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Nelson H. F. Beebe  
University of Utah  
Department of Mathematics, 110 LCB  
155 S 1400 E RM 233  
Salt Lake City, UT 84112-0090  
USA

Tel: +1 801 581 5254

E-mail: [beebe@math.utah.edu](mailto:beebe@math.utah.edu), [beebe@acm.org](mailto:beebe@acm.org),  
[beebe@computer.org](mailto:beebe@computer.org) (Internet)

WWW URL: <https://www.math.utah.edu/~beebe/>

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## Title word cross-reference

$(0, \infty)$  [MM03].  $(t, s)$  [HY00]. 1  
[Bre05, KGDD05, VVD06].  $1 - d$  [Neg08]. 2  
[BH08, EHL07, HL02, Kop08, Sch02a,  
vdVIB07].  $2 \times 2$  [ADBN08]. 3 [BBM01,  
Deu07, DL03, EHL07, Med07, Sar03].  $p$   
[Gue04].  $A^\alpha, \log(A)$  [HHT08].  $B$  [BB00].  
 $\mathbf{H}(\text{curl})$  [BH09].  $H$  [ABF05].  $C^0$   
[DJLT09, dVNS07].  $C^1$   
[DS02, SBM01, Zor00].  $C^2$  [AS05b].  $C^s$   
[LLF01].  $\mathcal{P}^k + 1 - S^k$  [Daw02].  $\mathcal{V}$  [Woh05].  
 $Cq_1$  [AD00].  $\ell^1$  [WJ08].  $\ell_1$  [FS09].  $\epsilon$  [LR02].  
 $\Gamma$  [ABFM04].  $\gamma = 3$  [Vas01].  $H$   
[BHL03, CW08a, TV05, GS07, GZ09].  $H^1$   
[Bre03, CKR08, PF02].  $H^1(\mathcal{P}^h)$  [VVD06].  $hp$   
[Hel09, LS07a].  $L^1$  [GP09, Da08].  $L^2$   
[DJLT09, ELS<sup>+</sup>02, HTW02, Mer08, Rod07,

CK06a].  $L^\infty$  [Mer08].  $L_1$  [HSW05].  $L_p$   
[Gei06].  $\lambda < 0$  [dP07].  $\lambda > 3$  [PP00].  $\leq 3$   
[BJJ02].  $M$  [PY04].  $\mathbf{L}^2$  [JY09].  $\mathbf{R}^d$   
[EJR08, Sze04].  $\mathbf{H}_\infty$  [LWX00].  $\mathcal{LL}^*$   
[CMMR01].  $\mathcal{R} \setminus$  [Cao07].  $\mathcal{Y}$  [Egg08].  $n$   
[KS01a].  $O(h^2)$  [AG03].  $P$  [Guo09, TV05,  
AC03, BG01, BXZ07, BBFP07, BH09,  
Beu02, DB03b, DER07, DK08b, Guo06,  
GS07, GZ09, Ju00, LY01b, LY02a, VO02].  
 $P^1$  [CT00].  $P_1$  [PS03].  $P_1^{\text{mod}}$  [KT03].  $p \leq 2$   
[PR01].  $Q^1$  [Xu00b].  $Q_1$  [MNS09, NS01].  
 $Q_{k+1,k} \times Q_{k,k+1}$  [Zha09].  $r$  [PW09].  $\mathbf{R}^3$   
[XH05].  $\mathbf{R}^s$  [HSW05].  
 $u_t t = \text{div}(\sigma(Du) + Du_t)$  [CD04].  $V = K^A$   
[UY00].  $W$  [SW04a].

**-Approximation** [GP09]. **-Box** [BHL03].  
**-Coercive** [VVD06]. **-Conforming** [BH09].  
**-Continuity** [Zor00]. **-Convergence**

[Rod07, ABFM04]. **-cycle** [Woh05]. **-D** [Bre05, Sar03]. **-Entropy** [LR02]. **-Error** [ELS<sup>+</sup>02, Mer08, WJ08]. **-Estimators** [PY04]. **-FEM** [Beu02]. **-Finite** [Hel09]. **-Galerkin** [PF02]. **-Harmonic** [BBFP07, VO02]. **-Interpolation** [BH09]. **-Laplacian** [DK08b, Ju00, LY01b, LY02a]. **-Methods** [SW04a]. **-Minimization** [FS09]. **-Nonconforming** [PS03]. **-Scale** [Egg08]. **-Sequences** [HY00]. **-Series** [BB00]. **-Smooth** [PW09]. **-Stability** [LWW00, JY09]. **-Structure** [DER07]. **-Version** [AC03, BG01, Guo06, LS07a, Guo09]. **-Widths** [KS01a].

1 [Guo06].

2002g [DGS03].

39 [DGS03].

**Absolutely** [BG04a]. **Absorbing** [AMR02, AMR03, CW03b, NT02, Sze04]. **Accelerated** [AG09]. **Acceleration** [BB09, LW03, Ovt03b, Van05]. **Accelerations** [GH03]. **Accuracy** [DGH02, ETW08, ELL02, GLL<sup>+</sup>03, RW05, Sim05, SL99, ST03, Xu00b, Zho01, dFN00]. **Accurate** [BL09, Dos04, JPT00, PR00]. **Acoustic** [BGS05, CE09, JRW02, MMS03]. **Acoustics** [ADZ09, BDL06, BDRS00]. **Action** [RS00]. **Active** [HO09]. **Acute** [KK01]. **Adams** [HS07a]. **Adaptation** [CCGHR03]. **Adapted** [BKT09]. **Adaptive** [Aza02, BMN02, Bar04, BHSI08, CU05, CET09, CLT05, CKNS08, CD01, CW03b, CL05b, CD03, CHR04, DDU02, DL05, DD07, DK08b, EP08, ELM00, GG09, HKW09, HKY00, KP07, KS08a, KS01b, Lam05, LMPQ04, MS02, MN05, MS09, MSTZ08, MNS00, PS05, Sta07, Ste03, Ste05, TT03, WZ07]. **Additive** [An05, BN07, CDS03, DZ02, FK01, FS01, Hig06, Jay07, MRT02b].

**ADI** [BL00]. **Adjoint**

[GM01, Har07, Lar00, MT04, Ait05].

**Adjoint-Based** [MT04]. **Adjustment**

[HH09]. **Advection** [AM09c, BGP05, BZ06, Bur09, Des04, Des09, DL02, GH07, LBD<sup>+</sup>03, Mer08, MPP03, DEG08, San00a, San03, TF04, Wan00, WSE01, ZLAT09].

**Advection-Diffusion** [DL02, LBD<sup>+</sup>03, MPP03, San03, Wan00, ZLAT09].

**Advection-Diffusion-Reaction**

[AM09c, BZ06]. **Advection-Dominated**

[San00a]. **Advection-Reaction**

[Bur09, WSE01]. **Affine** [AR02].

**Affine-Approximate** [AR02]. **Age**

[Aya00, AD02]. **Age-Dependent** [Aya00].

**al.** [AK09]. **ALE** [BC06a]. **Algebraic**

[AGG06, BB09, Bos07, FV04, FS01, Ger08, JW00a, JW00b, KK09, KMS05, SV05, Sch02a, Van05]. **Algorithm**

[BMZ09, BDW99, IC00, Chu00, DW09, DEJ06, EJR08, GPD04, GKK03, HSW05, Kim08a, KT09, KRW08, LWW02, MR07, Neg08, Per09, Per02, RF03, Sar03, SH08, TWV00, TWB07, Tid02, UY00, YZ07].

**Algorithms**

[AG03, Bac06, BR09b, BGMV08, ByS06, Che02, CN01, DLP05, DG00, DMW01, Du01, Fen00, FR08, GK08, Hig99, HKY00, KW06, LW06a, MST00, MS02, Pf00, SWW08, SV03, SL06, TZ99, TV05, TCOZ03].

**Aligned** [AM09b]. **Allen** [BB01]. **Almost** [DDO07, DW09, HMY07]. **Along** [HK09].

**Alternating** [BF09a, PFF08]. **Alternative** [BMPT09]. **American**

[ALY01, HW03, JD04, sQIXsJjB05, WZ08].

**Ampère** [FN09a]. **Anal** [DGS03]. **Analysis**

[AG00, AC00b, AMR03, ADF09, Arb04, ABCM02, AKW05, BTW03, BC06a, BS07, BMN04, BY00a, Bar09a, BK02, BJT00, Bel00b, BDRS00, BNV06a, BNV06b, BRLM03, BMMS05, BMM05, BD07, BB09, BG04b, BJJ02, Bos07, BIMV08, BHS06, Bur05, BF09b, CMS00, CMR09, CTU09, CCZ02, CET09, CP00, CP05, CHO07,

CCPS00, CHD07, CHS00, CEJS02, CS08, CY07, CDZ03, CE05, CGSS09, Cop07, Daw06, DK08a, DDE03, DLV08, DL09b, DS09, DM08, Du00, ER02a, ETW08, EGR<sup>+</sup>08, ET05, EHL07, Fen00, FSL05, GMM07, Ger08, Gie05, GPD04, Gou02, Gro08, GR07, GMS05, GM00b, HW09a, HhW02, Har07, Hau02, HM07, HKW09, HMN02, HMS03, HS07b, JL02, JR05, Ju00, KM05, KPS06, KRW08, KM06, LN05, Lar00, LN04, LV04, LSX08, Lin07, Lin09, Liu00, LPWE05, LW06b]. **Analysis** [LS06b, L009, MG01, Man06, MTW03, MPPS02, Mau09, NS09, NS01, Not07, OD09, OR04, PJ01, PJ02, Per02, PZ04, Pon07, Reu03, Ris01, RC01, RV06, San00a, San00b, SV08, SW04b, SW07, SE05, SD09, SS00c, ST03, TT00, THBS09, Tid02, Van05, VVD06, Wet00, WD00, XT06, YA05, Zha08, Zho01, Zor00, dVNS07, vdVIB07, Dar00, KL06]. **Analytic** [FDFD09, HV06, RW05]. **Analytical** [ZLAT08]. **Analyzed** [HDVV09]. **Analyzing** [CKK01]. **Anastomoses** [AQR06]. **Angle** [AD99, AD00, DL08b]. **Angles** [Cao05]. **Anisotropic** [AS02, AM08, AM06, BN07, CS07, Cao07, CM00, DDE05, DM08, GM06b, GGHS08, HK09, Kun01, MPP03, Nic01, NFW08a, DEG08]. **Anisotropically** [LW00a]. **Anisotropy** [AM09b]. **Anomalous** [ZLAT08]. **Anterpolation** [Sar03]. **Aorto** [AQR06]. **Aorto-Coronaric** [AQR06]. **Application** [AD99, BGR02, CZZ06, GW07, Kal00, Mel05, MV03, Nik02, RS00, Sch05, SS00b, She03, SS03b, BW06]. **Applications** [ADZ09, AL09, BY00b, BD07, BHMR07, Buf05, CHS00, CF07, GMR07, GK09b, GZ09, KK09, KT08, Lu99, NZ06, OP00, VO02]. **Applied** [AKW05, BGP05, DF09, Kop03, NV04, San00a, SVW02, oWZ06]. **Approach** [AGW04, Bac06, Ber09, BR09b, CMX09, CT00, DDO07, Dep08, DL09a, DG00, FVV08, HR09, HTW09, JVD02, Woh05, XY07].

**Approximabilities** [Guo06].

**Approximability** [BG01]. **Approximants** [KM05]. **Approximate** [AR02, BWWW08, Bue07, FLL<sup>+</sup>06, GHV00, IK08, IKT01, Per09, RBX08, RS00, ThT00].

**Approximated** [HR07]. **Approximating** [GS09, HMN02, LW00c, Wen09].

**Approximation**

[AP02, Ain04, Ain05, Ain07, ACDD05, ADGK03, BG01, BC06a, BJ05, BBG99, BB01, BGN03, BNS04, BNW06, Bar04, Bar05a, Bar05b, Bar09b, BJT00, BY00b, BHL03, BZ02, BG04b, BBMZ09, BH05b, BP06b, BM02, CG00, Car05, CZZ06, CW08c, CHX07, Cod09, CP08, DS02, DDE05, DH07, DL05, Des04, DL09b, DGS01, DZ02, Du08, EL08, EKS04, EM03, EL07, EHR07, FK01, FL03, GR09, GH05, GP09, GS05, Gui03, GM00b, Guo06, Guo09, HB00, Hau02, Hau08, HSW05, HRW01, HPS04, Ju00, KD06, KP03a, Kaw08, KSS09, Leo01, Lin07, LW00b, LS06b, LL06, Mer08, MG03, MSTZ08, Nic01, NS01, OS07, PR00, PJ02, PS04, PW09, Pro08b, Rin09, RWG01, RS06, RHA03, SW05a, SW07, SL06, Thü08, Wol00, Xu00b, Xu00a, XLC02, XTH07, DGS03].

**Approximations**

[AADL07, AR08b, AAL09, AGW04, Arm01, BTZ04, BFP08a, BK02, BFP08b, Ber04, BHD06, B JL03, Bur09, CFR00, CH02, DR08, DMC00, DHV00, DGHL04, EK00, ELW02, Fen06, Fer03, FG99, GKK03, HTW02, JRW02, JLM08, KP07, KPY02, KPY04, Lar00, Lep00, LL00, LW07, MSZ08, Mic02, MG05, NPSK07, SW03, ST07, SS00b, SEL09, Ste00, TK01, TV05, WY01, Wan08, ZaY04, Dem06]. **Arbitrary** [AR08b, AM08, Cod09, DDO07, Dic08, FQ00, KMS05, LMR02, SFNW05].

**Archimedes** [Kup06a]. **Arclength**

[DKIK07]. **Area** [SS00c]. **Area-Preserving** [SS00c]. **Arisen** [Bel00a]. **Arising** [BDRS00, CHK01, HS00, HSY04]. **Arterial** [QVZ01]. **Artificial** [BIR09, WZ08]. **Aspect**

[AC00a, Cao05, Ovt03a]. **Aspects** [HL02]. **Assisted** [BPS09]. **Assumptions** [CH02, LPWE05]. **Asymmetric** [Vic04]. **Asymptotic** [ADBN08, BSC07, CCZ02, DLV08, Des09, FLL<sup>+</sup>06, Gug01, Hig00, Sch00, WSD05, Dar00]. **Asymptotically** [BX03a, BX03b]. **Asymptotics** [BBC08, Peh09]. **Asynchronous** [LMPQ04]. **Attenuated** [XTH07]. **Attraction** [Grü03]. **Attractors** [Grü03]. **Augmentation** [CWX09b]. **Augmented** [Dos05, Gui03, SV02]. **Autoconvolution** [DL08a]. **Auxiliary** [HX07]. **Averaged** [JLM08]. **Averaging** [CLT05, CCF09]. **Avoidance** [HZ07]. **Axially** [DDE03]. **Axis** [AM09b]. **Axis-Aligned** [AM09b]. **Axisymmetric** [LW06b, Pie05]. **Axisymmetrical** [CCGHR03].

**B** [BOS05, DK08a, HRW01, HK07, MST06]. **B-series** [BOS05]. **B-Spline** [HRW01, MST06]. **B-Spline-Based** [HK07]. **Backprojection** [RF03]. **Backward** [BF09a, DK99a, LS06a, MSZ08, MP02a, PYD06]. **Balance** [BB09, CGLGP08, LRR00]. **Balanced** [CGLGP08, GT03, Nou01]. **Balls** [HX00]. **Banach** [BGMV08, CU05, CP03, SGM01, YZ07, YH06]. **Bandlimited** [ST06]. **Barrier** [Aza02, NSV05]. **Barriers** [Gug01]. **Base** [Gib04]. **Based** [AR08a, AS05b, AA08, ABV06, Bea04, BR09b, BZ06, CZ09, Car02, CEJS02, CGH05, CN02, DZ09, DL06, DG00, Du01, DE08, ELL02, FN09a, GL00, HW09a, He03, HK09, HK07, IK08, KM06, LS06a, LF99, LW04, LCN08, LO09, MT04, NZ04, NJN07, Par01a, Pro08a, RWG01, Sch07, SLS09, Sto09, THBS09, WK01, XY07, Yu06]. **Bases** [DGH02, LS05, Ste07]. **Bashforth** [HS07a]. **Basis** [CTU09, Dep08, JK09, KDW08, PD05, SWL09]. **BDDC** [Kim08a, KDW08, KT09, LW06a]. **BDF2** [Hun01]. **BDFM** [AP02]. **Be** [AK09, Beb07]. **Beam** [AS05a, HO09]. **Beams** [CCS06]. **Bean** [EKS04]. **Beaver** [GR09]. **Behave** [dP07]. **Behavior** [AW09, Da08, LL06]. **Bellman** [BJ05, CJ09, WF08]. **Beltrami** [DD07, GK08]. **Bel'tyukov** [SV00]. **BEM** [GH00, GHS03, HM06, MGP00, MS00b, Say09]. **Bending** [ACPC02a, XLC02]. **Bernoulli** [AS05a]. **Besov** [BG01, Guo06]. **Best** [CYN00, Ker00]. **between** [DJ05a]. **BFGS** [LF99]. **Biased** [RS04]. **Bidomain** [EB08]. **Bifurcation** [BJJ02, GKS00]. **Bifurcations** [DGK03, KGDD05]. **Biharmonic** [BACCF09, DP00, Tha00]. **Bilaplacian** [BBK01]. **Bilinear** [Ris01]. **Binary** [DL05]. **Bingham** [LV04]. **Binomial** [JD04, sQlXsJb05]. **Biological** [BGR02]. **Biot** [KS05]. **Bivariate** [DS02, DFK00, GS00, LS09]. **Black** [Che00, HW03, KN00]. **Blends** [Hun01]. **Block** [BL00, Dos04]. **Block-Grid** [Dos04]. **Blood** [QVZ01]. **Boltzmann** [AM06, BB09, CHX07, JY09, PR00, Rin00, RSZ01, Rin03, RW00, RW07]. **Boolean** [LZ07]. **Bordered** [DGK03]. **Borsuk** [FL05]. **Bose** [BW07]. **Bottom** [ADZ01]. **Bound** [BM06, Dep08, Dos05]. **Bound-Constrained** [BM06]. **Boundary** [Abg03, ADZ01, AMR02, AMR03, AGH00, AA08, ADZ09, AKW05, Bea04, Ber04, Ber02, BHN02, CS02, CX08, CWL07, Cou09, DKS02, DMC00, Dos04, EP08, EL07, FGNQ02, FVV08, GHV00, GM06b, GMS05, HW09b, Her03, HS02, Hip03, KD06, KN00, KS01a, KM03, KLS03, Küg03, Kwe00, Lee99, LY01a, LLK<sup>+</sup>04, LY09b, MST00, MRS00, MV03, NS05, Obe06, Pao01, Pao07, Raf05, SV08, SP02, Ste00, ST03, Sze04, Waa08, WZ08]. **Boundary-Value** [AA08, Ber04]. **Bounded** [BIR09, HSW05, RSZ01]. **Boundedness** [HMS09]. **Bounds** [AR08b, BJ05, Bue07, JCK08, OP00, SBBHP04, VV09, dFGAN08]. **Bourgain** [AK09]. **Box** [BHL03, Gre07, Ric02, Kup06a]. **Box-Schemes** [Gre07]. **BPX** [MKB07]. **BPX-type** [MKB07]. **Brezzi** [LV04].

**Brownian** [Men06]. **Bubble** [CS07, FJMT07, Ris01]. **Bubbles** [San00a].  
**Bump** [Ova07]. **Burgers** [LaY09, LL06, WML03]. **BV** [Pie05, EK00]. **Bypass** [AQR06].

