120303545.

Zhang:2019:HOP

[ZCQ19] Min Zhang, Juan Cheng, and Jianxian Qiu. High order positivity-preserving discontinuous Galerkin schemes for radiative transfer equations on triangular meshes. *Journal of Computational Physics*, 397(??):Article 108811, ???? 2019. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119304954. See corrigendum [ZCQ20a].

Zhang:2020:CHO

[ZCQ20a] Min Zhang, Juan Cheng, and Jianxian Qiu. Corrigendum to "High order positivity-preserving discontinuous Galerkin schemes for radiative transfer equations on triangular meshes" [j. comput. phys. 397 (2019) 108811]. *Journal of Computational Physics*, 406(??):Article 109250, April 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120300243. See [ZCQ19].

Zhao:2020:HHW

[ZCQ20b] Zhuang Zhao, Yibing Chen, and Jianxian Qiu. A hybrid Hermite WENO scheme for hyperbolic conservation laws. *Journal of Computational Physics*, 405(??):Article 109175, March 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119308800.

Zhao:2021:EBC

[ZCY+21] Xiang Zhao, Zhen Chen, Liming Yang, Ningyu Liu, and Chang Shu. Efficient boundary condition-enforced immersed boundary method for incompressible flows with moving boundaries. *Journal of Computational Physics*, 441 (??):Article 110425, September 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912100320X.

Zhan:2023:TDH

[ZCY23] Ningyu Zhan, Rongqian Chen, and Yancheng You. Three-dimensional high-order finite-volume method based on compact WENO reconstruction with hybrid unstructured grids. *Journal of Computational Physics*, 490(??):??, October 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123003959.

Zhao:2024:SOA

[ZCY24] Yi Zhao, Dongting Cai, and Junxiang Yang. Second-order accurate and unconditionally stable algorithm with unique solvability for a phase-field model of 3D volume reconstruction. *Journal of Computational Physics*, 504(??):??, May 1,

2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999124001220`.

Zhang:2020:DDF

[ZCYS20] L. Q. Zhang, Z. Chen, L. M. Yang, and C. Shu. Double distribution function-based discrete gas kinetic scheme for viscous incompressible and compressible flows. *Journal of Computational Physics*, 412(??):Article 109428, July 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999120302023`.

Zeng:2022:DNN

[ZCZ22] Shaojie Zeng, Yihua Cai, and Qingsong Zou. Deep neural networks based temporal-difference methods for high-dimensional parabolic partial differential equations. *Journal of Computational Physics*, 468(??):??, November 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999122005654`.

Zinchenko:2021:AFH

[ZD21] Alexander Z. Zinchenko and Robert H. Davis. Algorithm for flow of highly-concentrated emulsions through a narrow constriction. *Journal of Computational Physics*, 438(??):Article 110363, August 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999121002588`.

Zhou:2020:MLR

[ZDC20] Hang Zhou, Rémi Douvenot, and Alexandre Chabory. Modeling the long-range wave propagation by a split-step wavelet method. *Journal of Computational Physics*, 402(??):Article 109042, February 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S002199911930748X`.

Zhao:2024:CFI

[ZDM24] Lanhao Zhao, Yingtang Di, and Jia Mao. A coupled FDEM-IBM-level set method for water entry of multiple flexible objects. *Journal of Computational Physics*, 516(??):??, November 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124005382.

Zhang:2021:CDD

[ZDS+21] Yu Zhang, Richard P. Dwight, Martin Schmelzer, Javier F. Gómez, Zhong hua Han, and Stefan Hickel. Customized data-driven RANS closures for bi-fidelity LES-RANS optimization. *Journal of Computational Physics*, 432(??):Article 110153, May 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121000450.

Zhang:2023:HOA

[ZDT23] Zhihao Zhang, Junming Duan, and Huazhong Tang. High-order accurate well-balanced energy stable adaptive moving mesh finite difference schemes for the shallow water equations with non-flat bottom topography. *Journal of Computational Physics*, 492(??):??, November 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123005466.

Zhang:2022:CMF

[ZDW22] Kuokuo Zhang, Weibing Deng, and Haijun Wu. A combined multiscale finite element method based on the LOD technique for the multiscale elliptic problems with singularities. *Journal of Computational Physics*, 469(??):??, November 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122006027.

Zaitzeff:2020:SOT

[ZEG20] Alexander Zaitzeff, Selim Esedoğlu, and Krishna Garikipati. Second order threshold dynamics schemes for two phase motion by mean curvature. *Journal of Computational Physics*, 410(??):Article 109404, June 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120301789.

Zaitzeff:2021:HOS

[ZEG21] Alexander Zaitzeff, Selim Esedoáḡlu, and Krishna Garikipati. High order, semi-implicit, energy stable schemes for gradient flows. *Journal of Computational Physics*, 447(??): Article 110688, December 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121005830.

Zidane:2020:HOS

[ZF20] Ali Zidane and Abbas Firoozabadi. Higher-order simulation of two-phase compositional flow in 3D with non-planar fractures. *Journal of Computational Physics*, 402 (??):Article 108896, February 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119305947.

Zhang:2024:HWT

[ZFAA24] Wenbin Zhang, Nico Fleischmann, Stefan Adami, and Nikolaus A. Adams. A hybrid WENO5IS–THINC reconstruction scheme for compressible multiphase flows. *Journal of Computational Physics*, 498(??):??, February 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123007672.

Zhang:2021:HMS

[ZFG21] Yi Zhang, Joël Fisser, and Marc Gerritsma. A hybrid mimetic spectral element method for three-dimensional linear elasticity problems. *Journal of Computational Physics*, 433(??):Article 110179, May 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121000747.

Zhou:2020:DUG

[ZG20] Xiafeng Zhou and Zhaoli Guo. Discrete unified gas kinetic scheme for steady multiscale neutron transport. *Journal of Computational Physics*, 423(??):Article 109767, December 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120305416.

Zhang:2021:AEL

[ZG21] Yabin Zhang and Adrianna Gillman. An alternative extended linear system for boundary value problems on locally perturbed geometries. *Journal of Computational Physics*, 433(??):Article 110182, May 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121000772.

Zhao:2024:ALR

[ZG24] Yong-Liang Zhao and Xian-Ming Gu. An adaptive low-rank splitting approach for the extended Fisher–Kolmogorov equation. *Journal of Computational Physics*, 506(??):??, June 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124001748.

Zhang:2024:MBP

[ZGCW24] Wei Zhang, Xuelong Gu, Wenjun Cai, and Yushun Wang. Maximum bound principle preserving additive partitioned Runge–Kutta schemes for the Allen–Cahn equation. *Journal of Computational Physics*, 516(??):??, November 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124005278.

Zhang:2024:LRM

[ZGJ+24] Jiansong Zhang, Xinxin Guo, Maosheng Jiang, Tao Zhou, and Jia Zhao. Linear relaxation method with regularized energy reformulation for phase field models. *Journal of Computational Physics*, 515(??):??, October 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124004741.

Zou:2022:CST

[ZGK+22] Ziqiang Zou, Nicolas Grenier, Samuel Kokh, Christian Tenaud, and Edouard Audit. Compressible solver for two-phase flows with sharp interface and capillary effects preserving accuracy in the low Mach regime. *Journal of Computational Physics*, 448(??):Article 110735, January 1, 2022.

CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121006306.

Zhang:2020:MRB

[ZGLL20] Qianru Zhang, Sheng Gui, Hongliang Li, and Benzhuo Lu. Model reduction-based initialization methods for solving the Poisson–Nernst–Plank equations in three-dimensional ion channel simulations. *Journal of Computational Physics*, 419(??):Article 109627, October 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120304010.

Zhao:2024:HOC

[ZGX24] Fengxiang Zhao, Jianping Gan, and Kun Xu. High-order compact gas-kinetic scheme for two-layer shallow water equations on unstructured mesh. *Journal of Computational Physics*, 498(??):??, February 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123007465.

Zhao:2020:BTI

[ZH20] Weifeng Zhao and Juntao Huang. Boundary treatment of implicit-explicit Runge–Kutta method for hyperbolic systems with source terms. *Journal of Computational Physics*, 423(??):Article 109828, December 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120306021.

Zhao:2021:SOD

[ZH21] Jia Zhao and Daozhi Han. Second-order decoupled energy-stable schemes for Cahn–Hilliard–Navier–Stokes equations. *Journal of Computational Physics*, 443(??): Article 110536, October 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121004319.

Zhan:2023:NTS

[ZH23] Hongfei Zhan and Guanghui Hu. A novel tetrahedral spectral element method for Kohn–Sham model. *Journal of Com-*

putational Physics, 474(??):??, February 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122008944.

Zhang:2022:MSM

[Zha22] Shengliang Zhang. Meshless symplectic and multi-symplectic local RBF collocation methods for nonlinear Schrödinger equation. *Journal of Computational Physics*, 450(??): Article 110820, February 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121007154.

Zheng:2024:HHP

[ZHH+24] Haoyang Zheng, Yao Huang, Ziyang Huang, Wenrui Hao, and Guang Lin. HomPINNs: Homotopy physics-informed neural networks for solving the inverse problems of nonlinear differential equations with multiple solutions. *Journal of Computational Physics*, 500(??):??, March 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123008471.

Zhan:2024:CDE

[ZHK+24] Yaqian Zhan, Zhongbo Hu, Jisheng Kou, Nan Hong, and Qinghua Su. A constrained differential evolution algorithm for calculation of two-phase equilibria at given volume, temperature and moles. *Journal of Computational Physics*, 518(??):??, December 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124005680.

Zhang:2021:LRB

[ZHL21] He Zhang, John Harlim, and Xiantao Li. Linear response based parameter estimation in the presence of model error. *Journal of Computational Physics*, 430(??):Article 110112, April 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121000048.

Zhang:2021:SCP

[ZHPZ21] Ya Zhang, Sina Haeri, Guang Pan, and Yonghao Zhang. Strongly coupled peridynamic and lattice Boltzmann models using immersed boundary method for flow-induced structural deformation and fracture. *Journal of Computational Physics*, 435(??):Article 110267, June 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999121001625`.

Zhao:2020:BTH

[ZHR20] Weifeng Zhao, Juntao Huang, and Steven J. Ruuth. Boundary treatment of high order Runge–Kutta methods for hyperbolic conservation laws. *Journal of Computational Physics*, 421(??):Article 109697, November 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S002199912030471X`.

Zhou:2023:NNW

[ZHRB23] Mo Zhou, Jiequn Han, Manas Rachh, and Carlos Borges. A neural network warm-start approach for the inverse acoustic obstacle scattering problem. *Journal of Computational Physics*, 490(??):??, October 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999123004369`.

Zhang:2022:FDL

[ZHY22] Guo-Dong Zhang, Xiaoming He, and Xiaofeng Yang. A fully decoupled linearized finite element method with second-order temporal accuracy and unconditional energy stability for incompressible MHD equations. *Journal of Computational Physics*, 448(??):Article 110752, January 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999121006471`.

Zhao:2024:CEF

[ZIMA24] Shan Zhao, Idowu E. Ijaodoro, Mark McGowan, and Emil Alexov. Calculation of electrostatic free energy for the nonlinear Poisson–Boltzmann model based on the dimensionless potential. *Journal of Computational Physics*, 497(??):??, January 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123007295.

Zhao:2021:NCM

[ZJ21] Xiaoxi Zhao and Birendra Jha. A new coupled multiphase flow-finite strain deformation-fault slip framework for induced seismicity. *Journal of Computational Physics*, 433(??):Article 110178, May 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121000735.

Zhang:2022:MPM

[ZJ22] Yaoxin Zhang and Yafei Jia. Multi-point momentum interpolation correction on collocated meshes. *Journal of Computational Physics*, 449(??):Article 110783, January 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121006781.

Zhao:2023:DDP

[ZJ23] Meng Zhao and Lijian Jiang. Data-driven probability density forecast for stochastic dynamical systems. *Journal of Computational Physics*, 492(??):??, November 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912300517X.

Zhang:2024:FDS

[ZJQ+24] Xin Zhang, Zhenhua Jiang, Xueyu Qin, Feng Qu, and Chao Yan. A finite difference scale-adaptive TENO scheme for turbulence simulations. *Journal of Computational Physics*, 502(??):??, April 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124000421.

Zhao:2022:CHO

[ZJSX22] Fengxiang Zhao, Xing Ji, Wei Shyy, and Kun Xu. A compact high-order gas-kinetic scheme on unstructured mesh for acoustic and shock wave computations. *Journal of Computational Physics*, 449(??):Article 110812, January 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121007075.

Zhao:2023:DMC

[ZJSX23] Fengxiang Zhao, Xing Ji, Wei Shyy, and Kun Xu. Direct modeling for computational fluid dynamics and the construction of high-order compact scheme for compressible flow simulations. *Journal of Computational Physics*, 477(??):??, March 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123000165.

Zhang:2020:SSI

[ZJZK20] Hui Zhang, Xiaoyun Jiang, Fanhai Zeng, and George Em Karniadakis. A stabilized semi-implicit Fourier spectral method for nonlinear space-fractional reaction-diffusion equations. *Journal of Computational Physics*, 405(??): Article 109141, March 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119308460.

Zhang:2024:SSM

[ZKKS24] Qian Zhang, Adar Kahana, George Em Karniadakis, and Panos Stinis. SMS: Spiking marching scheme for efficient long time integration of differential equations. *Journal of Computational Physics*, 516(??):??, November 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124006119.