**C0** [ByS06]. **C1** [LM06]. **Cahn** [BB01, Fen06, BBG99, KSS09].  
**Cahn/Cahn** [BB01]. **Calculating** [SH08].  
**Calculations** [KEN01, SK03, SE05, Sou05].  
**Calculus** [AG03, LWW02]. **Calderon** [CN02]. **Camassa** [CKR08, HR06, XS08].  
**Can** [AK09, Beb07, WZ07]. **Cancellation** [GMR07, Ste07]. **Capturing** [Ran08].  
**Cardinal** [TWB07]. **Carlo** [ALNO07, BMPT09, Dic07, Dic08, YH06].  
**Cartesian** [BHD06, CKPS01, Des04].  
**Cascade** [Che02]. **Case** [CKK01, GAT00, MS02, Maj05, PS02a, PS02b, PR01, Tow01, Yu06, dFGAN09].  
**Cauchy** [DM06]. **Cavity** [BBK01]. **Cell** [EP08, Nic05, Nic06]. **Cell-Centered** [EP08, Nic05]. **Cells** [LSTZ07]. **Centered** [EP08, Nic05, Nic06]. **Central** [BC05, BL03, LRR00, LSTZ07, Par01a, WF08].  
**Centroidal** [DJ05b, DEJ06]. **Certain** [BHN09, BY00b, YH06]. **CEV** [WZ08].  
**CFL** [KD06, MP03, WH08]. **Chains** [SS00b]. **Changes** [Hac07]. **Changing** [CFFM08, DK99a]. **Channel** [ASXZ08].  
**Chapman** [Cai03]. **Characteristic** [ER02b, FN09b, FV03]. **Characteristics** [BNV06a, BNV06b, CEJS02, Kac01, PU99].  
**Characteristics-Based** [CEJS02].  
**Characteristics/Finite** [BNV06a, BNV06b]. **Characterization** [AK09, CG04]. **Chebyshev** [Boy02, KM05, MS00a, RW05, WML03].  
**Chemotaxis** [EK09]. **Circulant** [Ber02, CYN00]. **Circulant-Like** [Ber02].  
**Circular** [BBK01]. **Class** [AMT04, CG00, CO02, DMO07, JJ06, Med02, SR02, TCOZ03, Wen05].  
**Classification** [ABFM04]. **Closed** [UY00].

**Closely** [AKKL05]. **Clough** [SBM01].  
**Cluster** [LO09]. **Clustering** [GGHS08].  
**Coadjoint** [EF01]. **Coarse** [KPS06, NV04, PS08]. **Coarse-Graining** [KPS06]. **Codes** [Kup06b]. **Codim** [KGDD05, BJJ02]. **Coefficient** [BF09a, BGMV08, Bue07, MG05].  
**Coefficients** [BMMS05, BMM05, BN07, BGS05, CCZ02, CDZ00, DDP06, KWD02, MT05, SGM01, SV08, SD05, TK01].  
**Coercive** [BH04, VVD06]. **Coercivity** [EG08]. **Collision** [PR00]. **Collocation** [AB08, AB00, AB03, Ait05, AKW05, BNT07, BD03, BF09a, BPV01, BH05a, CHX03, CWX09a, CMX02, DD04, GW07, HMS03, KK02a, LFB02, LS08, MS00a, NTW08a, NTW08b, PFF08, Par01b, Par01c, PPT05, Sch07, Sid00, Xu00a, KL06].  
**Colocated** [EHL07]. **Combinatorial** [HX00]. **Combined** [BH04, SW09].  
**commutator** [Tha06]. **commutator-free** [Tha06]. **Compact** [AK07, BACF06, BACCF09, BGM07, Des09].  
**Compact-Equivalent** [AK07].  
**Compactness** [BCDD06, Raf05].  
**Comparing** [Can05]. **Comparison** [For09, NV04]. **Compatible** [CP00, GZ09].  
**Complementarity** [HTCP09]. **Complete** [HW09b]. **Completely** [Da08]. **Complex** [BT00, KDN00, TJ00]. **complexity** [Dar00].  
**Complicated** [PS08]. **Component** [KJ03].  
**Component-By-Component** [KJ03].  
**Components** [SVW01, SVW04].  
**Composite** [LMPQ04, PS08, SS07, Ste07].  
**Composite-Grid** [LMPQ04].  
**Compressible** [KT05, Kwe00, Liu00, PW99a].  
**Computable** [AR08b, BCT00].  
**Computation** [ALNO07, BGS05, CM01, Dep08, DV02, DGK03, HTW09, IZ05, LWX00, LaY09, LPSS00, Ovt08a, Ovt08b, PS08, SP02, Tod06]. **Computational** [DL09a, Moo05, WY07]. **Computations** [Ort09]. **Compute** [DK08a].

**Computerized** [RS00]. **Computing** [AA08, Ayo02, BW07, BL01, Boy02, DEJ06, GS03a, GKK03, HHT08, KB02, LS09, MMS03, PJ01, PJ02, SBBHP04, ST07, TWV00, TWB07, WZ05, Ovt08a, Ovt08b]. **Concentrated** [BEL08, JV03, KM03]. **Condensates** [BW07]. **Condition** [AD99, AD00, ADZ01, BMN02, DR08, DM06, DKIK07, DL08b, GR09, KD06, Kwe00, RBX08, SY00]. **Conditional** [GGGS08]. **Conditioning** [AC03, DWZ09, GM06b]. **Conditions** [Abg03, AMR02, AMR03, ADZ09, BOS05, BHN02, BB00, DS99, DMC00, EL07, FGNQ02, GHV00, GLL08, GMS05, HW09b, HMS09, KD06, KN00, Lee99, MV03, NS05, Pao07, Raf05, SFNW05, Spi07, Sze04, Waa08]. **Conductivity** [Küg03]. **Cone** [Men06]. **Conformal** [HT08, MR07]. **Conforming** [BH09, Bur05, CZ09, CT00]. **Conical** [BGS05]. **Conjugate** [AB03, BK01, ETW08, Ovt08a, Ovt08b, Rie05]. **Connected** [DLST07, RD03]. **Connection** [BG05]. **Connections** [BKT09]. **Conservation** [AJG04, AR08a, ADN00, AMT04, BC05, BHL03, Bre05, BKT09, CLG05, DMO07, GM00a, yGpMT01, HL00, Kim02, LV08a, LV08b, LW00c, MP03, Mic02, Mis05, Mor01, MV00, NP00, Par01a, QS08, ThT00, TT03, TW07, Tow00, Tow01, WN00, ZS04, ZS06]. **Conservative** [Arb04, BW07, BFV09, CT00, CGW07, GLL<sup>+</sup>03, JR05, LMR02, PZ04, RY05]. **Conserving** [Reb07, SWW08]. **Consistency** [BZ03, Har07, OD09, Ven09, LV08a]. **Consolidation** [KS05]. **Constant** [HSW05, MG05, Ver09, WJ08]. **Constant-Free** [Ver09]. **Constrained** [Ani09, Bad06, BM06, DH07, DHV00, Dos05, HH09, KLP08]. **Constraint** [BBFP07, JVD02, LMR<sup>+</sup>05, TF04]. **Constraint-Preserving** [BBFP07, TF04]. **Constraints** [BBMZ09, CHK01, FR08, Jay07, LMR<sup>+</sup>05, LM06]. **Constructing** [CKK01, Chu00, SKJ02]. **Construction** [AMR03, Che02, DS99, DLP05, KJ03, PZ04]. **Constructions** [Dic07]. **Contact** [AS05a, ACS09, Bel00a, CF03, HS00, HhW02, HW05, NSV05, RC01]. **Containing** [Dic08]. **Containment** [HJ03]. **Continuation** [DLM07, DKIK07, FK05, FDFD09, HV06, KLQ<sup>+</sup>08]. **Continuity** [Zor00]. **Continuous** [AGW04, AW05, Bre05, BFH06, CM08, CGW07, CGL09, GKK03, Gui03, MST06, PY04, PW09, RHA03, SV02, vdVIB07]. **Continuous-Discontinuous** [vdVIB07]. **Continuum** [Lin07, OZ08]. **Contour** [HHT08, ST07]. **Contours** [WT06]. **Contractivity** [GPHA07]. **Control** [BZ02, CET09, CD01, CYL08, DH07, DMO07, DHV00, GM05b, GM00b, HO09, HH09, IK08, KN08, LWX00, LY01a, LY02b, LMTY04, LY09b, MST07, Med02, MT04, Rin09, RV06, RWY07, RLK09]. **Control-Volume** [RWY07]. **Controllability** [Neg08]. **Controlled** [CS01]. **Convected** [BDL04]. **Convection** [BC06a, BK02, BGM07, BNV06a, BNV06b, BCT00, BHS06, ER02a, EK00, GHV00, Hum01, Kac01, KD06, KSS09, KT03, Kop01, KS01b, Kop03, Kwe00, LRV00, Lin09, LPWE05, Nic06, OR04, Pfl00, ST03, Tid02, Ver05b, Ver05a, Voh07]. **Convection-Diffusion** [BC06a, BGM07, BCT00, BHS06, ER02a, EK00, Kac01, KD06, KT03, Kop01, KS01b, Kop03, LRV00, Lin09, Pfl00, ST03, Tid02, Ver05b, Ver05a]. **Convection-Diffusion-Reaction** [BNV06a, BNV06b, Voh07]. **Convection-Dominated** [BK02, Kwe00, OR04]. **Convection-Reaction** [LPWE05]. **Convergence** [AG00, AS05a, ADF09, An05, AGW04, AMT04, BTW03, Bad06, BMN02, Bar05b, BP06a, BJM09, BK01, Bel00b,

BACF06, BGM07, Bes04b, Bes08, BHR07, BCC08, BMZ09, BLS05b, BF09b, Cai03, CMR09, CFR00, CFFM08, CKNS08, CHD07, CDZ03, CE05, CDG08, DDU02, DD04, DH07, Dem02, DER07, DK08b, Dos05, DM08, Du00, Du01, DEJ06, DE08, EHW00, EJR08, EG03, EGGM05, EHL07, Fer03, Fil01, FS01, Ger08, GPHA07, GKK03, GK09b, GGGS08, GS07, HK01, HTCP09, Han06, HS07a, HLP08, HMS02, HR06, HKW09, HMS03, JKR01, JJ06, JD04, JLM08, JV03, KP07, KDZ09, KPT05, KS08b, KT08, Leo01, LW00a, Lin07, LRV00, LW00c, LPWE05, LW06b, LW07, MR07, MN05, MV03, MG03, Mis05, MS09, MNS00, MV00, NS03, Neg08, Not07, OR04, Ovt03a]. **Convergence** [Ovt03b, PS04, Per02, Pfl00, Pie05, Pin04, Pro08a, sQlXsJb05, QS08, RPK04, Reu03, Ris01, Rod07, SST05, San09, SV08, Sch07, SD09, Sou05, TW07, Tid02, Tow00, UY00, Waa08, Wal05, Wan01, Wan07, Wen05, WN00, XH05, YZ07, KL06, ABFM04, Da08, Guo09, LV08b]. **Convergent** [BBP08, BBFP07, BGMV08, CKR08, GG09, LF99, LS08, Obe06, WWL09]. **Convex** [AM09a, Bar09b, CU05, CCZ02, CWL07, Dos05, Fer03, GS05, LY01a, LY09b, UY00]. **Convexity** [Han08, Yu06]. **Convexity-Preserving** [Han08]. **Convolution** [GH05]. **Convolution-Thresholding** [GH05]. **Cooperative** [KK09]. **Coordinates** [BHD06]. **Corner** [BB09, CK01, HZ07, LMW06]. **Coronary** [AQR06]. **Corotational** [SWW08]. **Corrected** [KR00, SL06]. **Correcting** [Kup06b]. **Correction** [ELM00, FS09, GS03b, GMS05, HL03b, KLR06, KW01, Med07, NV04, Ovt08a, Ovt08b, SV05]. **Corrections** [AGG06]. **Corrector** [BGP05, BT02, Rin01, SV08]. **Corrigendum** [DGS03]. **Cost** [Nik02]. **Cost-Functions** [Nik02]. **Coulomb** [HR07, HL09a, ZaY04]. **Counter** [RW00]. **Coupled** [BRLM03, EJS09, GR09, Xu00a]. **Coupling** [Daw06, DQV07, GH00, GHS03, GMM07, GSWY08, Hip02, Hip03, HM06, LSY03, Lin09, MMS03, MX07, RY05, Say09]. **Courant** [Fer03]. **Covolume** [CK00, CKK01, KK00]. **Crack** [BSES05]. **Crank** [He03, HS07a, Rod07]. **Creeping** [LV04]. **Critical** [YZ07]. **Cross** [KT05]. **Cross-section** [KT05]. **Crouzeix** [RBX08]. **Crystal** [BFP08b, DPvDC08, LW00b, WWL09]. **Crystalline** [UY00]. **Crystallization** [Bur01]. **Crystals** [DGS01, Sou05, DGS03]. **Cubature** [HX00, HS09, Kup06a, Kup06b, LSX08, Vic04]. **Cubic** [AB08, CK06b, SBM01]. **Curl** [BLS08, Chr05, LMW08a, DDO07, HX07]. **Curl-Curl** [BLS08]. **Current** [Hip02, LM07, PU99]. **Current-Voltage** [PU99]. **Curvature** [CM01, For08, GH05, LN05, Leo01, UY00]. **Curvature-Dependent** [Leo01]. **Curve** [Can05, CM01, UY00]. **Curved** [Zha08]. **Curves** [Ker00, KZ04, LM06]. **Curvilinear** [AC03]. **cycle** [Woh05]. **Cycles** [KGDD05]. **Cyclic** [PDP06]. **Cylindrical** [LPSS00]. **D** [BBM01, BH08, Bre05, Deu07, DL03, EHL07, HL02, Kop08, Med07, Sar03, VVD06, vdVIB07]. **DAEs** [Jay07, LS02]. **Damped** [BJ03]. **Darcy** [BC09, BFV09, CMX09, DS07, DQV07, GS09, GR09, MTW02, MX07, RY05]. **Data** [BNT07, CG08, CKR08, CP08, DGH03, ET08, FR08, GT00, JV03, LS09, Lin06, MNS00, Nik02, NTW08a, NTW08b, SEL09, XY07, Yu06]. **Data-Fidelity** [Nik02]. **Davidson** [Ovt03a, Ovt03b]. **DDG** [LY09a]. **Debye** [BF08]. **Decomposing** [SVW02]. **Decomposition** [Bel04, Beu02, BD03, BZ06, CPR<sup>+</sup>03, CET09, DDO07, Den03, DQV07, DKW08, DG00, Du01, ETW08, Fen00, FW09b, GL00, GH03, HZ03, KV02,

LS09, LCNY08, Mar01, MG05, QX06, RP03, SFNW05, SL06, SVW01, TW07, TK01].

**Decompositions** [HSY04, IZ05]. **Defect** [ELM00, KLR06, KW01, Sou05].

**Defect-Correction** [ELM00]. **Defective** [EL07, FGNQ02, FVV08]. **Defects** [Lin07].

**Defined** [DD07]. **Definite** [CDS03, DK99b].

**Deflation** [NV04]. **Degenerate** [BBG99, BB01, Beu04, BN07, CG00, CNPS07, CEJS02, EK00, Kac01, MV03, Obe06].

**Degree** [BXZ07, GS00, HR00, HS09, KD03, RB09].

**Delay** [AG03, BK00, BH07, Bue07, ER02b, Gug01, JPCH06, LBH03].

**Delay-Differential** [BK00]. **Delays** [BH05a]. **Densities** [BL09, KHP02].

**Density** [KHY09, LW07]. **Dependent** [Aya00, BHN09, BDR09, Dep08, DS09, EM03, EHR07, Ger08, Gra08, GMS05, He03, HS07a, HL03a, JD04, KR05, Küg03, Leo01, MST05, PR01, SK03, Tha08, WW07, Yu06].

**Depending** [AC00b]. **Depth** [ADZ01].

**Derivation** [CG09]. **Derivative** [BXZ07, CW08c]. **Derivatives** [HK09, Lin06]. **Derived** [Bos07]. **Descent** [BCC08, GLQZ02, IKT01]. **Design** [AQR06, BR09b, Sze04]. **Designs** [CW06a].

**Detecting** [FGS07]. **Detection** [AGY05, GT00]. **DG** [CDG08, GR09].

**DGFEM** [SST03]. **DGM** [KD06].

**Difference** [ADZ01, ADGK03, BL00, Bea09, BACCF09, BGM07, BLS<sup>+</sup>05a, BZ03, BLS05b, CMR09, CKR08, CV05, Cou09, EK00, FG99, HR06, JV03, KU02, KPY02, KPY04, Mic02, Mis05, NT02, NPSK07, Obe06, Par01b, Rin03, SGM01, SY00, Tow00, Tow01, WB00, WWL09, YA05].

**Differences** [BWWW08, DK99b, Rab00, SW03, SLS09, dB03a]. **Differencing** [Par01a, RW05, WF08]. **Differential** [Ayo02, BTZ04, BNT07, BHN09, BK00, BY00b, BCM04, BGMV08, Bos07, BPV01, BH07, Bue07, BT02, BL09, CMMR01, CJ09, CM08, CMM03, CP03, DL09a, DZ02, ER02b, HL00, Hau02, Hau08, HJ03, HMS02, HMY07, HMS03, JVD02, JW00a, JW00b, JPCH06, KMS05, LLRZ00, LL00, LS07b, MS00a, MSZ08, MMRR06, MMR06, MT05, NTW08a, NTW08b, PPT05, Röß09, San09, San00b, SS08, Sch02a, SP02, She03, SEL09, WM08, Yan05, Tha06].

**Differential-Algebraic** [Bos07, JW00a, JW00b, KMS05].

**Differentiation** [BF09a, Olv09, Slo04].

**Diffraction** [BY00a, BGS05]. **Diffuse** [Fen06]. **Diffusion** [Aya00, AD02, AM09c, BC06a, BMN04, Bea09, BGM07, BNV06a, BNV06b, BCT00, BB09, BLS05b, BHS06, BZ06, CNPS07, CV05, DDE03, DDE05, DJ05a, DM08, DL02, EL08, ER02a, EHR07, EK00, GM05a, GHV00, GH07, GGS08, Kac01, KD06, KT03, Kop01, KS01b, Kop03, Kop08, LX09, Lin08, LRV00, Lin09, Liu00, LBD<sup>+</sup>03, LY09a, Luc08, MPP03, NT02, Nic06, Pfl00, DEG08, PU99, Pin04, sQlXsJJB05, RS06, Rou00, San03, SWB<sup>+</sup>04, ST03, Tid02, Van05, Ver05b, Ver05a, Voh07, Wan00, YA05, ZLAT09].

**Diffusion-Convection-Reaction** [Nic06].

**Diffusions** [MT09, MSTZ08]. **Diffusive** [GT03, JPT00, KU02, NP00]. **Digital** [CS01, DLP05, PDP06]. **Dimension** [BHPS09, DFK00, RSS04, TJ00, Vic04].

**Dimensional** [BGM07, Bes04b, Bes08, BLS08, BH05b, Cha07, DDP00, DDO07, Dic07, DL09b, Du08, GS09, GHN03, GMM07, GM00a, GGS08, HLP08, JR05, Kim08b, KWD02, Kop01, KS01b, Kop03, LM07, LMW08a, Lin07, LZ08, MP02b, PS02a, PZ04, Pon07, RD03, Reu03, San03, TT03, TW06, TV05, Van05, Wan00, oWZ06]. **Dimensions** [AH06, Bea04, Bel04, BH09, CPR<sup>+</sup>03, CE09, CG05a, CG05b, DB03b, DKW08, Guo06, Guo09, GZ09, HZ03, KLPV01, KL05, Lin08, Mar05, SE05, TK01, WTW00].

**Diminishing** [BW07, FS04]. **Direct** [BG01, Pon07, LY09a]. **Direction**



[BF09a, MG01, PFF08]. **Directional**  
[HK09, SLS09]. **Directions** [GLQZ02].

**Dirichlet**

[AB00, Bar09a, BG05, HRW01, MV03].

**Discontinuities** [BH08, Mis05].

**Discontinuous**

[AJG04, Ain07, ADF09, ABCM02, AM09c, BJM09, BMMS05, BMM05, BPD08, BS06, BHS06, BP06b, BKT09, BS09, CCPS00, CS05, CCS06, CDZ00, CC04, CW06b, CE06, CE09, CKPS01, CKSS02, CG08, CGSS09, CG09, CGL09, Daw02, Daw06, DMO07, DDP06, DS09, EK09, EG06a, EG06b, EG08, FK01, FW09a, FSL05, GSWY08, GP99, GSS06, GP07, Har07, HKW09, HPS04, KP03a, KP07, KSS09, KR05, Kwe00, LN04, LS07a, Lin08, LMTY04, LSTZ07, LY09a, MG03, OD09, OS07, DEG08, RWG01, RS06, SS00a, SD05, SW05b, TK01, Tow00, Tow01, VVD06, Wal05, Wan07, WH08, XS08, YS02, Ye04, Ye06, ZS04, ZS06, vdVIB07].