Zhu:2020:PFM

[ZKY+20] Guangpu Zhu, Jisheng Kou, Jun Yao, Aifen Li, and Shuyu Sun. A phase-field moving contact line model with soluble surfactants. *Journal of Computational Physics*, 405(??):Article 109170, March 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119308757.

Zhang:2021:CHO

[ZL21a] Bin Zhang and Chunlei Liang. A conservative high-order method utilizing dynamic transfinite mortar elements for flow simulations on curved nonconforming sliding meshes. *Journal of Computational Physics*, 443(??): Article 110522, October 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121004174.

Zhang:2021:TOS

[ZL21b] Chao Zhang and Qibing Li. A third-order subcell finite volume gas-kinetic scheme for the Euler and Navier–Stokes equations on triangular meshes. *Journal of Computational Physics*, 436(??):Article 110245, July 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121001406.

Zhang:2021:STH

[ZL21c] Sheng Zhang and Guang Lin. SubTSBR to tackle high noise and outliers for data-driven discovery of differential equations. *Journal of Computational Physics*, 428 (??):Article 109962, March 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120307361.

Zhang:2021:RFI

[ZL21d] Zhiming Zhang and Yongming Liu. A robust framework for identification of PDEs from noisy data. *Journal of Computational Physics*, 446(??):Article 110657, December 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121005520.

Zou:2022:FDM

[ZL22] Haiyu Zou and Yingjie Liu. A finite difference method on irregular grids with local second order ghost point extension for solving Maxwell's equations around curved PEC objects. *Journal of Computational Physics*, 463(??):??, August 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-

2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122003357.

Zhou:2024:MFD

[ZL24a] Yanjiao Zhou and Dong Liang. Modeling and FDTD discretization of stochastic Maxwell's equations with Drude dispersion. *Journal of Computational Physics*, 509(??):??, July 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124002821.

Zhu:2024:DRA

[ZL24b] Aiqing Zhu and Qianxiao Li. DynGMA: a robust approach for learning stochastic differential equations from data. *Journal of Computational Physics*, 513(??):??, September 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124004492.

Zhao:2022:CPM

[ZLB22] Jiangming Zhao, Adam Larios, and Florin Bobaru. Construction of a peridynamic model for viscous flow. *Journal of Computational Physics*, 468(??):??, November 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912200571X.

Zhong:2020:NSP

[ZLC+20] He Zhong, Hui Liu, Tao Cui, Zhangxin Chen, Lihua Shen, Bo Yang, Ruijian He, and Xiaohu Guo. Numerical simulations of polymer flooding process in porous media on distributed-memory parallel computers. *Journal of Computational Physics*, 400(??):Article 108995, January 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119307004.

Zeng:2023:CAL

[ZLG+23] Yadong Zeng, Han Liu, Qiang Gao, Ann Almgren, Amneet Pal Singh Bhalla, and Lian Shen. A consistent adaptive level set framework for incompressible two-phase flows with high density ratios and high Reynolds numbers. *Journal of Computational Physics*, 478(??):??, April 1, 2023. CODEN

JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123000669.

Zhou:2024:DDD

[ZLHY24] Zhideng Zhou, Shilong Li, Guowei He, and Xiaolei Yang. A data-driven distributed force model for wall-modeled large-eddy simulations of rough-wall turbulence. *Journal of Computational Physics*, 514(??):??, October 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124004893.

Zhang:2023:SRD

[ZLL23] Mengmeng Zhang, Qianxiao Li, and Jijun Liu. On stability and regularization for data-driven solution of parabolic inverse source problems. *Journal of Computational Physics*, 474(??):??, February 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122008324.

Zhang:2024:EVB

[ZLL+24] Zhao Zhang, Piyang Liu, Ying Liu, Tianyu Zeng, and Menghan Li. Ensemble variational Bayesian approximation for the inversion and uncertainty quantification of Darcy flows in heterogeneous porous media with random parameters. *Journal of Computational Physics*, 510(??):??, August 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124003012.

Zhang:2024:LTS

[ZLQS24] Hong Zhang, Lele Liu, Xu Qian, and Songhe Song. Large time-stepping, delay-free, and invariant-set-preserving integrators for the viscous Cahn–Hilliard–Oono equation. *Journal of Computational Physics*, 499(??):??, February 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123008033.

Zhang:2022:SEP

[ZLS22] Wei Zhang, Tiejun Li, and Christof Schütte. Solving eigenvalue PDEs of metastable diffusion processes using artificial neural networks. *Journal of Computational Physics*, 465(??):??, September 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122004399.

Zhao:2021:ATL

[ZLW+21] Lifei Zhao, Zhen Li, Zhicheng Wang, Bruce Caswell, Jie Ouyang, and George Em Karniadakis. Active- and transfer-learning applied to microscale-macroscale coupling to simulate viscoelastic flows. *Journal of Computational Physics*, 427(??):Article 110069, February 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120308433.

Zhang:2022:TSF

[ZLW+22a] Chao Zhang, Qibing Li, Z. J. Wang, Jiequan Li, and Song Fu. A two-stage fourth-order gas-kinetic CPR method for the Navier–Stokes equations on triangular meshes. *Journal of Computational Physics*, 451(??):Article 110830, February 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121007257.

Zhou:2022:TSD

[ZLW22b] Hongyu Zhou, Yang Liu, and Jing Wang. Time-space domain scalar wave modeling by a novel hybrid staggered-grid finite-difference method with high temporal and spatial accuracies. *Journal of Computational Physics*, 455(??):??, April 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122000663.

Zhou:2023:SDE

[ZLW23] Hongyu Zhou, Yang Liu, and Jing Wang. K-space dispersion error compensators for the fractional spatial derivatives based constant-Q viscoelastic wave equation modeling. *Journal of Computational Physics*, 487(??):??, August 15, 2023.

CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123002565.

Zeng:2024:GSI

[ZLW24a] Jianan Zeng, Qi Li, and Lei Wu. General synthetic iterative scheme for rarefied gas mixture flows. *Journal of Computational Physics*, 519(??):??, December 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124006685.

Zhang:2024:ENH

[ZLW+24b] Shuaihao Zhang, Sérgio D. N. Lourenço, Dong Wu, Chi Zhang, and Xiangyu Hu. Essentially non-hourglass SPH elastic dynamics. *Journal of Computational Physics*, 510(??):??, August 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124003218.

Zhao:2022:SMS

[ZMG+22] Yue Zhao, Zhiping Mao, Ling Guo, Yifa Tang, and George Em Karniadakis. A spectral method for stochastic fractional PDEs using dynamically-orthogonal/bi-orthogonal decomposition. *Journal of Computational Physics*, 461 (??):??, July 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122002753.