**Discrepancy** [DLP05, HY00]. **Discrete**

[Ain04, AMR03, ADN00, AL09, ABFM04, BZ02, BCDD06, CS02, CE05, DDE05, DDO07, Fen06, Gei06, GT03, GGGS08, KK09, LMR02, LFB02, LSX08, LWX00, MS02, MP03, MS00b, Mic02, NZ06, OPR09, Raf05, RD03, ZaY04, dFGAN09].

**Discrete-Time** [LFB02, LWX00].

**Discretization**

[Abg03, AS05a, BBP08, BBK01, BNV06a, BRLM03, BC06b, BB07, Ber09, Beu04, Buf05, CD04, Da08, DER07, DDP06, EB08, GM05a, GPPP06, GR07, Grü03, HW09a, JK09, Kal00, Kim08a, Kim08b, Lin08, MP01, Mor01, OPR09, PR01, Pro08a, RPK04, Rin00, RV06, SS00a, Sch02b, SR02, TJ00].

**Discretizations**

[AMR02, Beb07, BCT00, CMS00, DZ08, GM08, GSWY08, Han06, HO08, Har07, KDW08, KT09, LZ07, Mar01, OD09, PW99a, PW99b, RS04, Sch02a, Voh07, WK01, vPS03].

**Discretized**

[BNV06b, BK03, HV05, LR02, Reu03].

**Dispersion** [Ain04]. **Dispersive**

[AW09, IZ09]. **Displacement**

[BJM09, Böt06, CS03]. **Dissipative**

[AW09, ADBN08, BDRS00, DGS01, Han06, HL03b, LL06, DGS03]. **Dissolution**

[DPvDC08]. **Distance** [AGG06].

**Distributed** [GM00b]. **Div**

[CK06a, Chr05, LMW08a, ABF05, CW08a, DDO07, HX07, WY07]. **Div-Curl**

[Chr05, DDO07]. **Div/Curl** [LMW08a].

**Divergence** [BLS08, Wen09, Zha09].

**Divergence-Free** [BLS08, Wen09, Zha09].

**Divided** [Rab00, dB03a]. **Dogleg**

[PSWS08]. **Domain** [AADL07, AGH00, Bel04, BSES05, Beu02, BD03, BGMV08, BZ06, CPR<sup>+</sup>03, CHL09, Den03, DQV07, DKW08, DK99b, DG00, Du01, DLST07, Fen00, GL00, GH03, HR09, HZ03, HSY04, Jia04, LS09, Mar01, MG05, QX06, SFNW05, SL06, TW07, TK01, VW04, Zha08].

**Domains**

[BS08, BACCF09, CCZ02, CL05a, FLL<sup>+</sup>06, HB00, KDZ09, KK01, LPSS00, MST05, PS08, RD03, RSS04, RSZ01, She00, SW07, Zha08].

**Dominated**

[BK02, Hun01, Kwe00, OR04, San00a].

**Downwind** [RS04]. **Downwind-Biased**

[RS04]. **DP**

[DDP06, KL05, Kim08b, KRW08]. **Drift**

[GM05a, PU99, Pin04]. **Drift-Diffusion**

[GM05a, PU99]. **Driven**

[BBK01, CM01, DZ02, Hau02, Hau08].

**DSMC** [RW07]. **Dual**

[BEL08, BS03, GH00, GMM07, KWD02, OD09, She03, TV05, VV09, Woh00].

**Dual-Dual** [GH00]. **Dual-Mixed**

[GMM07]. **Dual-Petrov** [She03].

**Dual-Primal** [KWD02, TV05]. **Duality**

[DDO07, OPR09]. **Dufort** [MPPS02].

**Duhamel** [BGMV08]. **Duhamel-Like**

[BGMV08]. **Dijkstra** [Per02]. **Dynamic**

[AS05a, HW09a, RP02, Vas01]. **Dynamical**

[ADZ09, CD01, EL09, GW07, HPS05, IK08].

**Dynamically** [DK99a]. **Dynamics**

[Aza02, BJL03, CKR07, FVV08, KPS06, KV02, QVZ01, WY07, vdVIB07]. **Dynamos** [CZZ06].

**Eddy** [BIR09, Hip02, HL03b, JL02, KR05, LM07, Med07]. **Edge** [AS02, AGY05, BCDD06, Chr05, DB03b, LM07, LMW08a, MG01, Nic01, Ova07, Raf05, TK01, TV05, XH05]. **Edge-Bump** [Ova07]. **Edges** [ET08, GT00, HK09]. **Effective** [BBC08, CT00, KB02, Lam05]. **Effects** [ER02a, Nou01]. **Efficient** [Bar05a, DMW01, HSY04, IZ05, LMR<sup>+</sup>05, LMW08b, SP02, She00, Vee01, WZ05, Xu00a]. **Eigencomputation** [Sim05]. **Eigenfunctions** [MG03]. **Eigenproblem** [BP06b]. **Eigenproblems** [CFR00]. **Eigensolvers** [EL09]. **Eigenvalue** [BDRS00, DZ08, GG09, Lar00, MG05, Ovt03a, Ovt03b, Ovt08a, Ovt08b, SS03b, Tod06]. **Eigenvalues** [AA08, Bar09a, BT07, Bue07, CW08b, Chu00, MG03, Ovt08b, SS03b]. **Eikonal** [CFFM08, CF07, QZZ07]. **Einstein** [BW07]. **Elastic** [CP00, Gie05, NPSK07]. **Elastic-Plastic** [Gie05]. **Elasticity** [ACS09, CS03, CS04, DW09, HW09a, HS08, KMM00, Kim08a, Kim08b, MMSW06, PW06a, PW99a, PW99b]. **Elasto** [BMPT09, Sta07]. **Elasto-Plastic** [BMPT09]. **Elasto-Plasticity** [Sta07]. **Elastodynamics** [Pro08a]. **Elastoplasticity** [AC00b, BS03]. **Electric** [CN02, HS02]. **Electrical** [MMM04]. **Electromagnetic** [BH04, CFR00, CM00, Hip03, KDZ09, SW09]. **Electromigration** [BNS04]. **Electronic** [BDS01, DGS03]. **Element** [AG00, Ach02, AADL07, AM09a, AC00a, Ain04, Ain05, Ain07, AR08b, AW09, ALY01, Ani09, ABV06, ACWY00, AR02, AMT04, AM06, AGAN05, BG01, BTZ04, BC06a, BC09, BBP08, BY00a, BFV09, BBG99, BB01, BGN03, BNS04, BNW06, BBFP07, Bar05b, BP06a, BFP08a, BJM09, Beb07, BFP08b, BSC07, Bel00b, Bel00a, BBM01, BBK01, BSES05, BMPT09, BDRS00, BRS02, BRS08, Ber09, Beu04, BHD06, BG04a, BG05, BR09c, BG04b, Böh08, BHV08, BDW99, Bur05, BFH06, BF09b, Bur09, CK01, CPR<sup>+</sup>03, CLG05, CJ09, CS07, CFR00, Car02, CKNS08, CZZ06, CWL07, CL05a, CDZ00, CW03b, CW03a, Che06, CHX07, CS08, CKK02, CH02, Cod09, DZ09, DS99, DZ08, DK99a, DMC00, Daw06, DDE05, DH07, Dem02, DD07, Dem09, Den08, Deu07, DK08b, DV05]. **Element** [DGHL04, DWZ09, DL03, yDLST06, DLST07, DJLT09, EL08, EHW00, EKS04, ELL02, ELW02, ELS<sup>+</sup>02, FLL<sup>+</sup>06, Fen00, Fen06, FN09b, FN09a, FJMT07, GAT00, GMM07, Gei06, GSWY08, GP99, GLL08, GP00, GM06b, GR07, GSS06, Gue04, Guo06, GS07, Guo09, GZ09, HB00, HhW02, HO08, HR09, Hau08, He03, HTW02, Hel09, HS02, HSS00, HMN02, JRW02, JLM08, Kal00, KSS09, KM03, KLPV01, KT03, KS08a, KS05, Kun01, Lar00, LS07a, LW00a, Liu00, LLK<sup>+</sup>04, Lov05, LCNY08, MST00, MRS00, Mar01, Mar05, MTW02, Mau09, MN05, MS09, NP05, NS01, ORG09, OS07, PF02, PS03, Par01c, PW99a, PW99b, PS08, Pie05, Pro08a, RPK04, Reb07, Ric02, RWG01, RS06, RV06, RWY07, San00b, SS07, Sch00, SW03, Sch05, SS00a, SWL09, SEL09, Sta05, Sta07, Ste05]. **Element** [TT00, TK01, TV05, VW04, Voh07, WY01, WY07, WY05, WY06, Woh00, WK01, WD00, Xu00b, XLC02, XH05, Yan05, Yan06, Zha08, ZaY04, Zho01, dV04, dFN00, dFN02, dFGAN08, dFGAN09, vdVIB07, Dem06]. **Element-Based** [Pro08a]. **Element-by-Element** [DS99]. **Element/Volume** [Mau09]. **Elements** [AD99, AD00, AC00a, AP02, AC03, AR08b, AM08, AW05, AB06, ABF05, BXZ07, BJT00, BNV06a, BNV06b, BDG06, BCDD06, BR05, CZ09, CHO07, Chr05, CG05a, CG05b, CJRT01, DB03b,

DHNN<sup>+</sup>03, GSWY08, HW09a, HR07, Hip03, HN09, HS08, KW06, LZ08, MNS09, MMS03, MPP03, Nic01, Raf05, Ris01, Ste00, TV05, Wan01, WY07, Woh05, Zha09, dVNS07].

**Elimination** [KEN01, SK03]. **ELLAM** [Wan00, WSE01, Wan08]. **ELLAM-MFEM** [Wan08]. **Elliptic** [AGW04, Arb04, AW05, ABCM02, BTZ04, BNT07, Bea04, BMMS05, BMM05, BN07, Böh08, BHV08, BH08, BS09, CMS00, CMMR01, CS02, CW08a, CMR09, CET09, CCPS00, CS05, CHD07, CL05a, CS99, CW03a, CC04, CYL08, CK00, CY07, CKPS01, CG04, CGSS09, CGL09, CMM03, CMMR03, DDP00, Daw02, DH07, Dem09, DV05, DL06, DDP06, DGH03, EP08, EG06b, EG03, FLL<sup>+</sup>06, FK01, FGS07, GG09, GLL08, Gre07, GP07, GH03, HH09, KP03a, KP07, KK09, KLS03, KP03b, KWD02, KK00, Lar00, LN04, Lee99, LMPQ04, LLK<sup>+</sup>04, MKB07, MN03, MMR06, MMR06, MN05, Obe06, ORG09, OS07, Pao07, PS03, Par01b, Par01c, PW99a, PW99b, PZ04, RSS04, RSS07, RWG01, San00b, SV08, Vee01, Ye04, Dem06].

**Elliptic-Parabolic** [AGW04, CHD07]. **Ellipticity** [GS09]. **Embedded** [CGSS09]. **Embedding** [Zha08]. **Enclosing** [JVD02]. **Energy** [BW07, DF09, DE08, EF01, HL00, LN04, LW06b, Reb07, SWW08, WWL09]. **Energy-** [Reb07]. **Energy-Based** [DE08]. **Energy-Conserving** [SWW08]. **Energy-Diminishing** [BW07]. **Energy-Stable** [WWL09]. **Engquist** [BKT09]. **Enhancement** [GT00, ST03]. **ENO** [CZ02, GM08]. **ENO-Wavelet** [CZ02]. **Enrichment** [ABV06]. **Entire** [GMR07]. **Entirely** [Sar03]. **Entropic** [GM05a, MP03]. **Entropy** [LR00, LMR02, LR02, MV03]. **Envelopes** [Bar05a]. **Environment** [ADZ01]. **Epitaxial** [XT06]. **Equality** [Dos05].

**Equation** [AB08, ADZ01, AM06, BC06a, BBP08, BS08, BFV09, BBG99, BP06a, Bea09, BDL04, BBK01, BACCF09, Ber09, BBD02, Bes04a, BB09, BG05, BZ03, BGP05, BDS01, BH04, Bur09, CK01, Cai03, CFFM08, CHX07, CN02, CE09, CG08, CDG08, CKR08, CJRT01, CF07, CP03, Da08, DF09, Den08, DK08b, DGH03, EW00, ER02a, EHR07, FW09a, FN09a, FL03, GK08, GHN03, Gie05, GPPP06, Gou02, Gra08, GSS06, HW03, HS02, HR06, HMN02, HMS03, HV05, IZ09, JRW02, JW06, JR05, KSS09, KK02a, KM06, KPY02, KPY04, KV02, LX09, LaY09, MS01a, MPSS02, Med00, Neg08, NPSK07, Oel02, OPR09, Ovt08a, Ovt08b, PF02, PFF08, PR00, Per09, RPK04, Rin00, RSZ01, RW00, RW07, STWW03, SBBHP04, Sch09, SM08, SP02, She03, SW05a, SW07, TJ00, WJ08].

**Equation** [WWL09, WD00, WML03, XS08, ZLAT08, ZLAT09, oWZ06]. **Equations** [Abg03, AG00, AD99, AMR02, AMR03, AM09b, AAL09, ADZ09, Ayo02, AGAN05, BTZ04, BNT07, Bad05, BHN09, BJ03, BOL00, BJ05, BK00, BHPS09, BBM01, BM06, BY00b, BGM07, BRS02, BF09a, BF08, BCM04, BG04a, BDG06, Böh08, BGMV08, BK03, BPV01, BH05a, BS06, BH07, BL03, Bue07, Buf05, BFH06, BF09b, BT02, BL09, Cai00, CMS00, CMMR01, CX08, CG00, CJ09, CCZ02, CHX03, CWX09a, CHK01, CDZ00, CNQ00, CMX02, CW06a, CM08, CYL08, CWX09b, CH02, CW06b, CDZ03, CE05, CL00, CMM03, DR08, DD04, DK99a, DMC00, Daw02, DM06, DJ05a, Dep08, DZ02, DL03, yDLST06, DL02, EL08, ER02b, EK00, EHL07, FN09b, Fer03, FGNQ02, FG99, FK05, FJMT07, FL05, GHV00, GS09, Ger08, GFD00, GR09, GPD04, GLQZ02, GMS05, GP09].

**Equations** [Gug01, GGGS08, GL00, HL00, Han06, HO08, Hau02, Hau08, HJ03, HL02, He03, HS07a, HMS02, HMY07, HL03a, HL03b, HL09b, HZ03, JKR01, JVD02, JW00a, JW00b, JPCH06, JPT00, JLM08, KN00, KOT05, KR00, KR05, KLR06, KU02, KMS05, Kwe00, LF99, LW06a, LLRZ00, Lin09, Liu00,

LL00, LY02b, LBD<sup>+</sup>03, LMTY04, LPWE05, LW07, LZ07, LR02, LS07b, LL06, Luc08, LCNY08, MS00a, MST05, MSZ08, MMRR06, MMR06, Med07, MV03, MT05, NT02, Nic01, NTW08a, NTW08b, NP05, NS05, Obe06, ORG09, OZ08, PYD06, Pao07, PPT05, PS04, Pfl00, Pro08b, QZZ07, Reb07, Reu03, Ric02, Rin01, RV06, Röß09, SV05, STWW03, SSTT05, San00b, SS08, SV08, SN04, Sch02a, SV03, SV00, She03, SL06, SD09, SEL09, Sta05, SW09, Ste03, Sze04, SD02, TT00, Tha08, TW06]. **Equations** [TF04, TCOZ03, VV08, VW04, Van05, Ven09, Ver05b, Ver05a, Voh07, Waa08, Wan00, WSE01, Wan07, WM08, Xu00a, YS02, Yan05, YA05, ZB00, dFN00, dFGAN08, dFGAN09, vPS03, Tha06]. **Equilibrated** [LW04]. **Equilibria** [DLM07, Thü08]. **Equivalence** [SWB<sup>+</sup>04, XY07]. **Equivalent** [AK07]. **Equivariant** [Thü08]. **Ergodic** [SS00b]. **Ericksen** [BFP08b]. **Erratum** [BX07]. **Error** [AD00, Ain05, Ain07, AR08b, ALY01, AMR03, Arm01, AKW05, BS07, BX03a, BX03b, BMN04, BJ05, BK00, BK02, BR09a, BDR09, BH09, Bos07, BGP05, Bue07, Bur09, CK06a, CZ09, CTU09, Cao05, Cao07, CET09, Car02, CLT05, CHO07, CCPS00, CL05a, CD01, CEJS02, CC04, Che06, CH02, CW06b, CG08, DDP00, DDE03, DMO07, DB03b, Dem09, DLM09, Dep08, Deu07, DV08, DL09b, DL02, DHHN<sup>+</sup>03, DL08b, EP08, ELS<sup>+</sup>02, FV03, For08, FW09b, GHV00, GMR07, GW07, GM00a, GR07, GMS05, GS05, HW09b, HB00, Hau02, HK09, HR07, HL09a, HH09, HPS05, HMN02, HV05, HW05, JCK08, JRW02, JR05, KP03a, KPS06, Kop01, Kop03, Kop08, Kun01, Kup06b, Küt01, LN05, Lar00, LN04, LWW00, LY01a, LY01b, LY02b, LY02a, LBD<sup>+</sup>03, LLK<sup>+</sup>04]. **Error** [LMTY04, LY09b, LW04, LCNY08, MS01a, MN03, MNS09, Mel05, Mer08, MPP03, NZ04, Nic05, Nic06, NSV05, OPR09, OP00, PJ02, RSS07, RWG01, RW07, RV06, San00a, Sch00, SW03, Sch05, SW04b, SD05, ST03, Vee01, Ver05b, Ver05a, Ver09, Voh07, Wan00, WSE01, Wan08, WJ08, Wet00, WY05, WML03, ZS04, ZS06, dFGAN08, vdVIB07, Dem06, Dar00, dVNS07]. **Error-Correcting** [Kup06b]. **Errors** [CI06, JL02, KEN01, RSS04, SK03, SE05]. **Estimate** [AKW05, BGP05, Cao07, Car02, CW03a, Des04, EP08, For08, HR07, HW05, Kop08, Wan00, WSE01, Wan08]. **Estimates** [AD00, ALY01, Arm01, BK00, BR09a, Ber09, BDR09, BBD02, CK06a, CLT05, CL05a, CC04, Che06, CH02, CW06b, CG08, DB03b, Dem09, DLM09, Deu07, DKIK07, DL02, DHHN<sup>+</sup>03, DL08b, ELS<sup>+</sup>02, FW09b, GHV00, GW07, GM00a, GS05, HB00, HK09, HH09, JRW02, KP03a, Kop01, Küt01, LN04, LWW00, LY01a, LY02b, LY02a, LBD<sup>+</sup>03, LMTY04, LY09b, LCNY08, MS01a, MN03, MNS09, Mer08, MPP03, NZ04, Ovt03a, Ovt03b, RPK04, RSS07, RWG01, Sch00, SW03, Sch05, SD05, Ver05b, Ver05a, Ver09, Voh07, WW07, WJ08, WY05, WML03, ZS04, ZS06, Dem06]. **Estimating** [KHY09]. **Estimation** [Ain05, Ain07, BH09, Bur09, Car05, HPS05, LY02a, Mel05, OPR09, RSS04]. **Estimations** [Nic05, Nic06]. **Estimator** [CZ09, Kun01, LW04]. **Estimators** [BX03a, BX03b, DDP00, FV03, HL09a, LY01b, LLK<sup>+</sup>04, NSV05, PY04, Vee01]. **Euler** [AS05a, BDR09, DK99a, DLV08, DPR06, HMS02, PYD06, RPK04, Reu03, San09, TJ00, TW06, Xu00a]. **Euler-Mixed** [DK99a]. **Euler-Type** [HMS02]. **Eulerian** [WW07]. **European** [JD04]. **European/American** [JD04]. **Evaluation** [AGH00, BR09a, CT00, EE06, GMR07, HV06]. **Evolution** [BG04b, Han06, PF02, PFF08, oWZ06]. **Evolutionary** [CHS00, HS00, HL03b]. **Evolutions** [CM01]. **Exact** [BX03a, BX03b, SBBHP04]. **Exclusion** [SN04]. **Existence** [CW06a, DR08, FL05,

Hel09, KDN00, KD03, Ker00, Ort09, Vas01]. **Expanded** [WD00]. **Expansion** [Boy02, Kop03, NS09, Rin00, Sch00]. **Expansions** [FLL<sup>+</sup>06]. **Explicit** [BJ03, CLT05, Des04, Des09, Dic07, Hel09, HO05, SV00, SL06, VV09, WB00, YA05]. **Explicit-Implicit** [SL06]. **Explicit-Jump** [WB00]. **Exponential** [BOS05, CI06, CV05, HMY07, HO05, HOS09, IZ05, LS06b, Tha08, Tha06]. **Exponentially** [BGMV08, Pin04]. **Expressed** [DR05]. **Extended** [HTCP09, HR09, HRW01, SV00, Ste07]. **Extension** [DGS08, DGS09]. **Extensions** [CGLGP08, GZ09, MST06]. **Exterior** [Deu07, MGP00, MS00b, SW07]. **Extrapolation** [FLL<sup>+</sup>06, He03, Sid00]. **Extrapolations** [LL00]. **Extreme** [Ovt08a, Ovt08b].