Zou:2024:CMM

[ZMK24] Zongren Zou, Xuhui Meng, and George Em Karniadakis. Correcting model misspecification in physics-informed neural networks (PINNs). *Journal of Computational Physics*, 505(??):??, May 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124001670.

Zhang:2020:HHO

[ZML20] Yongchao Zhang, Liquan Mei, and Rui Li. A hybrid high-order method for a coupled Stokes–Darcy problem on general meshes. *Journal of Computational Physics*, 403

(??):Article 109064, February 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119307697.

Zappon:2024:NCS

[ZMQ24] Elena Zappon, Andrea Manzoni, and Alfio Quarteroni. A non-conforming-in-space numerical framework for realistic cardiac electrophysiological outputs. *Journal of Computational Physics*, 502(??):??, April 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124000640.

Zhang:2020:REK

[ZMSX20] Xin-Lei Zhang, Carlos Michelén-Ströfer, and Heng Xiao. Regularized ensemble Kalman methods for inverse problems. *Journal of Computational Physics*, 416(??):Article 109517, September 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120302916.

Zhao:2024:HCS

[ZMTZ24] Chunheng Zhao, Jacob Maarek, Seyed Mohammadamin Taleghani, and Stephane Zaleski. A hybrid continuum surface tension force for the three-phase VOF method. *Journal of Computational Physics*, 504(??):??, May 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124001219.

Zhao:2023:SLF

[ZMW23] Xuning Zhao, Wentao Ma, and Kevin Wang. Simulating laser-fluid coupling and laser-induced cavitation using embedded boundary and level set methods. *Journal of Computational Physics*, 472(??):??, January 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122007197.

Zhang:2022:DIR

[ZMWS22] Chao Zhang, Igor Menshov, Lifeng Wang, and Zhijun Shen. Diffuse interface relaxation model for two-phase compressible flows with diffusion processes. *Journal of Computational Physics*, 466(??):??, October 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122004181.

Zhang:2023:TWC

[ZMZY23] Ningbo Zhang, Qingwei Ma, Xing Zheng, and Shiqiang Yan. A two-way coupling method for simulating wave-induced breakup of ice floes based on SPH. *Journal of Computational Physics*, 488(??):??, September 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123002802.

Zepeda-Nunez:2021:DDC

[ZNCZ+21] Leonardo Zepeda-Núñez, Yixiao Chen, Jiefu Zhang, Weile Jia, Linfeng Zhang, and Lin Lin. Deep density: Circumventing the Kohn–Sham equations via symmetry preserving neural networks. *Journal of Computational Physics*, 443(??):Article 110523, October 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121004186.

Zala:2023:COB

[ZNK23] Vidhi Zala, Akil Narayan, and Robert M. Kirby. Convex optimization-based structure-preserving filter for multidimensional finite element simulations. *Journal of Computational Physics*, 492(??):??, November 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912300459X.

Zolfaghari:2021:HTH

[ZO21] Hadi Zolfaghari and Dominik Obrist. A high-throughput hybrid task and data parallel Poisson solver for large-scale simulations of incompressible turbulent flows on distributed GPUs. *Journal of Computational Physics*, 437 (??):Article 110329, July 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121002242.

Zuzio:2020:NEM

[ZOEL20] Davide Zuzio, Annagrazia Orazzo, Jean-Luc Estivalèzes, and Isabelle Lagrange. A new efficient momentum preserving Level-Set/VOF method for high density and momentum ratio incompressible two-phase flows. *Journal of Computational Physics*, 410(??):Article 109342, June 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120301169.

Zhang:2021:PHC

[ZOG21a] Xiaofan Zhang, Daniel J. O'Brien, and Somnath Ghosh. Parametrically homogenized continuum damage mechanics (PHCDM) models for unidirectional composites with nonuniform microstructural distributions. *Journal of Computational Physics*, 435(??):Article 110268, June 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121001637.

Zhao:2021:LRL

[ZOG21b] Yong-Liang Zhao, Alexander Ostermann, and Xian-Ming Gu. A low-rank Lie–Trotter splitting approach for nonlinear fractional complex Ginzburg–Landau equations. *Journal of Computational Physics*, 446(??):Article 110652, December 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121005477.

Zandsalimy:2022:NAM

[ZOG22] Mohammad Zandsalimy and Carl Ollivier-Gooch. A novel approach to mesh optimization to stabilize unstructured finite volume simulations. *Journal of Computational Physics*, 453(??):Article 110959, March 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122000213.

Zandsalimy:2024:CSI

[ZOG24a] Mohammad Zandsalimy and Carl Ollivier-Gooch. CFD stability improvement using dynamic mode decomposition of solution update vectors. *Journal of Computational*

Physics, 513(??):??, September 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124004443.

Zandsalimy:2024:RVS

[ZOG24b] Mohammad Zandsalimy and Carl Ollivier-Gooch. Residual vector and solution mode analysis using semi-supervised machine learning for mesh modification and CFD stability improvement. *Journal of Computational Physics*, 510(??):??, August 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124003127.

Zhang:2020:NCM

[ZOWW20] Chenhui Zhang, Jie Ouyang, Cheng Wang, and Steven M. Wise. Numerical comparison of modified-energy stable SAV-type schemes and classical BDF methods on benchmark problems for the functionalized Cahn–Hilliard equation. *Journal of Computational Physics*, 423(??):Article 109772, December 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120305465.

Zamolo:2020:AGU

[ZP20] Riccardo Zamolo and Lucia Parussini. Analysis of geometric uncertainties in CFD problems solved by RBF-FD meshless method. *Journal of Computational Physics*, 421(??):Article 109730, November 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120305040.

Zhang:2022:MKE

[ZPGR22] Yi Zhang, Artur Palha, Marc Gerritsma, and Leo G. Rebholz. A mass-, kinetic energy- and helicity-conserving mimetic dual-field discretization for three-dimensional incompressible Navier–Stokes equations, part I: Periodic domains. *Journal of Computational Physics*, 451(??):Article 110868, February 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121007634.

Zhang:2024:MDT

[ZPGY24] Yi Zhang, Artur Palha, Marc Gerritsma, and Qinghe Yao. A MEEVC discretization for two-dimensional incompressible Navier–Stokes equations with general boundary conditions. *Journal of Computational Physics*, 510(??):??, August 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124003292.

Zygiridis:2022:EOF

[ZPK22] Theodoros T. Zygiridis, Aristeides D. Papadopoulos, and Nikolaos V. Kantartzis. Error-optimized finite-difference modeling of wave propagation problems with Lorentz material dispersion. *Journal of Computational Physics*, 452 (??):Article 110916, March 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121008111.