**Faber** [BR09a, FLT08]. **Factored** [Beb07]. **Family** [AW05, Wan08, Zha09, dVNS07]. **Far** [KN00]. **Farin** [AS05b]. **Fast** [AM09b, BL05, CX08, CWX09a, CFFM08, CMX02, CWX09b, Chu00, CF07, EL08, For09, HDVV09, HW03, KOT05, LMPQ04, QZZ07, Sar03, Sto09, ST06, TCOZ03, Dar00, Sar03]. **Fast-Marching** [CFFM08]. **FD** [BF08]. **FE** [RBX08]. **Feasibility** [Dos05]. **Feedback** [LWX00]. **Fekete** [TWV00]. **FEM** [BMN02, Beu02, GH00, GHS03, HO09, HM06, MGP00, MS00b, MNS00, Say09]. **FEM-BEM** [HM06]. **FEMs** [CT00]. **FETI** [DDP06, KL05, Kim08b, KWD02, KRW08, TK01, TV05, kDH07]. **FETI-DP** [DDP06, KL05, Kim08b]. **Few** [Vic04]. **Fickian** [ELS<sup>+</sup>02, RS06]. **Fictitious** [HR09]. **Fidelity** [Nik02]. **Field** [BNS04, BH04, CN02, Cod09, Du00, FW09b, HL02, HS02, KN00, NS09, SW09, WWL09]. **Fields** [WTW00]. **Fifth** [WS07]. **Fifth-Order** [WS07]. **Filippov** [DL09a]. **Film** [BGN03, BNW06, BHN02]. **Filtered** [RF03]. **Finance** [WF08]. **Finding** [Lin06, WZ04, YZ07]. **Fine** [HS07b]. **Fine-scale** [HS07b]. **Finite** [AG00, AADL07, AM09a, AC00a, AP02, Ain04, Ain05, Ain07, AR08b, ADZ01, ALY01, AGW04, Ani09, AM08, ABV06, ACWY00, AB06, ABF05, AR02, AMT04, ADGK03, AM06, AGAN05, BG01, BTZ04, BC06a, BC09, BBP08, BY00a, BFV09, BBG99, BB01, BGN03, BNS04, BNW06, BBFP07, Bar05b, BP06a, BFP08a, BJM09, Bea09, Beb07, BJT00, BFP08b, BSC07, Bel00b, Bel00a, BBM01, BSES05, BMPT09, BDRS00, BRS02, BNV06a, BNV06b, BRS08, BLS<sup>+</sup>05a, Ber09, Beu04, BHD06, BG04a, BG05, BDG06, BG04b, BCDD06, Böh08, BHV08, BZ03, BGP05, BH08, BDW99, BLS05b, BWWW08, Bur05, BFH06, BF09b, Bur09, CK01, CPR<sup>+</sup>03, CLG05, CJ09, CS07, CMR09, CFR00, Car02, CLT05, CHO07, CKNS08, CHD07, CZZ06, CL05a, CDZ00, CW03b, CW03a, Che06, CHX07]. **Finite** [CS08, CKK01, CKK02, CY07, CH02, CDZ03, CE05, CG05a, CG05b, CKR08, Cod09, CJRT01, CV05, Cou09, DZ09, DZ08, DK99a, DMC00, Daw06, DDE05, DH07, DDO07, DB03b, Dem02, DD07, Dem09, Den08, Des04, Deu07, DK08b, DV05, DM08, DGH03, DGHL04, DJ05b, Du08, DWZ09, DL03, yDLST06, DLST07, DJLT09, DHHN<sup>+</sup>03, EL08, EHW00, EKS04, EP08, ELL02, ELW02, ELS<sup>+</sup>02, EHL07, FLL<sup>+</sup>06, Fen00, Fen06, FN09b, FN09a, Fil01, FG99, GHV00, GAT00, GMM07, GLY00, Gei06, GSWY08, GP99, GLL08, GP00, GR07, GSS06, Gue04, Guo06, GS07, Guo09, GZ09, HB00, HhW02, HO08, HR09, Hau08, He03, HTW02, Hel09, HR07, Hip03, HR06, HSS00, HMN02, HS08, JJ06, JRW02, JLM08, Kal00, KSS09, KM03, KLPV01, KK02a, KW06, KU02, KT03, KS08a, KS05]. **Finite** [Kun01, Lar00, LS07a, LW00a, LZ08, Liu00, LLK<sup>+</sup>04, Lov05, LCNY08, MRS00, MNS09, Mar01, Mar05, MTW02, Mau09, MMS03, MN05, Mer08, Mic03, MPP03, Mis05, MS09,

NT02, Nic05, Nic06, NP05, NS01, ORG09, OPR09, OS07, PF02, PS03, Par01b, Par01c, Pie05, PZ04, Pro08a, RPK04, Reb07, Ric02, RWG01, RS06, RV06, RWY07, SFNW05, San00b, SS07, Sch00, SW03, Sch05, SS00a, SLS09, SEL09, Sta05, Sta07, Ste05, TT00, TV05, VW04, Voh07, Wan01, WY01, WY07, Wen05, WN00, WY05, WY06, WB00, WWL09, Woh00, WK01, Woh05, WD00, Yan05, Yan06, Ye04, Ye06, YA05, Zha08, Zha09, ZaY04, Zho01, dV04, dVNS07, dFN02, dFGAN08, dFGAN09, vdVIB07, Dem06].

**Finite-** [MRS00]. **Finite-Difference** [ADGK03, WWL09]. **Finite-Dimensional** [Du08]. **Finite-Element** [Ani09, AGAN05, Bar05b, GAT00, GLL08, Pie05, dFGAN08, dFGAN09]. **First** [Abg03, ACS09, BBM01, BMMS05, BMM05, CMMR01, CS02, CS03, CMM03, CMMR03, DS07, DV05, Gue04, HSS00, KEN01, Lee99, LMW06, LMW08a, MMM04, MMSW06, Rin01, RLK09, SK03, SE05, Sta05, SD02, KMM00]. **First-Order** [ACS09, BMMS05, BMM05, CMMR01, CS02, CS03, CMM03, CMMR03, DS07, Gue04, HSS00, Lee99, LMW06, LMW08a, MMM04, MMSW06, Rin01, RLK09, Sta05, KMM00]. **Fits** [LS09]. **Fitted** [Pin04]. **Fitting** [AGY05, CI06]. **Fixed** [Seg02]. **Flames** [KB02]. **Flexible** [SS03a]. **Floquet** [Moo05]. **Flow** [AC00a, BBFP07, BDL06, BFP08b, CLW04, Cha07, CG09, DS07, DGS01, ELM00, EM03, EL07, EJS09, FN09b, KT08, LN05, LSY03, Lee04, MTW02, Mic03, MX07, NV04, Nou01, PW99b, QVZ01, RLK09, Wan08, WD00, DGS03]. **Flows** [CHD07, DZ09, Deu07, ELS<sup>+</sup>02, Fen06, GR07, GH05, GS03b, GM00b, Hun01, KT05, LV04, LW00b, LW06b, Man06, PS08, RY05, SST03, VO02]. **Fluid** [CLW04, CHD07, DGHL04, EM03, Fen00, Fen06, FVV08, GMM07, KV02, LSY03, Lee04, Med02, MT04, MX07, Nou01, SSTT05, WY07]. **Fluid-Rigid** [SSTT05]. **Fluid-Solid** [Fen00, GMM07]. **Fluid-Structure** [DGHL04]. **Fluids** [BRLM03, BDR09, DPR06, LV04, PYD06, PR01]. **Flux** [AJG04, AW05, BKT09, CT00, CKK02, Mis05, Tow00, Tow01, WY06]. **Fluxes** [Bre05, CGW07, LW04, XZ05]. **Focusing** [BJ03]. **Fokker** [BDS01, Den08, Wan07]. **Force** [GR07]. **Form** [BG04b, MP02b]. **Formation** [BGR02]. **Forms** [RB09, Sch05]. **Formula** [KHY09, dB03a]. **Formulae** [BP05, HX00, HS09, Vic04]. **Formulas** [BNV06b, Ber02, BD07, CN02, GM09, HT08, Peh09]. **Formulation** [BMN04, BSES05, BACF06, BC06b, CS03, Cod09, EKS04, FN09b, GH00, KL05, Kim08b, Lin08, LCNY08, MP03, MGP00, MV03, NPSK07, PW06a, SWW08, STWW03, SS09, VVD06, WN00]. **Formulations** [BC09, Che00, RSS07]. **Forward** [MSZ08, San09]. **Forward-Backward** [MSZ08]. **FOSLL\*** [CMMR01, LM07]. **FOSLS** [BMMS05, BMM05, KMM00, LMW06, LMW08a]. **Foundations** [LMPQ04]. **Fourier** [DGS03, Sar03, BH05b, CX08, DGS01, HL09b, KS08b, LSX08, LL06, MG03, NS01]. **Fourier-Wavelet** [KS08b]. **Fourth** [BC05, BGM07, DS09, Jün01, MKB07, Mar05, Tha06]. **Fourth-Order** [BC05, DS09, Tha06]. **Fractal** [CK06b]. **Fractional** [Den08, EHR07, Ger08, LX09, SL99, THBS09, Ven09, YA05, ZLAT09]. **Frames** [Ste03]. **Framework** [BG01, BC06a, CHO07, CKK01, FV04, Guo06, Par06]. **Frankel** [MPPS02]. **Fredholm** [DM06, LZ07, PPT05, VV08]. **Free** [ACPC02b, BLS08, BWWW08, CS07, CCS06, FJMT07, HW09a, Her03, HO09, Obe06, Ris01, San00a, Ver09, Wen09, Zha09, dV04, GM06a, Tha06]. **Frequency** [BRS02, BGS05, CWL07, SM08, THBS09]. **Frequency-Based** [THBS09]. **Friction** [HR07, HL09a, RC01]. **Friedrichs** [Bre03, EG06a, EG06b, EG08, Küt01].

**Frobenius** [JK09]. **Front** [Cha07, GLL<sup>+</sup>03]. **Front-Tracking** [Cha07]. **Fully** [AR08b, BZ02, Böh08, CE05, DDE05, Fen06, FN09b, FN09a, GGGS08, LMR02, MS02, MS00b, NSV05, PR01, SWL09, dFGAN09, BNV06b]. **Function** [AJG04, Che02, GMR07, Hla01, HS07b, LS06b, Mis05, Ova07, PD05, ST07, SH08, TWB07]. **Functional** [MRS00, WM08]. **Functionals** [ABFM04, Bad06, CU05, GM05b, SBBHP04]. **Functions** [AGG06, AM09a, AR08a, ACDD05, BG01, BT00, BR09a, Bre03, CK01, CZ02, CK06b, CGH05, CS01, CN01, Dic07, Dic08, EE06, FV03, GMR07, Guo06, HHT08, HM07, KHY09, Mel05, Nik02, Ova07, PW06b, PW09, RW05, RHA03, Seg02, She00, SWL09, SVW02, ST06]. **Future** [CL00]. **FV** [MV03].

**Galerkin** [CGL09, LY09a, AG00, Ain07, ADF09, ADZ09, ABCM02, AD02, AM09c, BTZ04, BS07, BJM09, BK02, BPD08, BS06, BHS06, BP06b, BF09b, BS09, CX08, CFR00, CCPS00, CS05, CCS06, CWL07, CD01, CC04, CYL08, CT00, CW06b, CE06, CE09, CKPS01, CKSS02, CGW07, CG08, CGSS09, CG09, CGL09, CHR04, Daw02, DMO07, DS09, DL02, EK09, EG06a, EG06b, EG08, FK01, FW09a, GAT00, GSWY08, GM06b, GSS06, GP07, Har07, HKW09, HL09b, HPS04, KP03a, KP07, KSS09, KV02, Kwe00, LN04, LS07a, LV04, LLRZ00, LMTY04, LSTZ07, LZ07, MS00a, MS01a, MST00, MS01b, MS02, Maj05, MTW03, OD09, OS07, PF02, DEG08, RS06, SSTT05, SS00a, She03, SW07, SW05b, VVD06, Wal05, WH08, XS08, YS02, Yan05, ZS04, ZS06, oWZ06, vdVIB07]. **Gamma** [BBMZ09, ST07]. **Gas** [Aza02, B JL03, CKR07, Vas01]. **Gauge** [NP05]. **Gauss** [BHM09, Hel09, LF99, PP00, Peh09, Reu03, dP07]. **Gaussian** [Bal03, BP05, DK99b, HC09, KS08b, PD05]. **Gegenbauer** [BY00b, CW08b]. **General** [AAL09, BX03b, Ber02, BHMR07, CCZ02, CKK01, CKR08, DWZ09, EHL07, FS04, GHV00, GM08, GPHA07, HM07, KV02, MN05, MV03, Spi07, Wen05, EG06a]. **Generalization** [Lu99]. **Generalizations** [GH03, Lu99]. **Generalized** [BT00, Bal03, BZ03, CFFM08, CK06b, DPR06, EJS09, For09, GKS00, GH05, HC09, IZ05, LL06, Ovt03a, Ovt03b, PW06b, SH08, SdS06, WML03, vdVIB07]. **Generalizing** [FV04]. **Generation** [Aza02, CMMR03]. **Geometric** [BGP05, CM01, DL05, Hac07, KZ04, Sch02a]. **Geometrical** [JW06, Sto09]. **Geometrically** [MMSW06]. **Geometry** [DWZ09]. **Geophysics** [ET05]. **Geostrophic** [Med00]. **Gilbert** [BBP08, BP06a]. **Ginzburg** [CD01, TJ00]. **Global** [AG03, BHN02, DK00, EJ08, LMR<sup>+</sup>05, LLK<sup>+</sup>04, San00a]. **Globally** [LF99, PW09]. **GMRES** [Olv09]. **Goal** [MS09]. **Goal-Oriented** [MS09]. **Godunov** [AJG04, CGLGP08, JJ06, MP02b, Nou01, QS08]. **Godunov-Type** [AJG04, QS08]. **Good** [KJ03]. **Governed** [BZ02, CYL08, LY02b, LMTY04]. **Gradient** [AB03, DG00, HTW02, IKT01, Ova07, WZ07]. **Gradients** [BK01, Bes08, Ovt08a, Ovt08b, Rie05, Dem06]. **Graining** [KPS06]. **Graphs** [BMN04, BL00, DDE05, LN05]. **Green** [HS07b]. **Grid** [Aza02, Bea04, CMS00, CMX09, CMMR03, Dos04, LMPQ04, MX07, NV04, Neg08, NTW08a, NTW08b, Not07, TZ99]. **Grid-Based** [Bea04]. **Grids** [AAL09, ACWY00, BX03a, BX03b, BXZ07, Bel04, BHL03, BR09c, CK00, CKK01, CKPS01, Des04, Gra08, Gre07, Gro08, KK02b, Küt01, LW00a, RBX08, RWY07, SFNW05, Sch00, Zha08, Zha09]. **Ground** [BW07, Daw06]. **Groups** [Mar99]. **Growth** [BHN02, HW09b, HV05, XT06]. **Guided** [PJ01, PJ02]. **Gurtin** [BIMV08, KK02a]. **H** [EG03, HX07, WY07]. **H-Convergence**

- [EG03]. **Haar** [JK09]. **Half** [Bal03].  
**Half-Range** [Bal03]. **Halton** [HZ07].  
**Hamilton**  
 [Abg03, AM09b, BJ05, BL03, CG00, CJ09, Fer03, GP09, JKR01, KOT05, Lep00, Obe06, SV03, SD02, TCOZ03, Waa08, WF08].  
**Hamiltonian** [CCF09, HK01, JW06, KB02, MRT02b, WJ08]. **Hamiltonian-Preserving** [JW06, WJ08]. **Hammerstein** [CWX09b].  
**Handling** [LMR<sup>+</sup>05]. **Hardening** [AC00b].  
**Hardy** [BT07, HN09]. **Harmonic**  
 [BBFP07, Bar05b, BDL06, BRS02, CDS03, CM00, GPD04, HMN02, HTW09, Pie05, Sid00, VO02, CL05b]. **Hat-box** [Kup06a].  
**Heat** [Ber09, ETW08, Küg03, SL06, XZ05].  
**Helicity** [LW06b, Reb07].  
**Helicity-Conserving** [Reb07]. **Helmholtz**  
 [ADF09, BDL04, CCZ02, FW09a, HM06, SW05a, SW07]. **Hereditary** [SW00].  
**Hermite**  
 [AR08a, Bal03, BX02, BX07, GS00, MST05].  
**Hermitian** [CYN00, EL09, Ovt08a, Ovt08b].  
**Hessenberg** [LS05, LS02]. **Hessian**  
 [Ova07]. **Heterogeneous**  
 [Buf05, DZ09, KWD02]. **Hexagon** [LSX08].  
**Hexahedra** [AC03]. **Hierarchic** [AC03].  
**Hierarchical** [Beb07, LSTZ07, SSZ07].  
**High** [AC00a, Ain04, ADBN08, Bar09a, Bes08, BGS05, BL03, CGLGP08, CNPS07, CWL07, Dic07, Dic08, Dos04, Ger08, LR00, PZ04, RS04, SM08, SW05a, SSZ07, SR02, Tha08, Vic04, Zho01]. **High-Dimensional**  
 [Dic07]. **High-Frequency** [BGS05].  
**High-Lying** [Bar09a]. **High-Order**  
 [ADBN08, Bes08, BL03, CNPS07, LR00, RS04, SR02, Tha08]. **Higher**  
 [BNV06a, BNV06b, BH05b, Car05, CE09, CJRT01, Dem09, KD03, RB09, Sch09, She03].  
**Higher-Order** [BH05b, Dem09]. **Highly**  
 [BS07, CCF09, HV06, SS08]. **Hilbert**  
 [BY00b, Egg06, KF03, KK09, MP01, Mat04].  
**Hilliard** [BBG99, BB01, Fen06, KSS09].  
**HJB** [BZ03]. **Hodge** [DDO07]. **Holm**  
 [CKR08, HR06, XS08]. **Holonomic** [Jay07].  
**Homogeneous** [GS03a, RW07].  
**Homogenization** [CS08, OZ08].  
**Homotopies** [SVW04]. **Homotopy**  
 [LWW02]. **Hopf** [GKS00]. **Horner** [Peñ00].  
**Howard** [BMZ09]. **hp**  
 [BCDD06, BS06, HSS00, AC00a, Ain04, SS00a, AP02, Mel05, SST03].  
**hp}-Approximation** [AP02].  
**hp}-DGFEM** [SST03]. **hp-Discontinuous**  
 [BS06]. **hp-Finite** [HSS00, AC00a].  
**hp}-Interpolation** [Mel05]. **hp}-Version**  
 [Ain04, SS00a]. **Hybrid**  
 [CHX03, CKK02, LV08a, YD08].  
**Hybridizable** [CG09]. **Hybridization**  
 [CG05a, CG05b, CGL09]. **Hybridized**  
 [CG04]. **Hydrostatic** [BK03]. **Hyperbolic**  
 [ADBN08, AMT04, Aza02, BC05, BHL03, CLG05, CHK01, CD04, CGH05, Cou09, HSS00, JJ06, JV03, MP02b, Mor01, NP00, OS07, Par01a, Ric02, TT03, Zho01, Par06].  
**Hyperelasticity** [GH00]. **Hyperplane**  
 [PDP06].  
**Identification**  
 [Bur01, BM02, Kal00, Küg03]. **II**  
 [BX03b, BBK01, BNV06b, BRLM03, BMM05, BB09, CG05b, Da08, DGS09, EG06b, GT00, Guo09, KS01a, LV08b, MS02, Ovt03b, Ovt08b, PS02b, Par01c, PW99b, PJ02, Sch00]. **III** [DMC00, EG08, Maj05].  
**III** [AMR02, BK06, CL00, FSL05, Kal00, Mat04, PS05, Rin01]. **III-Posed** [BK06, CL00, FSL05, Kal00, Mat04, PS05, Rin01].  
**III-Posedness** [AMR02]. **Image**  
 [ABFM04, DM08, MG01, VO02]. **Images**  
 [AGY05]. **IMEX** [Bos07]. **Immersed**  
 [GLL08, WB00]. **Immersed-Interface**  
 [GLL08]. **Immiscible** [Mic03].  
**Immunology** [Luc08]. **Impact**  
 [PS02a, PS02b]. **Impedance** [MMM04].  
**Impenetrable** [CM00]. **Imperfect** [BJJ02].  
**Implicit**  
 [BBP08, BP06a, Bar09b, Bea09, BDR09, BF09a, Bre05, CM08, CW08d, DER07, EB08,



Hun01, Jay00, JJ06, KT08, PFF08, PR01, RPK04, SL06, TW06, ZLAT08, DPR06]. **Implicitly** [DD07]. **Importance** [Kaw08]. **Improved** [Bar09a, ETW08, GLL<sup>+</sup>03, Men06, Sch05, dFN00]. **Impulse** [SS08]. **Inclusion** [Bar09a, LaY09]. **Inclusions** [AKKL05, San09]. **Incompressible** [AG00, BJM09, Bel00b, BDR09, CLW04, CG05a, CG05b, DZ09, DW09, ELM00, EHL07, FVV08, GR07, GS03b, LW06a, LW07, PR01, Pro08b, SV05, SST03]. **Increment** [Wet00]. **Indefinite** [AB03, Ait05, BS07, Mis05]. **Independence** [FQ00, PW06b, WSD05]. **Independent** [AK07, Rin09]. **Index** [KMS05, LS02, Sch02a]. **Index-2** [LS02]. **Induced** [SM08]. **Inelastic** [RW07]. **Inequalities** [BTW03, Bel00a, BZ02, Bre03, HS00, LR00, NZ06, Sch00, kDH07]. **Inequality** [EKS04]. **Inertial** [IK08]. **Inexact** [An05, IC00, Dos05, Jay00, PSWS08, Rie05]. **Inf** [BMN02, FJMT07]. **Inf-Sup** [BMN02, FJMT07]. **Infinite** [ASXZ08, CW08d, DK99b, Du08, GPHA07, HN09, LPSS00]. **Infinite-dimensional** [Du08]. **Infinity** [GS09]. **Infinity-Dimensional** [GS09]. **Inflow** [Kwe00]. **Ingham** [NZ06]. **Inhomogeneous** [BH05b, CM00, MMS03]. **Initial** [BK03, CG08, CKR08, Cou09, HMS09, KW01, Pal04, Rod07, SEL09, Spi07]. **Inner** [BCT00, Beu02, Rie05, SS03a]. **Inner-Outer** [SS03a]. **Input** [BNT07, NTW08a, NTW08b]. **Inscribed** [Can05]. **Inspired** [HR09]. **Instability** [SM08, WS07]. **Integral** [AAL09, Bea04, BH05a, BH04, CX08, CHX03, CWX09a, CHK01, CMX02, CN02, DD04, DM06, HS02, HMN02, KK02b, LZ07, SV00, SW09, VV08]. **Integrals** [BL01, BL05, HHT08, HS09, HV06, HC09, ST07]. **Integrated** [PJ01, PJ02]. **Integration** [BCM04, BS03, CO02, CN01, Dic07, DV08, EF01, Hel09, JPCH06, MRT02b, MT05, NJN07, Pal04, PDP06]. **integrator** [Tha06]. **Integrators** [BOS05, GFD00, HL03a, LMW08b, SS00c]. **Integro** [BPV01, BH07, CJ09, CP03, LLRZ00, PPT05, SEL09]. **Integro-Differential** [BPV01, BH07, CP03, LLRZ00, PPT05, SEL09]. **Integro-Partial** [CJ09]. **Integrodifferential** [BS06, vPS03]. **Interaction** [DGHL04, Fen00, GMM07]. **Interface** [BEL08, CZ09, CZZ06, Fen06, GR09, GLL08, SFNW05, WB00]. **Interfaces** [FGS07, Say09, TZ99]. **Interior** [ByS06, BLS08, BPD08, Bur05, BFH06, BZ06, Bur09, CW03a, DZ09, EK09, HKW09, Sch00]. **Intermediate** [KJ03]. **Intermediate-Rank** [KJ03]. **Internal** [Cao05, DK08a]. **Interpolation** [ACDD05, AL09, BH09, BX02, Cao05, Cao07, CK06b, DS02, DB03b, DL08b, FW09b, GM06a, GS00, Han08, HK09, Ker00, KZ04, LSX08, LLF01, LY02a, MNS09, Mar99, Mel05, PY04, PD05, Sar03, Xu03, BX07, VV08]. **Interpolations** [Cod09]. **Interpolatory** [GS05, LM06]. **Intersecting** [SVW04]. **Interval** [BP05, Boy02, LaY09]. **Intervals** [DV02, GPHA07]. **Intrinsic** [CO02]. **Invariant** [HX00]. **Inverse** [BG01, BHM09, BHMR07, CHR04, DL08a, Hac07, HR00, MP01, RS00, SS03b]. **Inverses** [Du08, Slo04]. **Inversion** [RF03, WT06]. **Inverting** [LFPS06]. **Involving** [FSL05, Nik02]. **Ionic** [BDS01]. **Irreducible** [SVW01]. **Irregular** [BACCF09, BHL03, KRW08, Sch00]. **Irregularly** [AGY05]. **Isentropic** [Vas01]. **Isoparametric** [AD00, DHHN<sup>+</sup>03]. **Isothermal** [BJL03]. **Itô** [Röβ09]. **Iterated** [BH05a, KW01]. **Iteration** [ALNO07, PS04, RP02, Rie05]. **Iterations** [Jay00]. **Iterative** [BHN09, BEL08, Bur01, DK08a, Den03, EL09, Huh01, Lu99, Med02, MT04, PW99a, PW99b, WTW00, Egg06]. **Iteratively** [BHM09].

**J** [DGS03]. **Jacobi** [BJ05, CJ09, WF08, Abg03, AM09b, BL03, CG00, CW08c, Fer03, GP09, Guo06, JKR01, KOT05, Lep00, Obe06, Ovt08a, Ovt08b, SV03, SD02, TCOZ03, Waa08]. **Jacobi-Weighted** [Guo06]. **Johnson** [Say09]. **Joint** [FR08]. **Joseph** [GR09]. **Jump** [CV05, GLL08, Hau08, sQlXsJjB05, WB00]. **Jump-Diffusion** [sQlXsJjB05]. **Jumps** [LL00, MSTZ08].

**Kaczmarz** [BK06]. **KDV** [She03, LL06, YS02]. **Keller** [BCC08, EK09]. **Kelvin** [BG05]. **Kernel** [Da08, Sch07, Wen09]. **Kernel-Based** [Sch07]. **Kernels** [AGH00, BPV01, CHX03, Lin06, PPT05]. **Killed** [Men06]. **Kind** [CMX02, LZ07, SV00]. **Kinetic** [ADN00, BHN02, DJ05a, GT03, Jun00, MP03, WN00]. **Kirchhoff** [ACPC02a, Per09, dVNS07]. **Knots** [Rab00]. **Kolmogorov** [Cai03]. **Korobov** [WSD04]. **Korteweg** [MS01a]. **Kronrod** [PP00, dP07]. **Krylov** [Bad05, BWWW08, EE06, KDZ09, LS05, LW03, SS03a]. **Kutta** [Bos07, BB00, BT02, BS03, CM08, CG08, DK08a, DMO07, DHV00, FS04, Gug01, HO08, Hig05, Hig06, HO05, Jay00, Jay07, Röß09, RS04, Sch02a, ZS04, ZS06].

**L** [Gue04]. **L2** [yDLST06]. **L2-Projected** [yDLST06]. **Lagrange** [AG00, ADF09, BXZ07, BK02, BRS02, HSY04, LLF01, Mar05, SV02, SSTT05, Woh00]. **Lagrangian** [Ayo02, Bes04b, Bes08, CS05, CF07, Fer03, Gui03, WW07]. **Lagrangians** [Dos05]. **Laguerre** [ASXZ08, BBC08, She00]. **Landau** [BBP08, BP06a, CD01, EW00, TJ00]. **Laplace** [DD07, Dos04, LS06a, LFPS06, OPR09, WT06]. **Laplacian** [DK08b, Ju00, LY01b, LY02a]. **Large** [Bad05, BM06, BIR09, FW09a, Fer03, JL02, LR02, QS08, RP02, SD09, XT06]. **Large-Scale** [Bad05]. **Lattice** [JY09, KPS06, KJ03, SKJ02, WSD04]. **Law** [Hla01, Mis05, TW07]. **Laws** [AJG04, AR08a, ADN00, AMT04, BC05, BHL03, Bre05, BKT09, CLG05, CGLGP08, DMO07, GM00a, yGpMT01, Kim02, LV08a, LV08b, LRR00, LW00c, MP03, Mic02, Mor01, MV00, NP00, Par01a, QS08, ThT00, TT03, Tow00, Tow01, WN00, ZS04, ZS06]. **Lax** [Küt01]. **Layer** [CL05b, Med00, ST03]. **Layers** [BDL04, BDL06, CW03b]. **Leapfrog** [KN08]. **Least** [Arm01, ACS09, AM06, BY00a, BMMS05, BMM05, BG05, Cai00, CS02, CS03, CS04, CLW04, CK06a, CW08a, CMM03, CMMR03, DKS02, DS07, DL03, yDLST06, DLST07, GHS03, HDVV09, KMM00, KLS03, KS05, Lee99, LMW06, LMW08a, Lin08, MMM04, MS01b, MS02, Maj05, MRS00, MMSW06, RLK09, Sta05, Sta07, Tha00]. **Least-Squares** [AM06, BY00a, BG05, CS04, CLW04, CK06a, CW08a, DS07, DL03, yDLST06, DLST07, KLS03, KS05, Lee99, LMW08a, Lin08, MS01b, MS02, Maj05, MRS00, RLK09, Sta07]. **Leffler** [SH08]. **Legendre** [ASXZ08, CYL08, MS00a, MS01a, Par01b, Par01c, SW04b, WML03]. **Leibniz** [dB03a]. **Lemma** [Chr05]. **Leslie** [BFP08b]. **Less** [DKW08]. **Level** [FK01, He03, KW06, KT09, SGM01]. **Lévy** [CV05, Kaw08]. **Liapunov** [BGR02]. **Lie** [EF01, Mar99, Ran08]. **Life** [KK02a]. **Life-Span** [KK02a]. **Lifshitz** [BBP08, BP06a, EW00, FL03]. **Like** [Ber02, BGMV08, CJ09]. **Limit** [DLV08, KGDD05]. **Limits** [LR02]. **Line** [AG09, Ovt08a, Ovt08b]. **Line-search** [AG09]. **Linear** [ACS09, AM06, BOL00, Ber02, BF09a, BB09, BHV08, BGP05, BH08, BPV01, Bue07, CS03, CDS03, CS04, CLW04, CZ09, Cao05, CH02, CHR04, DF09, Des04, Des09, DK08b,

DS09, DZ02, DGHL04, ELL02, FLT08, FQ00, GM09, GS03a, GPHA07, GKK03, GP07, GH03, HDVV09, HTCP09, HM07, HRS03, IKT01, JW00b, KMM00, KS01b, KK00, LLRZ00, LRV00, LMW08b, Mat04, MST06, MN05, Mer08, Pao07, PW06a, PW99a, PW99b, PW06b, SBBHP04, Sch09, SW03, SW00, SD05, Sto09, Van05, Wan00, WS07, dFN02, Dem06, LLK<sup>+</sup>04, San00b). **Linearization** [JPCH06, San00b]. **Linearized** [PYD06, TT00]. **Lines** [Jia04]. **Lions** [GH03]. **Liouville** [AGG06, GM01, JW06, WJ08]. **LIP** [LWW00]. **Lipschitz** [CM08, DLST07, MT05, SV02]. **Lipschitz-Continuous** [SV02]. **Liquid** [BFP08b, DGS01, LW00b, DGS03]. **Lloyd** [DEJ06, EJR08]. **LMS** [ER02b]. **Lobatto** [Hel09]. **Local** [AH06, BHPS09, Ber09, CCPS00, CW03a, CKPS01, CKSS02, DL08a, Daw02, DS09, DJLT09, GKK03, HW09b, HK09, JPCH06, Kun01, LY01b, LY09b, LW04, PW06b, RC01, San00a, WZ04, XS08, YS02]. **Local-in-Space-timestep** [Ber09]. **Localization** [GT03, HS07b]. **Localized** [Dem06, GM09, NSV05]. **Locally** [Arb04, BN07, BLS08, CGW07, PZ04, RY05]. **Locking** [ACPC02b, CCS06, HO09]. **Locking-Free** [ACPC02b, CCS06, HO09]. **Long** [HW09b, HL00, LL06, OP00, TW06]. **Long-Time** [HL00, OP00, TW06, LL06]. **Look** [RP03]. **Lorentz** [BF08]. **Lossless** [Jia04]. **Love** [ACPC02a]. **Low** [BJM09, BRS02, BDG06, BS09, DLP05, DHHN<sup>+</sup>03, Lov05]. **Low-Frequency** [BRS02]. **Low-Order** [DHHN<sup>+</sup>03, BDG06, Lov05]. **Lower** [Car05, HS08]. **Lowest** [BR09c, Voh07]. **Lowest-Order** [BR09c, Voh07]. **Lubrication** [ZB00]. **Lubrication-Type** [ZB00]. **Lumping** [CJRT01]. **Lyapunov** [DV02, SD09]. **Lying** [Bar09a]. **MacCamy** [BIMV08, KK02a]. **Macroelement** [AS05b]. **Macroscopic** [CP05]. **Magnetization** [BW07]. **Magnetodynamics** [BPS09]. **Magnetostatic** [BRS08, DLST07]. **Magnetostatics** [HL02]. **Magnus** [HL03a]. **Majda** [KB02]. **Malik** [Ese06]. **Malliavin** [KHY09]. **Manifold** [XY07]. **Manifold-Valued** [XY07]. **Manifolds** [IK08]. **Manteuffel** [FLT08]. **Mapped** [SW04b]. **Mapping** [MR07]. **Maps** [Bar05b, BFP08a, Bar09b, HT08, HTW09, Pie05]. **Marching** [AM09b, CFFM08, For09]. **Markov** [GM05b, SS00b]. **Mass** [BW07, BCC08, CJRT01, GLY00, GGGS08, Gui03, HW09a]. **Mass-Free** [HW09a]. **Mass-Transport** [BCC08]. **Massic** [Gib04]. **Matched** [BDL04, BDL06, CW03b, CL05b]. **Matching** [CDZ00, SBM01]. **Material** [Lin07]. **Mathematical** [CZZ06, MG01, PJ01, QVZ01]. **Matrices** [Beb07, Chu00, GM06b, Lu99, Slo04, SS03b, BD07]. **Matrix** [BSC07, BR09a, Böt06, BWW08, DWZ09, EE06, GM06a, HHT08, Huh01, IZ05, KM06, LS06b, Sim05]. **Matrix-Free** [BWW08, GM06a]. **Matrix-Vector** [Sim05]. **Max** [FS01]. **Maximal** [CG00, Gei06, LBH03, WF08]. **Maximum** [AD99, Bea09, CMS00, DDP00, DLM09, DL08b, KK09, KL06, Kop01, Kop08, MP02a, Rod07]. **Maximum-Norm** [MP02a]. **Maxwell** [BBP08, BBM01, BRS02, BF08, Buf05, BP06b, CDZ00, CDZ03, CE05, DJLT09, GPD04, HL02, HPS04, HMN02, HZ03, Nic01, VW04]. **Mean** [Du00, For08, HY00, Hig00, LN05]. **Mean-Square** [Hig00]. **Measure** [Bar04, DGH03, MPPS02]. **Measurements** [FGS07, Küg03]. **Measures** [Hau02, Hau08, Vic04]. **Mechanics** [GK09b, Med02, MT04]. **Media** [BH05b, CHD07, Che00, CDZ03, CE05, DPvDC08, ELS<sup>+</sup>02, KS05, KT08, LSY03, Mic03, MX07, NV04, SS07, SW05b, WD00].

**Medium** [EL08, EJS09, HO08, MMS03, NT02, Oel02, Wan08]. **Memory**

[CP03, PF02, PFF08]. **Mesh**

[AH06, AK07, CCGHR03, Cao07, DK99a, DWZ09, DL02, EP08, GM06b, GGHS08, JR05, LBD<sup>+</sup>03, PS08, TT03, WSD05].

**Meshes** [AC03, BR05, BLS05b, Cao07, CDZ00, CW03a, CDG08, DDO07, DJ05b, EHL07, GS07, Kun01, LRV00, MPP03, Nic01, QZZ07, TV05, WH08, WZ07].

**Meshfree** [LV08a, LV08b, KL06]. **Meshless**

[GW07, LS08, Sch07]. **Method**

[AG00, Ach02, AM09a, AR08a, AW09, AB03, ACPC02a, ACPC02b, ADF09, An05, AA08, AR02, AM06, Aya00, AGAN05, ASXZ08, Aza02, BG01, BNT07, BTW03, Bad06, BL00, BJ03, BW07, Bar09a, BFV09, BBFP07, BP06a, BHM09, BL01, Bea04, Bel00b, BBM01, Bel04, BMPT09, BRS02, BRS08, BD03, BF09a, BB09, BG04a, BGR02, BL05, BGP05, BH08, BDW99, BLS08, Bre05, BLS05b, BPD08, BHS06, BM02, BFH06, BZ06, CK01, Cai03, CPR<sup>+</sup>03, CK06a, CX08, CW08a, CLG05, CS07, CMR09, CTU09, CHX03, CWX09a, CFFM08, CKNS08, CCPS00, CGLGP08, CS05, CWL07, CL05a, CW03b, CS08, CYL08, CKR07, CT00, CDZ03, CKPS01, CGW07, CG08, CDG08, CGSS09, CF03, CP03, DZ09, DP00, Daw02, DD07, Den08, Deu07, DK08b, DV05, DS09, Dos04, Du00, DG00, DL03]. **Method**

[DLST07, DJLT09, EHW00, EE06, EP08, ELL02, FN09b, FN09a, For09, GAT00, GLY00, GG09, Gie05, GP99, GP00, GSS06, GL00, yGpMT01, GH03, Guo06, GS07, Guo09, GZ09, HDVV09, HW03, HR09, HL02, He03, HLP08, Her03, HR00, Hig00, HKW09, HL03b, HL09b, HZ03, JJ06, JPCH06, JK09, JY09, Kac01, Kal00, KR05, KLPV01, KK02a, KLS03, KDW08, KS08a, KS01b, KS05, Kwe00, LS09, LN04, LS07a, Lee04, LS06a, LM07, LF99, LX09, LS02, Liu00, LLK<sup>+</sup>04, LMTY04, LFPS06, Lu99, LO09, MS00a, MS01a, MST00, MP02a,

Mar05, MTW02, Mau09, MT04, Med07, MS09, MV00, MX07, NS09, NTW08a, NTW08b, NP05, Oel02, OR04, ORG09, Ovt03a, Ovt03b, PF02, PYD06, PJ01, PJ02, PS04, Pie05, sQLXsJjB05, QX06, RP02, RW05, Rin01, Rin03, Ris01, SSTT05].