Zhu:2021:GSI

[ZPS+21] Lianhua Zhu, Xingcai Pi, Wei Su, Zhi-Hui Li, Yonghao Zhang, and Lei Wu. General synthetic iterative scheme for nonlinear gas kinetic simulation of multi-scale rarefied gas flows. *Journal of Computational Physics*, 430(??):Article 110091, April 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120308652.

Zhang:2023:ETT

[ZPW+23] Wei Zhang, Yu Pan, Junshi Wang, Valentina Di Santo, George V. Lauder, and Haibo Dong. An efficient tree-topological local mesh refinement on Cartesian grids for multiple moving objects in incompressible flow. *Journal of Computational Physics*, 479(??):??, April 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123000785.

Zhao:2020:HWS

[ZQ20] Zhuang Zhao and Jianxian Qiu. A Hermite WENO scheme with artificial linear weights for hyperbolic conservation laws. *Journal of Computational Physics*, 417

(??):Article 109583, September 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120303570.

Zhang:2023:CMDa

[ZQC+23] Pei Zhang, Ling Qiu, Yilin Chen, Yifeng Zhao, Lingwei Kong, A. Scheuermann, Ling Li, and S. A. Galindo-Torres. Coupled metaball discrete element lattice Boltzmann method for fluid-particle systems with non-spherical particle shapes: a sharp interface coupling scheme. *Journal of Computational Physics*, 479(??):??, April 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123001006.

Zhou:2022:SMF

[ZQL+22] Boxiao Zhou, Feng Qu, Qingsong Liu, Di Sun, and Junqiang Bai. A study of multidimensional fifth-order WENO method for genuinely two-dimensional Riemann solver. *Journal of Computational Physics*, 463(??):??, August 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122003114.

Zhu:2020:HOR

[ZQS20] Jun Zhu, Jianxian Qiu, and Chi-Wang Shu. High-order Runge–Kutta discontinuous Galerkin methods with a new type of multi-resolution WENO limiters. *Journal of Computational Physics*, 404(??):Article 109105, March 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119308101.

Zhou:2021:SHO

[ZQS+21] Boxiao Zhou, Feng Qu, Di Sun, Zirui Wang, and Junqiang Bai. A study of higher-order reconstruction methods for genuinely two-dimensional Riemann solver. *Journal of Computational Physics*, 443(??):Article 110469, October 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121003648.

Zhang:2020:HEI

[ZQYS20] Hong Zhang, Xu Qian, Jingye Yan, and Songhe Song. Highly efficient invariant-conserving explicit Runge–Kutta schemes for nonlinear Hamiltonian differential equations. *Journal of Computational Physics*, 418(??):Article 109598, October 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120303727.

Zhao:2020:ESF

[ZR20] Quan Zhao and Weiqing Ren. An energy-stable finite element method for the simulation of moving contact lines in two-phase flows. *Journal of Computational Physics*, 417 (??):Article 109582, September 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120303569.

Zhao:2021:FEM

[ZR21] Quan Zhao and Weiqing Ren. A finite element method for electrowetting on dielectric. *Journal of Computational Physics*, 429(??):Article 109998, March 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120307725.

Zhao:2024:DFM

[ZR24a] Jijing Zhao and Hongxing Rui. A discrete fracture-matrix approach based on Petrov–Galerkin immersed finite element for fractured porous media flow on nonconforming mesh. *Journal of Computational Physics*, 499(??):??, February 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123008136.

Zugliani:2024:DTS

[ZR24b] Daniel Zugliani and Giorgio Rosatti. DOT-type schemes for hybrid hyperbolic problems arising from free-surface, mobile-bed, shallow-flow models. *Journal of Computational Physics*, 507(??):??, June 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124002249.

Zhang:2020:DCT

[ZRH20] Chi Zhang, Massoud Rezavand, and Xiangyu Hu. Dual-criteria time stepping for weakly compressible smoothed particle hydrodynamics. *Journal of Computational Physics*, 404(??):Article 109135, March 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199911930840X.

Zhang:2021:MRS

[ZRH21] Chi Zhang, Massoud Rezavand, and Xiangyu Hu. A multi-resolution SPH method for fluid-structure interactions. *Journal of Computational Physics*, 429(??):Article 110028, March 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120308020.

Zhu:2020:NTT

[ZS20] Jun Zhu and Chi-Wang Shu. A new type of third-order finite volume multi-resolution WENO schemes on tetrahedral meshes. *Journal of Computational Physics*, 406(??):Article 109212, April 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119309179.

Zhang:2021:RCM

[ZS21a] Qinglong Zhang and Wancheng Sheng. A random choice method based on the generalized Riemann problem for the Euler equations in gas dynamics. *Journal of Computational Physics*, 441(??):Article 110431, September 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121003260.

Zhao:2021:HMC

[ZS21b] Shuang Zhao and Jerome Spanier. Hybrid Monte Carlo estimators for multilayer transport problems. *Journal of Computational Physics*, 431(??):Article 110117, April 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121000097.

Zeifang:2022:ITD

[ZS22a] Jonas Zeifang and Jochen Schütz. Implicit two-derivative deferred correction time discretization for the discontinuous Galerkin method. *Journal of Computational Physics*, 464(??):??, September 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122004156.

Zhang:2022:GSA

[ZS22b] Yanrong Zhang and Jie Shen. A generalized SAV approach with relaxation for dissipative systems. *Journal of Computational Physics*, 464(??):??, September 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122003734.

Zhang:2024:GRP

[ZS24] Qinglong Zhang and Wancheng Sheng. The generalized Riemann problem scheme for a laminar two-phase flow model with two-velocities. *Journal of Computational Physics*, 506(??):??, June 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124001785.

Zulian:2022:CAN

[ZSKN22] Patrick Zulian, Philipp Schädle, Liudmila Karagyaur, and Maria G. C. Nestola. Comparison and application of nonconforming mesh models for flow in fractured porous media using dual Lagrange multipliers. *Journal of Computational Physics*, 449(??):Article 110773, January 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121006689.

Zhang:2023:IMS

[ZSL+23] Zhilang Zhang, Chang Shu, Yangyang Liu, Wei Liu, and Muhammad Saif Ullah Khalid. An improved M-SPEM for modeling complex hydroelastic fluid-structure interaction problems. *Journal of Computational Physics*, 488(??):??, September 1, 2023. CODEN JCTPAH.

ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123003285.

Zhang:2022:KFR

[ZSM22] Benjamin J. Zhang, Tuhin Sahai, and Youssef M. Marzouk. A Koopman framework for rare event simulation in stochastic differential equations. *Journal of Computational Physics*, 456(??):??, May 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122000870.

Zahr:2020:IST

[ZSP20] M. J. Zahr, A. Shi, and P.-O. Persson. Implicit shock tracking using an optimization-based high-order discontinuous Galerkin method. *Journal of Computational Physics*, 410(??):Article 109385, June 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120301595.