**Method** [San09, San00a, San03, San00b, Sch00, Sch05, SS00a, Seg02, She03, SLS09, SWL09, Sou05, Sta05, Sta07, Ste05, Sto09, SL99, TW07, Tha00, TK01, VV08, VW04, Wal05, WZ04, WZ05, Wan07, WS07, WSD05, WY05, WY06, WB00, WTW00, Woh00, WK01, WZ08, WML03, Xu00a, XLC02, XS08, YS02, Yan06, Ye04, Ye06, YD08, YA05, ZS06, ZLAT08, Zor00, dFN00, dFN02, dFGAN08, vdVIB07, Dar00, KL06].

**Methods** [AG09, AJG04, AC00a, AM09b, Ani09, ADZ09, AS02, ABV06, ACWY00, ABCM02, AKW05, ALNO07, AD02, AM09c, Bad05, BHN09, BK00, Bea09, Bel00a, BSES05, BM06, BHL03, BLS<sup>+</sup>05a, BBD02, Beu02, BEL08, BHMR07, BCM04, BG05, Böh08, Bos07, ByS06, BWWW08, BPV01, BK06, Bur05, BF09b, BS09, BB00, BT02, BL09, BS03, CS04, CLW04, CCGHR03, CLT05, CCS06, CW08b, CDZ00, Che00, CNQ00, CD01, CEJS02, CMX02, CC04, CGH05, CM08, CWX09b, CK00, CKK01, CKK02, CY07, CW06b, CE05, CE06, CE09, CKSS02, CG04, CG09, CGL09, CHR04, CS01, DDU02, DKS02, DK99a, Daw06, DM06, DK08a, DF09, DMO07, Dem02, Dem09, DQV07, DJ05b, yDLST06, DL02, EW00, ER02b, EK09, EG06a, EG06b, EG08, ELM00, ELS<sup>+</sup>02, FLL<sup>+</sup>06, Fen00, FK01, FW09a, FN09a, FS04]. **Methods**

[FS09, FS01, FSL05, Gan06, GH07, GHS03, GMM07, GLL08, GPHA07, GKS00, GK09a, GK09b, GLQZ02, GP07, GS03b, Hac07, HW09b, HL00, Hel09, HX00, HMS02, Hig05, Hig06, HS02, HO05, HOS09, HM07, HK07, HSS00, HMS03, HS07b, Huh01, HRS03, Jay00, Jay07, JD04, JR05, KOT05, KF03, KLR06, KM03, KL05, KWD02, KHP02,

KV02, KK00, LV08a, LMPQ04, LW00a, LFB02, LLRZ00, LS08, LBD<sup>+</sup>03, LSTZ07, LY09a, LS06b, Lu99, MST05, MS01b, MS02, Maj05, MMRR06, MMR06, Mar01, MTW03, MM03, MP01, Mat04, MST06, Med02, MN05, MV03, MRT02a, NS03, Nic05, Nic06, Not07, PFF08, Pao01, Pao07, PS03, Par01b, Par01c, PW99a, PW99b, PSWS08, DEG08, PZ04, Pon07, Pro08b, QZZ07, Ran08, Ric02, Rin00, RSZ01, RWG01, Röß09, RWY07, RS04].

**Methods** [RLK09, SFNW05, SV02, SV05, SS07, SS08, Sch07, SW04a, SS09, SM08, SV03, She00, SW04b, SS03a, Sim05, SD09, SR02, ST06, SW05b, SD02, TT03, THBS09, Tha08, TF04, VO02, WY01, WY07, WW07, WH08, Wen05, Wen09, WB00, Wol00, WD00, XH05, XT06, Yan05, ZS04, Zha08, Zho01, ZLAT09, dV04, dFGAN09, BW06, Par06]. **Metrics** [Cao07]. **MFEM** [Wan08].

**Micromagnetics** [CP05]. **Mimetic** [BLS<sup>+</sup>05a, BLS05b, CMR09]. **Mindlin** [ACPC02b, Cai00, Car02, Lov05, SS09, dV04]. **Mini** [PS08]. **Minimal** [CH02, GS00, HS09, LWX00, LPWE05]. **Minimax** [WZ04, YZ07]. **Minimax-Newton** [WZ04]. **Minimization** [Bad06, DK00, FS09]. **Minimizers** [Nik02]. **Minimizing** [HW09b]. **Minmod** [KPT05]. **Minmod-Type** [KPT05]. **Minvar** [GKK03]. **Miscible** [BJM09, CHD07, Cha07]. **Miss** [AGG06]. **Miss-Distance** [AGG06]. **Mittag** [SH08]. **Mittag-Leffler** [SH08]. **Mixed** [AD99, AC00a, ACPC02a, ACPC02b, ACWY00, AW05, AB06, AGAN05, BJT00, Bel00b, BSES05, BDG06, BG04b, CPR<sup>+</sup>03, CMX09, CHD07, CK00, CKK01, CG04, CGL09, DP00, DK99a, Dem02, DV05, DL03, ELW02, ELS<sup>+</sup>02, FLL<sup>+</sup>06, FN09a, GH00, GMM07, GSWY08, HPS04, HS08, JRW02, KS05, KK00, LW00a, LBD<sup>+</sup>03, LCNY08, MX07, NS01, PF02, PW06a, PW99b, RPK04, Raf05, RSS07, Rin03, RWY07, SST03, SEL09, Sta07, Ste00, Voh07, WY05, WY06, WD00, YD08, dFGAN08].

**Mixed-FEM** [GH00]. **Mobility** [BBG99]. **Model** [ACPC02a, ACPC02b, Aya00, AD02, BNS04, BFP08b, BRLM03, BB07, BCC08, BHD06, BIR09, BHN02, BIMV08, CMX09, CP05, Che00, CD01, CW08d, DJ05a, Du00, EKS04, EK09, EB08, Fen06, GM05a, KB02, LBH03, Luc08, MX07, NJN07, OR04, PU99, Pin04, sQIXsJJB05, SSZ07, WZ08, dV04]. **Modeling** [BPS09, CHD07, DGS01, EGGM05, QVZ01, WD00, DGS03]. **Modelling** [SSTT05]. **Models** [CV05, GT03, HPS05, KS08b, RP02, XT06]. **Modes** [Sou05]. **Modified** [AB08, DF09, FN09b, FDFD09, HKY00, SW09, dV04]. **Modular** [RP02]. **Mollified** [SS08]. **Moment** [ACPC02a, DS99, FN09a, HMY07, RSZ01]. **Monge** [FN09a]. **Monotone** [BJ05, EK00, HK07, JW00a, KT08, LBH03, Waa08]. **Monotonic** [Da08, Her03, MST07]. **Monotonicity** [HRS03, Spi07]. **Monotonicity-Preserving** [HRS03]. **Monte** [ALNO07, BMPT09, Dic07, Dic08, YH06]. **Moore** [Du08]. **Moreau** [HH09]. **Morgan** [DFK00]. **Morley** [XLC02]. **Mortar** [Ach02, Bel00b, BBM01, BDW99, DDP06, GSWY08, GP00, KLPV01, KL05, KW06, Kim08a, KDW08, Kim08b, KT09, Mar01, Mar05, RBX08, WY05, Woh00, WK01, Woh05, XLC02, XH05]. **Mortar-Type** [XLC02]. **Motion** [DL09a, For08, Men06, PYD06, SSTT05, UY00]. **Motions** [Leo01, PR01]. **Moving** [Arm01, DL02, LBD<sup>+</sup>03, Pie05]. **MR1860443** [DGS03]. **Multiblock** [ACWY00]. **Multibody** [HW05]. **Multidimensional** [ADN00, BL03, KHY09, PS02b, TF04, WSE01]. **Multidisciplinary** [DG00]. **Multifield** [EG08]. **Multigrid** [AS02, Beu02, BDW99, ByS06, FV04, GP00, GPD04, HK07, Lee04, Not07, OR04, PW06a,

SS09, WK01, Woh05, XLC02]. **Multilevel** [Ait05, AH06, Bad06, Beu04, BPD08, CWX09b, CMM03, CMMR03, DE08, MMRR06, MMR06, Pfl00, Sar03]. **Multiphase** [KT08]. **Multiple** [KMS05, WZ04, WZ05, YZ07]. **Multiplicative** [BTW03, MST00, NS03]. **Multiplier** [KLPV01, SV02, Woh00]. **Multipliers** [ADF09, BRS02, CS05, HSY04, Mar05]. **Multiply** [DLST07]. **Multipoint** [WY06]. **Multipole** [BL05, Sar03, Dar00]. **Multiprecision** [BHSI08]. **Multiresolution** [CLG05, GM08]. **Multiscale** [ABV06, AB06, BHS06, CCZ02, CET09, CS08, EHW00, EGR<sup>+</sup>08, GK09b, HS07b, JPT00, Lin06]. **Multisection** [HLP08]. **Multistep** [Ber02, BD07, BW06, Han06, HRS03, MST06]. **Multivariable** [BL05]. **Multivariate** [DL05, LLF01, Peñ00, PDP06, Rab00, TWB07, dB03a]. **MultiWell** [GP99].

**Naghdi** [BB07, BHD06]. **Natural** [Dep08, Gug01, HS02, LZ08]. **Navier** [AG00, AGAN05, BACF06, CMX09, DR08, Dep08, EHL07, Fen06, FGNQ02, GR09, GGGS08, GM00b, GL00, He03, HS07a, HL09b, JLM08, KR05, KLR06, Kwe00, Liu00, LW07, LCNY08, Man06, Med07, NP05, NS05, Pro08b, Reb07, SV05, TT00, TW06, Xu00b, Xu00a, dFN00, dFGAN08, dFGAN09]. **Near** [BHV08, Ker00]. **Near-Interpolation** [Ker00]. **Near-Linear** [BHV08]. **Nearly** [BL01, HC09]. **Nearness** [Huh01]. **Necessity** [Wan01]. **Nédélec** [AC03, Say09]. **Negative** [BCT00]. **Negative-Order** [BCT00]. **Nematic** [BFP08b]. **Nets** [DLP05, PDP06, YH06]. **Neumann** [KPY04, YA05]. **Neumann-Type** [YA05]. **Neutral** [WM08]. **Neutron** [MRS00]. **Newton** [An05, BHM09, BWWW08, BK06, GK09a, GLQZ02, HDVV09, Jay00, Kal00, KF03, LF99, PSWS08, Rie05, WZ04, WSD05]. **Newton-Based** [LF99]. **Newtonian** [CLW04, DPR06, EL07]. **Nicely** [dP07]. **Nicolson** [HS07a, He03, Rod07]. **Nicolson/Adams** [HS07a]. **no** [DGS03]. **Nodal** [AB08, BFV09, HX07]. **Node** [LO09]. **Node-Based** [LO09]. **Nodes** [LLF01]. **Noise** [BHM09, BMPT09, ET08, MRT02b, BW06]. **Noises** [DZ02]. **Noisy** [Lin06]. **Non** [Ait05, Des04, EL09, ELS<sup>+</sup>02, GM01, RS06]. **Non-Cartesian** [Des04]. **Non-Fickian** [ELS<sup>+</sup>02, RS06]. **Non-Hermitian** [EL09]. **Nonaffine** [CTU09]. **Nonautonomous** [HV05, OP00, Tha06]. **Nonclassical** [LR00]. **Noncoercive** [Buf05, DGH03]. **Nonconforming** [AD99, Ain05, AR08b, AM08, Bur05, Car02, CHO07, CT00, EHW00, Gre07, HhW02, HS08, KT03, Lov05, PS03, Wan01, Xu00b]. **Nonconservative** [MP02b, TZ99, Par06]. **Nonconvex** [ABFM04, Bar04, CL05a, San09, Tow01]. **Nondegeneracy** [EJR08]. **Nondifferentiable** [CNQ00]. **Nonglobally** [MT05]. **Nonhomogeneous** [CDZ03, CE05, GLL08]. **Nonlinear** [AR08a, AB00, AGW04, Aya00, AD02, Bad05, BJ03, BHM09, BM06, BBD02, Bes04a, Böh08, BH08, BK06, CTU09, CD04, CNPS07, CHS00, CHX07, CS08, IC00, CMM03, CD03, DL08a, DMO07, DM08, DE08, EHR07, EJS09, FN09b, FN09a, FK05, FL05, GT00, Gie05, GK09b, GLQZ02, yGpMT01, HK01, Han06, HR00, HMS02, HL03b, HW05, IZ09, IK08, JW00a, Jia04, Jün01, Kal00, KF03, KK09, KR00, KDN00, KD03, KMS05, LF99, MMSW06, MTW03, MV00, NT02, Nou01, OS07, Pao01, Pao07, PS04, RS06, Rou00, SS00c, WD00, Yu06, ZLAT09]. **Nonlinearity** [BJ03]. **NonLipschitz** [AADL07]. **Nonlocal** [ALY01, AK09, BHN02]. **Nonmatching** [ACWY00, Bel04, CMS00, CDZ00, RBX08, SFNW05]. **Nonmixed** [CT00].

**Nonmonotone** [GP07, LLK<sup>+</sup>04]. **Nonnegative** [SBM01]. **Nonoscillatory** [BC05, LSTZ07]. **Nonoverlapping** [BD03, Den03, DG00, Du01, GH03, HZ03, QX06]. **Nonquadratic** [Bad06]. **Nonreflecting** [AGH00]. **Nonseladjoint** [AB03]. **Nonsimply** [RD03]. **Nonsmooth** [FK05, GK09a, Mel05, Nik02, SEL09]. **Nonstationary** [LCNY08, Pro08b, Ver05a]. **Nonstiff** [TJ00]. **Nonsymmetric** [BD07, LN04, SW05b]. **Nonuniform** [ST06]. **Norm** [Bea09, CMS00, CK06a, Car05, DDP00, DM06, DLM09, Dep08, Kop01, Kop08, LMW06, LMW08a, LWX00, LY01b, LY02a, MP02a]. **Normalization** [KGDD05]. **Norms** [AL09, FS01, Slo04, VV09]. **Note** [DFK00, JW00b, Ven09, Ver09]. **Nozzle** [KT05]. **Number** [Ain04, CW08d, FW09a, WH08]. **Numbers** [DM06, Fer03, SW05a]. **Numer** [DGS03]. **Numerical** [Abg03, AS05a, AC00b, BJ03, BW07, BHPS09, Bel00a, BNV06a, BNV06b, BRLM03, BCM04, BJJ02, BGR02, BBMZ09, BJJ03, BDS01, BM02, BL09, Cai03, CMX09, CG00, CCZ02, CHK01, CP00, CP05, Che00, CHS00, CF03, Cop07, CP03, DR08, DDE03, DPvDC08, Dic07, Du00, DZ02, EW00, EF01, EL07, EHR07, ET05, EG03, EGGM05, FL03, FGNQ02, FVV08, GK08, GKS00, GM01, HL00, HW03, HJ03, HL02, Her03, HMY07, HMS09, IZ09, JPCH06, JL02, Ju00, Jün01, Kim02, KT05, Kup06a, Kup06b, KGDD05, LMR<sup>+</sup>05, LWW02, LWX00, Lin06, LW07, LPSS00, MSZ08, MG01, Man06, MMRR06, MP02a, Mau09, Med00, MRT02a, MT05, NP00, NS09, Ort09, Pao01, Pao07, PS02a, PS02b, Par06, PR00, Par01a, PJ02, PS04, QVZ01, RC01, Rou00, STWW03, San00b, SV08, SH08]. **Numerical** [SS00b, SW00, SD09, SVW01, Spi07, SD02, THBS09, Thü08, VO02, Waa08, Wan07, WM08, XZ05, ZB00, ZLAT08, ZLAT09, kDH07]. **Numerics** [HLP08]. **Nyström** [MM03, SM08]. **Nyström-Type** [MM03].

**Obstacle** [Nou01, Vee01]. **Obstacles** [CM00]. **Occurring** [Bur01]. **Ocean** [Med00, Med07]. **Odd** [She03]. **Odd-Order** [She03]. **ODE** [Lam05]. **ODEs** [DGK03, GS03a, NJN07]. **Oil** [Che00]. **Oldroyd** [PYD06]. **One** [ALNO07, Bes04b, Bes08, CN01, DL09b, GHN03, GM00a, JR05, Kop01, KS01b, Lin08, MP02b, PYD06, PS02a, PZ04, Reu03, San03, TJ00, TT03]. **One-** [TT03]. **One-Dimensional** [Bes04b, Bes08, DL09b, GM00a, JR05, Kop01, KS01b, MP02b, PS02a, PZ04, San03]. **Open** [GMS05]. **Operations** [Böt06]. **Operator** [BGMV08, BR05, Buf05, CET09, CW08c, CNQ00, DD07, ETW08, EGR<sup>+</sup>08, HPS04, JKR01, JK09, KR00, KM06, Luc08, Olv09, PR00, SGM01, Ste03, Tha08, ZaY04]. **Operator-Based** [KM06]. **Operators** [AK07, DGS08, DGS09, FLT08, FSL05, Gei06, GM09, JW00b, KP03b, KK02b, Par01b, Par01c, Tod06]. **Optics** [JW06, PJ01, PJ02, Sto09]. **Optimal** [ADGK03, BT00, BDR09, BH09, BH05a, BH07, Cao07, CKNS08, CCS06, CYL08, CE06, CE09, CDG08, DDU02, Dem02, Den03, DER07, DL09b, DHV00, Dos05, GHN03, GGHS08, GS07, HK01, HW05, IK08, JCK08, Kaw08, KN08, KDZ09, KS08a, LMTY04, MS01a, MP01, RF03, Rin09, RV06, RLK09, SD05, SR02, Ste05, ST03, Wan00, WSE01, Wan08, WML03]. **Optimal-Order** [Wan00, WSE01, Wan08]. **Optimality** [AH06, San03]. **Optimization** [Ani09, BR09b, CU05, DG00, Du01, GK09b, GL00, HS07b]. **Optimization-Based** [BR09b, DG00, GL00]. **Optimized** [Gan06, GH07]. **Optimizing** [WT06]. **Option** [ALY01, CV05, WZ08]. **Options** [HW03, JD04, sQIXsJjB05]. **Orbits** [EF01]. **Order** [Abg03, AR08b, AM08, AW05, ADBN08, ACS09, BC05, BGM07, BOS05, BNV06a, BNV06b, BMMS05, BMM05, BCT00, BBD02, Bes08, BR09c, Böh08, BH05b, BL03,

BS09, BB00, CMMR01, CS02, CS03, CW08a, CCZ02, Car05, CGLGP08, CS05, CNPS07, CW03a, CC04, CY07, CG04, CGSS09, CGL09, CMM03, CMMR03, CJRT01, DS07, DB03b, Dem09, Dic08, DV05, DL09b, DS09, DHV00, DHHN<sup>+</sup>03, FLL<sup>+</sup>06, FK01, Ger08, GS03a, Gue04, HPS05, HSS00, HS08, IK08, Jün01, KP03a, KP07, KLS03, KEN01, KPY02, KPY04, KK00, LR00, LMR02, Lee99, LMW06, LMW08a, LFPS06, MS00a, MMM04, MKB07, MMSW06, Mar05, MN05, NPSK07, OS07, PYD06, PZ04, RPK04, RP02, Rin01, Röß09, RS04, RLK09, Sch09, She03, SK03, SE05, SR02, Sta05, SD02, THBS09, Tha08, Voh07]. **Order** [Wan00, WSE01, WS07, Wan08, ZLAT09, BDG06, Dem06, EG06b, Lov05, Tha06, KMM00, PS03]. **Ordered** [SV03]. **Orders** [BH05a]. **Ordinary** [BCM04, CM08, HJ03, JVD02, SP02]. **Orientation** [Cao05]. **Oriented** [MS09]. **Original** [CDG08]. **Orthogonal** [AB00, AB03, Ait05, BD03, BF09a, CO02, DR05, DGH02, KV02, LFB02, LS05, LCN08, PFF08, RP03]. **Oscillating** [CCZ02, SV08]. **Oscillation** [MNS00]. **Oscillatory** [CCF09, CI06, HL00, HV06, SS08]. **Oseen** [BFH06, Deu07, FJMT07]. **Osher** [BKT09]. **Osher-Type** [BKT09]. **Outer** [SS03a]. **Outliers** [Nik02]. **Output** [LWX00]. **Overdetermined** [Jay07]. **Overlap** [CDS03]. **Overlapping** [Ach02, BN07, CMS00, CKK01, DKW08, DW09, KW06, LSTZ07]. **Overrelaxation** [Lu99].

**Padé** [KM05]. **PageRank** [ALNO07]. **Pairs** [SV00]. **Panel** [GGHS08, Pon07]. **Panel-Clustering** [GGHS08]. **Pantograph** [BH07, HV05]. **Parabolic** [ADZ01, AGW04, ADZ09, BZ02, BF09a, CHD07, CEJS02, CH02, CW06b, CHL09, DK99a, DLM09, DER07, DMW01, FGS07, HO05, Ju00, Jün01, KR00, LS07a, LS06a, LMTY04, LR02, LS07b, MST05, MS01b, MS02, Maj05, MN03, MP02a, MV03, Obe06, OP00, OZ08, Pao01, Pon07, SS00a, SD05, SEL09, SY00, WD00, Yan05, Yan06, vPS03]. **Parabolic-Elliptic** [FGS07]. **Parallel** [Den03, DMW01, LS06a, QX06, SW04a, SL06]. **Parameter** [Bur01, BM02, Dep08, HH09, Kal00, Kaw08, PS05]. **Parameter-Dependent** [Dep08]. **Parametric** [Ani09, CP08, JVD02]. **Parametrized** [CTU09]. **Parareal** [MST07]. **Part** [BG01, BX03a, BX03b, BBK01, BNV06a, BNV06b, BRLM03, BMMS05, BMM05, CG05a, CG05b, DMC00, DGS08, DGS09, EG06b, EG08, Guo06, Guo09, NP05, PJ01, PJ02, Sch00]. **Partial** [BTZ04, BNT07, BHN09, CMMR01, CJ09, CMM03, DZ02, EG08, Hau08, JW06, LS07b, MMRR06, MMR06, NTW08a, NTW08b, Peñ03, San00b, Yan05]. **Partially** [Hun01]. **Particle** [CKR07, Oel02, Wol00]. **Particular** [Bar09a]. **Partitioned** [BL09, CHL09, Jay07]. **Partitions** [CS07, DL05, KK01]. **Passive** [HTCP09]. **Past** [Nou01]. **Patch** [Wan01]. **Path** [BHSI08, JD04]. **Path-Dependent** [JD04]. **Patlak** [BCC08]. **Pattern** [BGR02]. **PCG** [AK07]. **PDE** [BR09b, GH03]. **PDEs** [CTU09, CL05a, CGH05, DLM07, EG06b, Gue04, MN05, Thi08, WF08, WB00]. **Peer** [SW04a]. **Penalties** [BZ06, DZ09]. **Penalty** [ByS06, BLS08, BPD08, Bur05, BFH06, Bur09, CC04, CF03, DL06, EK09, HKW09, Mau09]. **Penrose** [Du08]. **Perfect** [Hla01]. **Perfectly** [BDL04, BDL06, CW03b, CL05b]. **Performing** [Sar03]. **Perimeter** [Hac07]. **Perimeter-Regularized** [Hac07]. **Periodic** [Bue07, CW03b, Dic07, DGK03, KGDD05, Pao01, ST06]. **Periodic-Coefficient** [Bue07]. **Perona** [Ese06]. **Perron** [JK09]. **Perspective** [ET08, Jun00]. **Perturbation** [AQR06, ABFM04, SS00b]. **Perturbations** [Sch05]. **Perturbative** [Bar09a].



**Perturbed** [Cai00, KS01a, Kop08, Lin08, Lin09, Not07, Pal04, WW07]. **Petrov** [MS00a, MS01a, CS05, LLRZ00, She03]. **Petviashvili** [PS04]. **Phase** [BNS04, CP00, Cha07, Fen06, GR07, Mic03, WWL09]. **Phenomena** [NT02]. **Photonic** [Sou05]. **Piecewise** [ACDD05, Bre03, BPV01, CZ02, ELL02, FQ00, GKK03, Han08, HSW05, Kim02, MG05, PPT05, PW09, RHA03, SW03, ThT00, WJ08, WB00, Dem06]. **Pieri** [LWW02]. **Pitkäranta** [LV04]. **Pivoting** [Peñ03]. **Pivots** [Peñ03]. **Planar** [BACCF09, Cop07]. **Planck** [BDS01, Den08, Wan07]. **Plane** [ADF09, BT00, CM01, HS08, KRW08, MGP00, MS00b, MMS03, PW06a]. **Plastic** [BMPT09, Gie05, Hla01]. **Plasticity** [Sta07]. **Plate** [ACPC02a, ACPC02b, Cai00, Car02, HhW02, Mar01, RHA03, SS09, XLC02, dV04]. **Plates** [DHHN<sup>+</sup>03, Lov05, dVNS07]. **PML** [ADGK03]. **Poincaré** [Bre03]. **Point** [IC00, CN01, DDU02, DL06, DK99b, GK09a, HSY04, HTW09, MTW03, Sch05, Seg02, SLS09, SdS06, KL06]. **Points** [BHPS09, Gib04, GS03a, LZ08, Sid00, TWV00, TWB07, Vic04, WZ04, WZ05, YZ07]. **Pointwise** [AG03, CC04, Che06, Dem09, LRV00, Sch00, SW03, Dem06]. **Poisson** [AB08, Bes04b, Bes08, BG04a, BG05, CK01, CHX07, DLV08, EF01, Fil01, Hau02, Hau08, Rin03, STWW03, SBBHP04, VVD06, Wol00]. **Pol** [SM08]. **Polar** [IZ05]. **Polyconvex** [Bar05a]. **Polygon** [Can05]. **Polygonal** [CL05a, Say09]. **Polygons** [CWL07]. **Polyhedra** [HS02]. **Polyhedral** [BLS05b, KK01, Per02]. **Polymer** [Bur01]. **Polymers** [RS06]. **Polynomial** [AGY05, BHPS09, Boy02, BPV01, CL00, DGS08, DGS09, GM09, GZ09, KZ04, NZ04, PPT05, RHA03, SVW01, SVW02, SVW04, Xu03, YD08]. **Polynomials** [Bal03, BX02, DR05, ELL02, GS00, PY04, PD05, dP07, BX07]. **Polytopes** [GS05]. **Population** [Aya00, AD02]. **Pore** [DPvDC08]. **Pore-Scale** [DPvDC08]. **Porous** [CHD07, Che00, DPvDC08, EL08, EJS09, ELS<sup>+</sup>02, HO08, KS05, KT08, LSY03, Mic03, MX07, NV04, Oel02, SW05b, Wan08, WD00]. **Poroviscoelastic** [SS07]. **Posed** [BK06, CL00, FSL05, Kal00, LLF01, Mat04, NS05, PS05, Rin01]. **Posedness** [AMR02, BK03]. **Position** [RSZ01]. **Positive** [CDS03, DK99b, PF02, PFF08]. **Positive-Type** [PF02, PFF08]. **Positivity** [Jün01, ZB00]. **Positivity-Preserving** [Jün01, ZB00]. **Possessing** [BGMV08]. **Possible** [PP00]. **Posteriori** [Ain05, Ain07, BX03a, BX03b, Ber09, Bur09, CTU09, CET09, Car02, CLT05, CHO07, DR08, DLM09, EP08, ETW08, EGR<sup>+</sup>08, FV03, GM00a, KP03a, Kop01, Kop08, LN05, Lar00, LY01a, LY02b, LY02a, LLK<sup>+</sup>04, LMTY04, LY09b, LW04, MN03, NZ04, Nic05, Nic06, NSV05, OPR09, Ort09, RSS04, RSS07, Vee01, Ver05b, Ver05a, Ver09, Voh07, WY05, Dem06, Mel05]. **Postprocessed** [AGAN05, dFGAN08]. **Postprocessing** [GAT00, HL09b, LS07b, MTW03, RV06, Yan06, dFN02, dFGAN09]. **Potential** [DD04, PD05, ZaY04]. **Potentials** [BRS08, RD03, WJ08]. **Power** [UY00]. **Practical** [MT09]. **Prandtl** [CW08d]. **Precipitation** [DPvDC08]. **Preconditioned** [AB03, An05, BHN09, BD07]. **Preconditioner** [BPD08, CN02, DL06, DDP06, KL05, PW06a, Reu03]. **Preconditioners** [Ait05, AH06, Ber02, BN07, BHV08, CDS03, CYN00, GM06b, MKB07, SdS06]. **Preconditioning** [CS99, HX07, KF03, KP03b, Ovt03a, Par01b, Par01c]. **Predicted** [LS02]. **Prediction** [HK01]. **Predictor** [BT02, Rin01]. **Predictor-Corrector** [BT02, Rin01]. **Premixed** [KB02]. **Prescribed** [Chu00]. **Presence**

[BDL06, GGHS08, Raf05]. **Preservation** [Ran08, THBS09]. **Preserving** [BBFP07, CP08, DLV08, EF01, Han08, Hig05, HRS03, JW06, Jün01, LW06b, MG01, MRT02a, NZ04, RS04, SS00c, SR02, TF04, WJ08, Yu06, ZB00]. **Pressure** [BC06b, BG04a, BF09b, DL03, GMS05, Pro08b, SV05, STWW03, Wet00]. **Pressure-Correction** [GMS05]. **Pressure-Poisson** [BG04a]. **Pressureless** [BJL03, CKR07]. **Prewavelets** [FQ00]. **Pricing** [CV05, WZ08]. **Primal** [AC00b, BEL08, CKK02, DL06, GMM07, KWD02, TV05]. **Primal-Based** [DL06]. **Primitive** [Med07, STWW03]. **Principle** [For09, KK09, KL06]. **Principles** [BG05]. **Priori** [CCPS00, Des04, EGR<sup>+</sup>08, HW05, JRW02, Lar00, MPP03, RWG01, RV06]. **Problem** [ALY01, AGW04, AM08, ABV06, ACS09, ASXZ08, BT00, BMN02, Bel00b, Bel04, BMPT09, BDRS00, BRS08, BC06b, Beu02, Beu04, BBMZ09, Böt06, BK03, Bur01, BS03, CS02, Che06, Cod09, CHL09, CF03, Cop07, DL08a, DP00, DH07, Dos04, DK99b, DGHL04, DLST07, DJLT09, EL07, ETW08, Fen00, FGS07, GMM07, GP99, Gui03, GM00b, HhW02, HR07, Hla01, Huh01, KLS03, KS08a, Kop01, KS01b, Kop03, Kop08, KS05, KPY04, Kun01, LM07, LWX00, LLK<sup>+</sup>04, MGP00, MS00b, MG05, Nou01, OR04, Rod07, RLK09, San03, Sch02b, ST03, TT00, VVD06, WY01, Wen09, Xu00b, XLC02]. **Problems** [AGG06, AG03, AB00, AB03, Ait05, ADF09, Ani09, AA08, Arb04, AW05, ABCM02, AK09, AKW05, AM09c, Aza02, BC09, BS07, BY00a, Bar04, BJM09, BHM09, BK02, Bea04, BJT00, Bel00a, BSES05, Ber04, BZ02, BNV06a, BNV06b, BMMS05, BMM05, Ber02, BCT00, BN07, BD03, BHMR07, BG04b, BH08, BLS08, BLS05b, BHS06, BK06, BZ06, BS09, CLW04, CW08a, CZ09, CMR09, CCGHR03, CCF09, CCPS00, CS05, CNPS07, CEJS02, CW03a, CC04, CL05b, CS08, CYL08, IC00, CK00, CY07, CKPS01, CG04, CGSS09, CGL09, CD03, CHR04, CI06, Cou09, DDU02, DKS02, DZ08, DDP00, DDO07, Dem09, DLM09, DDP06, DS09, DMW01, EP08, ELM00, EG03, FLL<sup>+</sup>06, FK01, FVV08, FSL05, GH07, GG09, GLL08, GK09a, GM01, Gre07, GP07, Hac07, HW09a, HB00, HS00, Her03]. **Problems** [HR00, HH09, Hip02, HM06, HO05, HN09, HRW01, HSS00, HSY04, HW05, HMS09, JV03, Kac01, Kal00, KP03a, KP07, KF03, KS01a, Kim08a, Kim08b, KWD02, KDZ09, KT03, KW01, KK00, Lar00, LN04, LS07a, Lee99, LMPQ04, LS06a, LMW06, LFB02, Lin08, LRV00, LY01a, LY02b, LMTY04, LY09a, LY09b, MKB07, MS01b, MS02, Maj05, MN03, MRS00, MP02a, Mar01, Mar05, MP01, Mat04, Med02, MT04, MPP03, MG03, Nic06, NSV05, Obe06, OP00, Ovt03a, Ovt03b, Pal04, Pao01, PS02a, PS02b, PS03, Par01b, Par01c, PS05, PZ04, RSS04, RSS07, Rin09, RWG01, RC01, San00a, SS00a, SP02, SW00, SdS06, SD05, Spi07, SS03b, Tha00, Tid02, Vee01, WW07, Yan06, Ye04, Ye06, Zho01, BW06, Dem06]. **Procedure** [AGG06, Den03]. **Process** [Sid00]. **Processed** [BCM04]. **Processes** [GM05b, Gug01, Kaw08, KS08b, Rou00]. **Processing** [DM08, Nik02, VO02]. **Product** [CN01, VV08, WK01]. **Products** [BCT00, Sim05]. **Profile** [HM07]. **Profiles** [Vas01]. **Programming** [Dos05, JCK08]. **Projected** [yDLST06, DJLT09, KLQ<sup>+</sup>08]. **Projection** [AG00, AAL09, BHN02, DM06, GS03b, HS07b, Kal00, LS06b, MMR06, MMR06, MP01, Pro08b, Sim05, SD09, WY01, XY07]. **Projection-Regularized** [Kal00]. **Projection/Lagrange** [AG00]. **Projections** [CW03a, HTW02, XTH07]. **Prolate** [CGH05]. **Prolongation** [BR05]. **Prolongation/Restriction** [BR05]. **Proof** [GKK03, WN00]. **Propagation**

[AGH00, BJT00, Bes08, CE06]. **Proper** [KV02, LCN08, RP03]. **Properly** [LLF01]. **Properties** [Bea09, CW08d, CP03, Ese06, HZ07, Sch02a, Ste07, Vas01, Ven09, XY07]. **Property** [FS04]. **Proximity** [Gro08]. **Pseudo** [DKIK07, FK05]. **Pseudo-Arclength** [DKIK07]. **Pseudo-Transient** [FK05]. **Pseudospectra** [JW00b]. **Pseudospectral** [KLS03, SW04b, Slo04]. **Pseudotransient** [KLQ<sup>+</sup>08]. **Pure** [BACF06, KMM00].

**QR** [DV08]. **Quadratic** [AG03, BDRS00, Dos05, Ova07]. **Quadrature** [Ayo02, BNV06b, BP05, GM09, HT08, HC09, MM03, PP00, Peh09, TWB07, YH06, dP07]. **Quadratures** [Bal03]. **Quadrilateral** [ABF05, BR09c, CKK01, DHN<sup>+</sup>03, MNS09, PS03, Xu00b]. **Quadrilaterals** [AP02, AC03, BLS<sup>+</sup>05a]. **Qualitative** [CP03]. **Quantization** [DE08]. **Quantum** [Ayo02, DZ08, GM05a, MST07, PU99, Pin04]. **Quartic** [DS02, Han08]. **Quasi** [BD07, CKNS08, CW03a, Dic07, Dic08, EL07, GLQZ02, GP07, GS07, HDVV09, KF03, KS01b, KK00, Lin07, LRV00, LY01b, LY02a, LLK<sup>+</sup>04, Med00, Pao07, RC01, San03, San00b, VV08, YH06]. **Quasi-Continuum** [Lin07]. **Quasi-Geostrophic** [Med00]. **Quasi-interpolation** [VV08]. **Quasi-Linear** [GP07, KS01b, KK00, LRV00, Pao07, LLK<sup>+</sup>04, San00b]. **Quasi-Monte** [Dic07, YH06]. **Quasi-Newton** [GLQZ02, HDVV09, KF03]. **Quasi-Newtonian** [EL07]. **Quasi-Norm** [LY01b, LY02a]. **Quasi-Optimal** [CKNS08]. **Quasi-Static** [RC01]. **Quasi-Toeplitz** [BD07]. **Quasi-Uniform** [GS07, CW03a]. **Quasicontinuum** [DL09b, LO09]. **Quasilinear** [MMRR06, MMR06, MGP00, Dem06]. **Quasineutral** [DLV08]. **Quasistatic** [SW00].

**Radial** [PD05]. **Radiation** [HW09b]. **Radon** [XTH07]. **Random** [BNT07, BHM09, CS08, HZ07, Hau02, Hau08, KS08b, NTW08a, NTW08b]. **Random-Start** [HZ07]. **Randomly** [SKJ02]. **Range** [Bal03]. **Rank** [KJ03]. **Rapid** [AGH00, BS08]. **Rapidly** [CCZ02, SV08]. **Rate** [BTW03, Bad06, CKNS08, JKR01, KDZ09, Rin09, Waa08]. **Rate-Independent** [Rin09]. **Rates** [AK07, BHM07, DDU02, Grü03, LW00c, MS09, Rod07]. **Ratio** [AC00a, Cao05]. **Rational** [BT00, Gib04, Han08, KDZ09, LS06b, ST07, SWL09]. **Raviart** [BR09c, DL08b, RBX08, WTW00]. **RBFs** [FW09b]. **Reaction** [AM09c, BNV06a, BNV06b, BZ06, Bur09, CDG08, GH07, Kop08, Lin08, LPWE05, Luc08, Nic06, Rou00, Voh07, WSE01]. **Reaction-Diffusion** [Kop08, Lin08, Luc08]. **Reactive** [SW05b]. **Real** [Boy02]. **Reconstruction** [AKKL05, LSTZ07, MN03, ST06, XZ05, XTH07]. **Recovery** [BXZ07, CZ09, CKK02, ET08, FR08, NZ04, Ova07, WZ07]. **Recovery-Based** [CZ09]. **Rectangular** [AM08, AW05, BCDD06, CK00, FLL<sup>+</sup>06, Gre07, HS08, RWY07, Zha09]. **Recursive** [Chu00, GK09b]. **Reduced** [CTU09, Dep08, GMR07, HPS05, IK08, RP02]. **Reduced-Order** [HPS05, IK08]. **Reduction** [CS01, KDZ09, KHP02, LS05, MT09, Pal04, RSS04]. **Refinable** [Che02]. **Refined** [BS07, LW00a, dFGAN08]. **Refinement** [AH06, AS02, Cao07, EP08, GM06b, GGHS08, JR05]. **Refinements** [KK01]. **Reflections** [JW06]. **Regimes** [GT03, KU02]. **Region** [BM06, GK09b, Hig99, AG09]. **Regions** [HSW05, SN04]. **Regression** [MT09]. **Regular** [AGG06, CS99, DKW08, Gro08, TV05].

**Regularity**

[BJM09, CH02, Gei06, LPWE05, ThT00].

**Regularization** [BHMR07, Bur01, CL00, DL08a, Egg06, Egg08, FSL05, FDFD09, HH09, HM07, IKT01, LS02, MP01, Mat04, PS05, Rie05, Rin01, SGM01, SWB<sup>+</sup>04].**Regularized** [BHM09, FV03, Hac07, Kal00].**Regularizing** [BK06]. **Rehabilitation**[BR09c]. **Reissner**

[ACPC02b, Cai00, Car02, Lov05, SS09, dV04].

**Related**

[Bal03, GM01, HHT08, Huh01, Med07].