Zheng:2021:HOC

[ZSQ21] Feng Zheng, Chi-Wang Shu, and Jianxian Qiu. A high order conservative finite difference scheme for compressible two-medium flows. *Journal of Computational Physics*, 445(??):Article 110597, November 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121004927.

Zhang:2022:PFM

[ZSsC+22] Wenqiang Zhang, Armin Shahmardi, Kwing so Choi, Outi Tammisola, Luca Brandt, and Xuerui Mao. A phase-field method for three-phase flows with icing. *Journal of Computational Physics*, 458(??):??, June 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122001668.

Zhang:2023:FAP

[ZSST23] Xiaojiang Zhang, Peng Song, Yi Shi, and Min Tang. A fully asymptotic preserving decomposed multi-group method for the frequency-dependent radiative transfer equations. *Journal of Computational Physics*, 491(??):??, October 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999123004631`.

Zheng:2021:NIM

[ZSY21] B. X. Zheng, L. Sun, and P. Yu. A novel interface method for two-dimensional multiphase SPH: Interface detection and surface tension formulation. *Journal of Computational Physics*, 431(??):Article 110119, April 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999121000115`.

Zhang:2024:SAT

[ZSY24] Hongyuan Zhang, Navneeth Srinivasan, and Suo Yang. *In situ* adaptive tabulation of vapor–liquid equilibrium solutions for multi-component high-pressure transcritical flows with phase change. *Journal of Computational Physics*, 500(??):??, March 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999124000019`.

Zhang:2023:CCM

[ZSZ23] Chao Zhang, Huai Su, and Jinjun Zhang. On the computation of compressible multiphase flows with heat and mass transfer in elastic pipelines. *Journal of Computational Physics*, 490(??):??, October 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999123003522`.

Zhu:2023:ROW

[ZT23] Min Zhu and Aaron Towne. Recursive one-way Navier–Stokes equations with PSE-like cost. *Journal of Computational Physics*, 473(??):??, January 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999122008075`.

Zhang:2024:HOA

[ZTD24] Zhihao Zhang, Huazhong Tang, and Junming Duan. High-order accurate well-balanced energy stable finite difference schemes for multi-layer shallow water equations on fixed and adaptive moving meshes. *Journal of Computational Physics*, 517(??):??, November 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999124005497`.

Zhu:2023:LSD

[ZTK23] Yuanran Zhu, Yu-Hang Tang, and Changho Kim. Learning stochastic dynamics with statistics-informed neural network. *Journal of Computational Physics*, 474(??):??, February 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999122008828`.

Zhang:2020:SMH

[ZTS20] Jize Zhang, Alexandros A. Taflanidis, and Jeffrey T. Scruggs. Surrogate modeling of hydrodynamic forces between multiple floating bodies through a hierarchical interaction decomposition. *Journal of Computational Physics*, 408(??):Article 109298, May 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999120300723`.

Zheng:2024:HOC

[ZTZX24] Shaoqin Zheng, Min Tang, Qiang Zhang, and Tao Xiong. High order conservative LDG-IMEX methods for the degenerate nonlinear non-equilibrium radiation diffusion problems. *Journal of Computational Physics*, 503(??):??, April 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999124000871`.

Zhang:2022:GCF

[ZW22] Tiankui Zhang and Charles W. Wolgemuth. A general computational framework for the dynamics of single- and multiphase vesicles and membranes. *Journal of Computational Physics*, 450(??):Article 110815, February 1, 2022. CODEN

JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121007105.

Zucatti:2021:CPB

[ZWB21] Victor Zucatti, William Wolf, and Michel Bergmann. Calibration of projection-based reduced-order models for unsteady compressible flows. *Journal of Computational Physics*, 433(??):Article 110196, May 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121000917.

Zhang:2023:CMDb

[ZWLG23] Chunhua Zhang, Lian-Ping Wang, Hong Liang, and Zhaoli Guo. Central-moment discrete unified gas-kinetic scheme for incompressible two-phase flows with large density ratio. *Journal of Computational Physics*, 482(??):??, June 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123001353.

Zhang:2024:MCE

[ZWN24] Haodong Zhang, Fei Wang, and Britta Nestler. Multicomponent electro-hydro-thermodynamic model with phase-field method. I. Dielectric. *Journal of Computational Physics*, 505(??):??, May 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124001566.

Zhong:2023:IFO

[ZWQG23] Wei Zhong, Shufei Wang, Jiulu Qiu, and Jiahao Gao. An improved fifth-order WENO scheme with symmetry-preserving smoothness indicators for hyperbolic conservation laws. *Journal of Computational Physics*, 491(??):??, October 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912300445X.

Zhou:2024:MLO

[ZWR24] Chong-Bo Zhou, Qian Wang, and Yu-Xin Ren. Machine learning optimization of compact finite volume methods on unstructured grids. *Journal of Computational*

Physics, 500(??):??, March 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123008422.

Zhao:2024:VFP

[ZWS+24] Hanzhi Zhao, Suming Weng, Zhengming Sheng, Shi Jin, and Jie Zhang. A Vlasov–Fokker–Planck–Landau code for the simulation of colliding supersonic dense plasma flows. *Journal of Computational Physics*, 503(??):??, April 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124000925.

Zhai:2021:HOO

[ZWY21] Shuying Zhai, Zhifeng Weng, and Yanfang Yang. A high order operator splitting method based on spectral deferred correction for the nonlocal viscous Cahn–Hilliard equation. *Journal of Computational Physics*, 446(??): Article 110636, December 1, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121005313.

Zhang:2023:MMT

[ZWY+23] Chao Zhang, Lifeng Wang, Wenhua Ye, Junfeng Wu, Zhijun Shen, and Igor Menshov. Mathematical modeling of transport phenomena in compressible multicomponent flows. *Journal of Computational Physics*, 472(??):??, January 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912200691X.

Zhu:2024:PSR

[ZWYZ24] Zaiping Zhu, Shuangbu Wang, Lihua You, and Jianjun Zhang. Parametric surface reconstruction from 3D point data using partial differential equation and bilinearly blended Coons patch. *Journal of Computational Physics*, 519(??):??, December 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124006843.

Zhang:2022:CFE

[ZWZL22] Qianru Zhang, Qin Wang, Linbo Zhang, and Benzhuo Lu. A class of finite element methods with averaging techniques for solving the three-dimensional drift-diffusion model in semiconductor device simulations. *Journal of Computational Physics*, 458(??):??, June 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999122001486`.

Zaleski:2020:SIN

[ZX20] Stéphane Zaleski and Feng Xiao. Special issue: Numerical methods and modeling of multiphase flows. *Journal of Computational Physics*, 402(??):Article 108902, February 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S002199911930600X`.

Zhang:2022:HOI

[ZX22] Peng Zhang and Tao Xiong. High order implicit finite difference schemes with a semi-implicit WENO reconstruction for nonlinear degenerate parabolic equations. *Journal of Computational Physics*, 467(??):??, October 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999122005046`.

Zhang:2024:HOC

[ZX24] Yue Zhang and Kun Xu. High-order compact gas-kinetic scheme in arbitrary Lagrangian–Eulerian formulation. *Journal of Computational Physics*, 515(??):??, October 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999124005187`.

Zeng:2022:PCC

[ZXBS22] Yadong Zeng, Anqing Xuan, Johannes Blaschke, and Lian Shen. A parallel cell-centered adaptive level set framework for efficient simulation of two-phase flows with subcycling and non-subcycling. *Journal of Computational Physics*, 448(??):Article 110740, January 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic).

URL http://www.sciencedirect.com/science/article/pii/S0021999121006355.

Zhuang:2022:BEB

[ZXD22] Chungang Zhuang, Zhenhua Xiong, and Han Ding. Bézier extraction based isogeometric topology optimization with a locally-adaptive smoothed density model. *Journal of Computational Physics*, 467(??):??, October 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122005319.

Zhong:2024:SGL

[ZXK+24] Mingliang Zhong, Tianbai Xiao, Mathias J. Krause, Martin Frank, and Stephan Simonis. A stochastic Galerkin lattice Boltzmann method for incompressible fluid flows with uncertainties. *Journal of Computational Physics*, 517(??):??, November 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124005928.

Zhang:2023:CDI

[ZXLH23] Xin-Lei Zhang, Heng Xiao, Xiaodong Luo, and Guowei He. Combining direct and indirect sparse data for learning generalizable turbulence models. *Journal of Computational Physics*, 489(??):??, September 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123003674.

Zan:2021:FPP

[ZXMK21] Wanrong Zan, Yong Xu, Ralf Metzler, and Jürgen Kurths. First-passage problem for stochastic differential equations with combined parametric Gaussian and Lévy white noises via path integral method. *Journal of Computational Physics*, 435(??):Article 110264, June 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121001595.

Zhang:2023:SPF

[ZXX23] Jiahui Zhang, Yinhua Xia, and Yan Xu. Structure-preserving finite volume arbitrary Lagrangian–Eulerian WENO schemes for the shallow water equations. *Journal of Computational Physics*, 473(??):??, January 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S002199912200821X`.

Zhang:2022:RHS

[ZXY22] Lu Zhang, Liwei Xu, and Tao Yin. Regularized hypersingular boundary integral equation methods for three-dimensional poroelastic problems. *Journal of Computational Physics*, 468(??):??, November 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S002199912200554X`.

Zhang:2020:LSM

[ZY20a] Jiaqi Zhang and Pengtao Yue. A level-set method for moving contact lines with contact angle hysteresis. *Journal of Computational Physics*, 418(??):Article 109636, October 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999120304101`.

Zhang:2020:DNI

[ZY20b] Jun Zhang and Xiaofeng Yang. Decoupled, non-iterative, and unconditionally energy stable large time stepping method for the three-phase Cahn–Hilliard phase-field model. *Journal of Computational Physics*, 404(??):Article 109115, March 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999119308204`.

Zhou:2024:CFB

[ZY24] Han Zhou and Wenjun Ying. A correction function-based kernel-free boundary integral method for elliptic PDEs with implicitly defined interfaces. *Journal of Computational Physics*, 496(??):??, January 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S002199912300640X`.

Zou:2020:PPL

[ZYD20] Shijun Zou, Xijun Yu, and Zihuan Dai. A positivity-preserving Lagrangian discontinuous Galerkin method for ideal magnetohydrodynamics equations in one-dimension. *Journal of Computational Physics*, 405(??):Article 109144, March 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119308496.

Zhang:2023:ICS

[ZYL23a] Fan Zhang, Pengying Yang, and Moubin Liu. An improved continuum surface tension model in SPH for simulating free-surface flows and heat transfer problems. *Journal of Computational Physics*, 490(??):??, October 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123004175.

Zhang:2023:PIC

[ZYL+23b] Zhao Zhang, Xia Yan, Piyang Liu, Kai Zhang, Renmin Han, and Sheng Wang. A physics-informed convolutional neural network for the simulation and prediction of two-phase Darcy flows in heterogeneous porous media. *Journal of Computational Physics*, 477(??):??, March 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123000141.

Zhu:2024:VTS

[ZYL+24] Huajun Zhu, Zhen-Guo Yan, Huayong Liu, Meiliang Mao, and Xiaogang Deng. A viscous-term subcell limiting approach for high-order FR/CPR method in solving compressible Navier–Stokes equations on curvilinear grids. *Journal of Computational Physics*, 514(??):??, October 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124004881.

Zhou:2023:KFB

[ZYY23] Han Zhou, Jiahe Yang, and Wenjun Ying. A kernel-free boundary integral method for the nonlinear Poisson–Boltzmann equation. *Journal of Computational Physics*, 493(??):??, November 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123005181.

Zhang:2024:MFT

[ZYY+24] ZiHan Zhang, Qian Ye, DeJin Yang, Na Wang, and GuoXiang Meng. A multi-fidelity transfer learning strategy based on multi-channel fusion. *Journal of Computational Physics*, 506(??):??, June 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124002018.

Zhang:2023:ELA

[ZYZ+23] Yuze Zhang, Xuguang Yang, Lei Zhang, Yiteng Li, Tao Zhang, and Shuyu Sun. Energy landscape analysis for two-phase multi-component NVT flash systems by using ETD type high-index saddle dynamics. *Journal of Computational Physics*, 477(??):??, March 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123000116.

Zhang:2020:WGF

[ZZ20] Tie Zhang and Shangyou Zhang. The weak Galerkin finite element method for the transport-reaction equation. *Journal of Computational Physics*, 410(??):Article 109399, June 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912030173X.

Zhang:2023:SDC

[ZZ23a] Donghang Zhang and Lei Zhang. Spectral deferred correction method for Landau–Brazovskii model with convex splitting technique. *Journal of Computational Physics*, 491(??):??, October 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123004436.

Zhang:2023:FOF

[ZZ23b] Min Zhang and Zhuang Zhao. A fifth-order finite difference HWENO scheme combined with limiter for hyperbolic conservation laws. *Journal of Computational Physics*, 472(??):??, January 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122007392.

Zhao:2023:WBF

[ZZ23c] Zhuang Zhao and Min Zhang. Well-balanced fifth-order finite difference Hermite WENO scheme for the shallow water equations. *Journal of Computational Physics*, 475(??):??, February 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122009238.

Zhang:2024:FDF

[ZZ24a] Yan Zhang and Jun Zhu. Finite difference and finite volume ghost multi-resolution WENO schemes with increasingly higher order of accuracy. *Journal of Computational Physics*, 504(??):??, May 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124001396.

Zou:2024:NVH

[ZZ24b] Zihao Zou and Xiaolin Zhong. A new very high-order finite-difference method for linear stability analysis and bi-orthogonal decomposition of hypersonic boundary layer flow. *Journal of Computational Physics*, 512(??):??, September 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S002199912400384X.

Zuo:2024:IHO

[ZZ24c] Huimin Zuo and Jun Zhu. Increasingly high-order hybrid multi-resolution WENO schemes in multi-dimensions. *Journal of Computational Physics*, 514(??):??, October 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124004820.

Zuo:2024:NTM

[ZZ24d] Huimin Zuo and Jun Zhu. A new type of modified MR-WENO schemes with new troubled cell indicators for solving hyperbolic conservation laws in multi-dimensions. *Journal of Computational Physics*, 508(??):??, July 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999124002456`.

Zhang:2020:RES

[ZZC20] HuiJie Zhang, WeiBing Zhu, and Hong Chen. A robust and efficient segregated algorithm for fluid flow: the EPPL method. *Journal of Computational Physics*, 423 (??):Article 109823, December 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999120305970`.

Zhu:2022:DRM

[ZZH22] Yujie Zhu, Chi Zhang, and Xiangyu Hu. A dynamic relaxation method with operator splitting and random-choice strategy for SPH. *Journal of Computational Physics*, 458(??):??, June 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S002199912200167X`.

Zhang:2024:PEK

[ZZH24] Xin-Lei Zhang, Lei Zhang, and Guowei He. Parallel ensemble Kalman method with total variation regularization for large-scale field inversion. *Journal of Computational Physics*, 509(??):??, July 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999124003085`.

Zheng:2020:PIS

[ZZK20] Qiang Zheng, Lingzao Zeng, and George Em Karniadakis. Physics-informed semantic inpainting: Application to geostatistical modeling. *Journal of Computational Physics*, 419(??):Article 109676, October 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999120304502`.

Zuo:2024:PPO

[ZZL24] Hujian Zuo, Weifeng Zhao, and Ping Lin. A positivity preserving and oscillation-free entropy stable discontinuous Galerkin scheme for the reactive Euler equations. *Journal of Computational Physics*, 505(??):??, May 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124001554.

Zhan:2020:URS

[ZZML20] Qiwei Zhan, Mingwei Zhuang, Yiqian Mao, and Qing Huo Liu. Unified Riemann solution for multi-physics coupling: Anisotropic poroelastic/elastic/fluid interfaces. *Journal of Computational Physics*, 402(??):Article 108961, February 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999119306667.

Zhao:2022:BEM

[ZZN22] Shuo Zhao, Jie Zhang, and Ming-Jiu Ni. Boiling and evaporation model for liquid-gas flows: a sharp and conservative method based on the geometrical VOF approach. *Journal of Computational Physics*, 452(??):Article 110908, March 1, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999121008032.

Zhang:2024:EDE

[ZZSL24] Jiahao Zhang, Shiheng Zhang, Jie Shen, and Guang Lin. Energy-dissipative evolutionary deep operator neural networks. *Journal of Computational Physics*, 498(??):??, February 1, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123007337.

Zhao:2023:ESM

[ZZW23] Meiling Zhao, Na Zhu, and Liqun Wang. The electromagnetic scattering from multiple arbitrarily shaped cavities with inhomogeneous anisotropic media. *Journal of Computational Physics*, 489(??):??, September 15, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123003698. See corrigendum [ZZW24b].

Zhang:2024:EUE

[ZZW24a] Jinpeng Zhang, Changjuan Zhang, and Xiaoping Wang. An efficient unconditional energy stable scheme for the simulation of droplet formation. *Journal of Computational Physics*, 507(??):??, June 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999124002237.

Zhao:2024:CES

[ZZW24b] Meiling Zhao, Na Zhu, and Liqun Wang. Corrigendum to "The electromagnetic scattering from multiple arbitrarily shaped cavities with inhomogeneous anisotropic media" [journal of computational physics, volume **489** (2023) 112274]. *Journal of Computational Physics*, 499(??):??, February 15, 2024. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123008240. See [ZZW23].

Zhu:2020:RER

[ZZX20] Yajun Zhu, Chengwen Zhong, and Kun Xu. Ray effect in rarefied flow simulation. *Journal of Computational Physics*, 422(??):Article 109751, December 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120305258.

Zheng:2020:MCM

[ZZY+20] Hui Zheng, Chuanbing Zhou, Dong-Jia Yan, Yue-Sheng Wang, and Chuanzeng Zhang. A meshless collocation method for band structure simulation of nanoscale phononic crystals based on nonlocal elasticity theory. *Journal of Computational Physics*, 408(??):Article 109268, May 1, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120300425.

Zhou:2021:TUA

[ZZY21] Xiaochao Zhou, Zekun Zhu, and Shunchuan Yang. Towards a unified approach to electromagnetic analysis of objects embedded in multilayers. *Journal of Computational*

Physics, 427(??):Article 110073, February 15, 2021. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120308470.

Zhao:2020:CDG

[ZZYX20] Jianli Zhao, Qian Zhang, Yang Yang, and Yinhua Xia. Conservative discontinuous Galerkin methods for the nonlinear Serre equations. *Journal of Computational Physics*, 421 (??):Article 109729, November 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120305039.

Zhao:2020:SOB

[ZZZ20] Jin Zhao, Weifeng Zhao, and Zhimin Zhang. Second-order boundary schemes for the lattice Boltzmann method with general propagation. *Journal of Computational Physics*, 419(??):Article 109669, October 15, 2020. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999120304435.

Zeng:2022:ADN

[ZZZ22] Shaojie Zeng, Zong Zhang, and Qingsong Zou. Adaptive deep neural networks methods for high-dimensional partial differential equations. *Journal of Computational Physics*, 463(??):??, August 15, 2022. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999122002947.

Zhang:2023:ECS

[ZZZG23] Zhi-Yong Zhang, Hui Zhang, Li-Sheng Zhang, and Lei-Lei Guo. Enforcing continuous symmetries in physics-informed neural network for solving forward and inverse problems of partial differential equations. *Journal of Computational Physics*, 492(??):??, November 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0021999123005107.

Zhang:2023:LFS

[ZZZH23] Shuoguo Zhang, Wenbin Zhang, Chi Zhang, and Xiangyu Hu. A Lagrangian free-stream boundary condition for weakly compressible smoothed particle hydrodynamics. *Journal of Computational Physics*, 490(??):??, October 1, 2023. CODEN JCTPAH. ISSN 0021-9991 (print), 1090-2716 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021999123003984`.