**Relation** [Ain04]. **Relative** [Thü08].**Relaxation**[BK00, Bes04a, CNPS07, GHN03, GH07, JW00a, JW00b, JPT00, LRR00, LW00c, LW00, LW03, NP00, Par01a]. **Reliable** [BOL00, Bar05a, Hac07, Hla01, Vee01].**Remarks** [Buf05]. **Renormalized**[LV08a, LV08b]. **Representations** [Hig05].**Residual** [CS07, Car02, FJMT07, HL09a,Ris01, San00a]. **Residual-Based** [Car02].**Residual-Free** [FJMT07, San00a].**Residual-Free-Bubble** [CS07]. **Residuals**[VV09]. **Resolution** [SSZ07]. **Resonance**[HN09, Nou01]. **Respect** [Sch05].**Restarted** [EE06]. **Restricted**[CDS03, FS01, NS03]. **Restriction** [BR05].**Restrictions** [FS04]. **Results**

[AS05a, BBM01, BMZ09, BH07, DL09a,

MMRR06, MMR06, YZ07]. **Retarded**[DD04]. **Revisited** [WSD05]. **Richards**[RPK04]. **Richardson** [FLL<sup>+</sup>06, Sid00].**Riemann** [Nou01]. **Rigid** [ADZ01, SSTT05].**Rigorous** [HJ03, JCK08, NS09]. **Robin**[QX06, DQV07, Lee99]. **Robin-Type**[QX06]. **Robust** [Ain05, KS01b, MTW02,

Med02, MT04, Pfl00, Tod06, Ver05b, Ver05a].

**Robustness** [Grü03]. **Rootfinding** [Boy02].**Roots** [DR05, ER02b]. **Rosenbrock**[HOS09]. **Rosenbrock-Type** [HOS09].**Rough** [HLP08]. **RT** [AP02]. **Rules**

[Dic07, Dic08, DK99b, HC09, KJ03, LO09,

MM03, SKJ02, WSD04]. **Runge**

[Bos07, BB00, BT02, BS03, CM08, CG08, DK08a, DMO07, DHV00, FS04, Gug01, HO08, Hig05, Hig06, HO05, Jay00, Jay07, Röß09, RS04, Sch02a, ZS04, ZS06].

**Saddle** [lC00, DDU02, DL06, GK09a,

HSY04, HTW09, SdS06, WZ04, WZ05].

**Saddle-Point** [lC00, HSY04, SdS06]. **Safe**[LMR<sup>+</sup>05]. **Saffman** [GR09]. **Sampled**[AGY05]. **Sampling** [BT07, Kaw08, ST06].**Satisfaction** [JVD02]. **Satisfying**[AD00, DS99]. **Saturated** [SS07, WD00].**Saturation** [Mat04]. **Scalable** [kDH07].**Scalar** [Bar04, BRS08, Bre05, CMMR01,

GM00a, Kim02, LV08b, MP03, Mis05,

MV00, QS08, TW07, ZS04]. **Scale**

[Arb04, Bad05, DZ08, DPvDC08, Egg08,

LZ07, RP02, HS07b]. **Scaled** [Peñ03].**Scales** [Egg06, MP01, OZ08]. **Scaling**[DDP06, MST05]. **Scattered** [LS09].**Scatterers** [CM00]. **Scattering** [AM06,

BGS05, BH05b, BH04, CWL07, CW03b,

CL05b, CM00, HLP08, Hip03, HN09, SW09].

**Scheme** [BACF06, BACCF09, BNV06b,

BDR09, Bes04b, Bes04a, Bes08, BCC08,

BHN02, BKT09, CJ09, CHD07, Cha07,

CW08d, CKR08, CV05, DK08a, DDE03,

DLV08, DPvDC08, DPR06, DM08, DGH03,

DE08, Ese06, EGGM05, EHL07, Fil01,

For08, GGGS08, HR06, HMN02, JW06,

Jün01, Kim02, KU02, Kop03, Küt01, LV04,

Leo01, LW00, LW06b, MPPS02, Mic03,

MP02b, NT02, Nou01, PS02a, PS02b, Peñ00,

Pin04, Reb07, RW00, Rod07, TW06, Tow00,

Tow01, Wan00, WSE01, WJ08, WWL09,

Yu06, HS07a]. **Schemes**

[ADZ01, ADN00, ADBN08, AMT04, Ayo02,

BC05, BJ05, Bar05b, BLW08, BGM07, BF08,

BZ03, BL03, CNPS07, CO02, CD03, Cou09,

CF07, DD04, Des09, EB08, ET05, EG03,

Ger08, GM08, GT03, Gre07, Gro08, GMS05,

HTCP09, IZ09, IKT01, JPT00, JV03, Jun00,

KPT05, KT08, LV08a, LV08b, LR00,

LMR02, LRR00, LW00c, LPWE05, MP03,

Mis05, NP00, Obe06, Par01a, QS08, RW07, SGM01, STWW03, SSZ07, SY00, Ven09, Waa08, WN00, Wet00, XY07, ZB00, oWZ06]. **Schmidt** [BGR02]. **Scholes** [HW03, KN00]. **Schrödinger** [AMR02, AMR03, ADZ09, BJ03, BBD02, Bes04a, DF09, Gra08, HL03a, IZ09, MPPS02, Sze04, Tha08, ZaY04]. **Schrödinger-Type** [AMR02, AMR03]. **Schubert** [LWW02]. **Schwarz** [An05, BTW03, Bad06, BN07, CDS03, DKW08, DW09, FK01, FS01, GHN03, Gan06, GH07, KW06, MST00, NS03]. **Scott** [DFK00]. **Scrambled** [HY00]. **SDEs** [BW06]. **SDFEM** [ST03]. **Search** [Kaw08, Ovt08a, Ovt08b, AG09]. **Secant** [HDVV09]. **Second** [AW05, Böh08, BS09, CS02, CW08a, CCZ02, CS05, CW08c, CMX02, CW03a, CC04, CY07, CG04, CGSS09, CGL09, DHV00, DK99b, FLL<sup>+</sup>06, FK01, GS03a, HR00, KP03a, KP07, KLS03, KPY02, KPY04, KK00, LZ07, MKB07, MN05, NPSK07, OS07, Röß09, SV00, SD02, Dem06, EG06b, PS03]. **Second-Order** [CS02, CW08a, CW03a, CC04, CGSS09, DHV00, KP03a, KP07, KLS03, KK00, OS07, Dem06, PS03, EG06b]. **section** [KT05]. **Sectorial** [LFPS06]. **Segel** [BCC08, EK09]. **Seidel** [Reu03]. **Selection** [Hig99, PS05]. **Self** [GM01, Kim02, Lar00, MP01, Ait05]. **Self-Adjoint** [GM01, Lar00, Ait05]. **Self-Regularization** [MP01]. **Self-Similar** [Kim02]. **Semi** [ASXZ08, Bar09b, BDR09, Bes04b, Bes08, CW08d, CF07, DPR06, DK99b, Egg06, EB08, Fer03, GPHA07]. **Semi-Implicit** [Bar09b, BDR09, CW08d, EB08, DPR06]. **Semi-Infinite** [ASXZ08, DK99b, GPHA07]. **Semi-iterative** [Egg06]. **Semi-Lagrangian** [Bes04b, Bes08, CF07, Fer03]. **Semicirculant** [KP03b]. **Semiconductor** [CHK01, RSZ01]. **Semidefinite** [JCK08, DEG08]. **Semidiscrete** [CH02, DDE03, DGHL04, Gou02, Maj05, Neg08, RF03, Vas01]. **Semidiscretization** [MS01b]. **Semigeostrophic** [FN09b]. **Semilinear** [CGLGP08, CH02, HO05, Kop08, LS07a, Maj05, Yan06]. **Semimonotonic** [Dos05]. **Semismooth** [CNQ00]. **Semismoothness** [SS03b]. **Sensitivities** [SP02]. **Sequence** [Sid00]. **Sequences** [BSC07, HZ07, HY00]. **Sequential** [GM05b, LS02, Rin01]. **Series** [BB00, DK08a, Pie05, Rin00, BOS05]. **Set** [BHPS09, GK09a]. **Set-Valued** [GK09a]. **Sets** [Leo01, LLF01, NSV05, Per02, SVW01, SVW02]. **Setting** [MP02a]. **Settings** [Du08]. **Severall** [Ovt08b]. **Shadowing** [HJ03, OP00]. **Shallow** [DMC00, Nou01, Sta05]. **Shape** [AQR06, CP08, LM06, TV05]. **Shape-Preserving** [CP08]. **Shape-Regular** [TV05]. **Sharp** [ELS<sup>+</sup>02, GS05, MP03]. **Shear** [BDR09, PR01]. **Shear-Dependent** [PR01]. **Shell** [BB07, BHD06]. **Shifted** [SKJ02]. **Shishkin** [LRV00]. **Shishkin-Type** [LRV00]. **Shock** [KEN01, Ran08, SK03, SE05, Vas01]. **Shock-Capturing** [Ran08]. **Shocks** [LR00, Mic02]. **Shooting** [KMS05]. **Shrinkage** [SWB<sup>+</sup>04]. **SIAM** [DGS03]. **Sided** [RSS07]. **SIDEs** [SWB<sup>+</sup>04]. **Sign** [CFFM08]. **Signals** [AGY05]. **Signorini** [ACS09, HR07]. **Similar** [Kim02]. **Simple** [BB09, GM06b, Rab00]. **Simplicial** [BR05]. **Simplified** [Jay00]. **Simulating** [MT09]. **Simulation** [BMN04, Bel00a, BIR09, CCZ02, DPvDC08, GPPP06, HMY07, Jia04, JL02, KHP02, Men06, Oel02, RP02, SS07, THBS09]. **Simulations** [DG00, Med00]. **Sinc** [AA08]. **Sinc-Based** [AA08]. **Single** [Küg03]. **Singular** [AGG06, AAL09, AKW05, BL01, BY00b, BPV01, CK01, CX08, CHX03, Chu00, CN01, DM06, Guo06, HL02, HMS03, HC09, KDN00, KD03, KW01, PPT05, Pie05, VV08].

**Singularities**

[CK01, Dos04, LMW06, LM07, LMW08a].

**Singularly**[KS01a, Kop08, Lin08, Lin09, WW07]. **Size** [SSZ07]. **Size-Structured** [SSZ07]. **Sliding** [DL09a]. **Slyozov** [FL03]. **Small**

[AKKL05, HS09, HL03b, Med07, BW06].

**Smooth** [ACDD05, Bar09b, BSES05, Can05, CZ02, Che02, CN01, DJ05a, Dic08, PW09, ThT00, WB00, ZS04, ZS06]. **Smother**[RHA03]. **Smoothing**

[Bea09, CNQ00, ER02a, KLP08, Tod06].

**Smoothness** [DGH02, Gro08, XY07].**Sobolev** [Arm01, AK09, Car05, Guo06,PDP06, SKJ02]. **Soft** [SWB<sup>+</sup>04]. **Solid**[Fen00, GMM07]. **Solids** [CP00]. **Solitary**[LPSS00]. **Solute** [BNW06]. **Solute**[QVZ01]. **Solution** [ADF09, BS08, BOL00,

BHPS09, BR09b, BHN02, BDS01, CMX09,

CET09, CF03, DR08, DK99a, DGK03,

ETW08, FVV08, FSL05, GK08, GHV00,

GM01, Her03, Hla01, Kac01, KW01, MRS00,

Oel02, PR00, Rou00, SW00, SD09, SVW01,

SVW02, SVW04, Ste03, ZLAT08, kDH07].

**Solutions** [Ayo02, Bar09a, Bar04, Ber04,

BH05a, CG00, CW03a, CW06a, Che06,

EK00, FLL<sup>+</sup>06, FL05, GS03a, HJ03, JVD02,

Kim02, KT05, Lep00, LaY09, Pao01, PS04,

San00b, SBBHP04, ThT00, Wal05, WB00,

WM08, ZS04, ZS06]. **Solver** [Beu02].**Solvers** [Beu04, HSY04, Lam05, Man06].**Solving**

[AK09, Bad05, BJ03, BHV08, Cai03, CX08,

CWX09a, CWX09b, Dos04, GP99, Gue04,

MP02b, Tha00, Wan07, WML03, YD08].

**Some** [AAL09, Bel00a, Ber02, BMZ09,

Buf05, DZ02, Her03, KM05, NT02, Nic05,

Nic06, SV00, Zho01]. **Souganidis** [KB02].**Source** [JKR01, Luc08, OD09, ZLAT09].**Space**

[AJG04, AD02, Ber09, BGMV08, CD04,

CG05a, CG05b, DL05, DFK00, Den08,

DER07, EHR07, GT03, HW09a, HX07, HN09,

JR05, KF03, KK09, KHP02, LX09, OZ08,

PR01, Pro08a, Rin00, SE05, TJ00, WK01].

**Space-Fractional** [EHR07]. **Spaced**[AKKL05]. **Spaces**

[Arm01, AK09, BG01, BY00b, BT07, CU05,

CP03, Dic08, DWZ09, Guo06, HX07,

KLPV01, Mat04, PDP06, RWG01, SGM01,

SKJ02, WSD04, Woh00, YZ07, YH06].

**Spacetime** [JJ06]. **Span** [KK02a]. **Sparse**

[Gra08, JK09, KK02b, NTW08a, NTW08b].

**Sparsity** [FR08]. **Spatial**

[AMR02, Cha07, FG99, KMM00, RS04].

**Spatially** [RW07]. **Special**[CDG08, DDP06, DZ02, Seg02]. **Specialized**[Jay07]. **Spectra** [JW00b]. **Spectral**

[AGG06, AR08a, AW09, Ani09, ASXZ08,

BBK01, BRLM03, BC06b, BB07, BD07,

BGR02, CGH05, CYL08, DV02, DK99b,

DGS01, ET08, GT00, yGpMT01, HMS03,

Lep00, LX09, LFPS06, LL06, MST05,

MMS03, MG05, Par01b, Par01c, PW99a,

PW99b, Rin03, She00, SW04b, SW05a,

SW07, SWL09, WML03, dFN00, DGS03].

**Spectral-Difference** [Rin03].**Spectral-Galerkin** [SW07]. **Spectrally**[PR00]. **Spectrum**[BSC07, Ber02, CW08c, ZaY04]. **SPH**[MV00]. **Sphere**

[FW09b, GM06a, GM09, MKB07, Xu03].

**Spheres** [BBFP07, BFP08a, DJ05b, HX00].**Spherical** [CZZ06, CW06a, CN01, DJ05b].**Spherically** [HS09]. **Spheroidal** [CGH05].**Spin** [BW07]. **Spin-1** [BW07]. **Spline**

[AB08, AB00, AB03, Ait05, BD03, BF09a,

CK06b, DFK00, HRW01, HK07, KLP08,

LS09, LFB02, MST06, PFF08, RHA03,

VV08]. **Splines** [DS02, SBM01]. **Split**[AS05b, DF09, MP02b]. **Split-Step** [DF09].**Splits** [SBM01]. **Splitting**[BBD02, EGR<sup>+</sup>08, Gra08, JKR01, KR00,

Luc08, NT02, RW07, SV05, Sch09, Tha08].

**Spreading** [BGN03, BNW06]. **Spurious**[CW08b]. **SQP** [BM02, SV02]. **SQP-Type**[BM02]. **Square** [Arm01, HY00, Hig00].**Squares** [ACS09, AM06, BY00a, BMMS05,

BMM05, BG05, Cai00, CS02, CS03, CS04, CLW04, CK06a, CW08a, CMM03, CMMR03, DKS02, DS07, DL03, yDLST06, DLST07, GHS03, HDVV09, KLS03, KS05, Lee99, LMW06, LMW08a, Lin08, MMM04, MS01b, MS02, Maj05, MRS00, MMSW06, RLK09, Sta05, Sta07, Tha00, KMM00]. **Squeezable** [DGH02]. **Stability** [AC00a, AMT04, BS07, Bar05b, BLW08, BF08, BIMV08, BF09b, Cha07, Cou09, DS99, DD04, Des09, ER02b, Ese06, FQ00, FW09b, Gie05, Gug01, GGGS08, HS07a, Hig00, HMY07, Hig05, Hig06, HV05, JY09, KU02, Lam05, LV08a, LN04, LWW00, Mic02, RS04, SGM01, SL06, SS00c, SR02, Ste07, SY00, THBS09, TW06, Ven09, XT06, YA05, oWZ06]. **Stabilization** [BDG06, BF09b]. **Stabilized** [ABV06, BC06a, BC09, Bel04, BG04a, Bur05, DV05, HM06, HSS00, HS07b, KLR06, LV04, MPP03, NS01, SS09]. **Stable** [AR02, BJ03, BCT00, BG04a, DS02, FJMT07, FDFD09, GZ09, LS08, NPSK07, Ric02, Sch02b, She00, WZ05, WWL09]. **Stage** [DK08a]. **Staggered** [BLW08, GFD00, Küt01]. **Stair** [Lu99]. **Star** [DLP05]. **Start** [HZ07]. **State** [BW07, DH07, HH09, Rin03]. **State-Constrained** [DH07]. **Static** [KOT05, RC01, SV03]. **Stationary** [AM09b, BL09, CLW04, CW08d, GP09, PS04, PU99, Ver05b]. **Statistical** [BHMR07, CW08d]. **Statistics** [JLM08]. **Steady** [Man06, Rin03]. **Steepest** [BCC08]. **Stefan** [Sch02b]. **Step** [Aya00, DF09, Ger08, SW04a, SL99, Ven09]. **Stepping** [BS06, CHL09, HTCP09, LMTY04, XT06]. **Steps** [QS08]. **Stepsize** [FS04, HMS09, Spi07]. **Sticky** [CKR07]. **Stieltjes** [dP07]. **Stiff** [NP00]. **Stiffness** [DWZ09]. **Stochastic** [Ayo02, BTZ04, BNT07, BZ03, BB00, BT02, BL09, CWX09a, DK08a, DZ02, ET05, GS09, Hau02, Hau08, Hig00, HMS02, HMY07, KPS06, Kaw08, LL00, LS07b, LMW08b, Luc08, MSZ08, MRT02a, MT05, NTW08a, NTW08b, Röß09, WM08, Yan05]. **Stokes** [Fen06, AG00, AD99, AC00a, AM08, ABV06, AGAN05, ASXZ08, BC09, BMN02, Bel00b, Bel04, BACF06, BC06b, BG04a, BDG06, BF09b, Cai00, CMX09, Che06, CKSS02, CG05a, CG05b, CG09, Cod09, DS07, DR08, Dep08, DQV07, DL03, yDLST06, EL07, EJS09, EHL07, FGNQ02, Ger08, GR09, GMS05, GGGS08, GM00b, GL00, He03, HS07a, HL09b, JLM08, KR05, KLR06, KS08a, Kwe00, LW06a, Liu00, LY02b, LW07, LCNY08, Man06, MTW02, MS00b, Med07, MPP03, MX07, NP05, NS05, PW99b, PS08, Pro08b, Reb07, RY05, Rod07, RV06, RLK09, SV05, TT00, TW06, Ven09, WY01, Wen09, Xu00b, Xu00a, Ye06, dFN00, dFGAN08, dFGAN09]. **Stokes-Type** [Med07]. **Stokes/Darcy** [CMX09]. **Stokes/Euler** [Xu00a]. **Strain** [Hla01]. **Strang** [Des09, Gra08]. **Strategies** [ER02a, Peñ03]. **Stratigraphic** [EGGM05]. **Streamfunction** [BACF06]. **Streamline** [Liu00]. **Stress** [CS03, Hla01]. **Stress-Displacement** [CS03]. **Stress-Strain** [Hla01]. **Strong** [DR08, HMS02, Hig05, Hig06, Lin09, LMW08b, RS04, SR02, SS03b, YH06]. **Strong-Stability-Preserving** [RS04, SR02]. **Structure** [Böt06, DER07, DGHL04, MRT02a]. **Structured** [SSZ07, WH08]. **Structures** [CW03b]. **Study** [CHK01, LBH03, Yu06]. **Sturm** [AGG06, GM01]. **Subcritical** [BCC08]. **Subdiffusion** [ZLAT08]. **Subdivision** [Gro08, LM06, PW06b, XY07, Yu06, Zor00]. **Subdomains** [Ach02, DKW08, KRW08]. **Subgrid** [Arb04, AB06, KR05, KLR06]. **Suboptimal** [Dem02]. **Subregions** [KW06]. **Subspace** [BM06, EE06, FS09, KDZ09, LS05, LW03, Ovt03b, SS03a]. **Subspaces** [Sch05]. **Substructuring**

[BEL08, PW99a, PW99b, WTW00].  
**Successful** [Lu99]. **Sufficiency** [Wan01].  
**Sufficient** [ALNO07]. **Summation** [LO09].  
**Sup** [BMN02, FJMT07]. **Supercell** [Sou05].  
**Superconducting** [Du00].  
**Superconductivity** [CD01, EKS04].  
**Superconvergence** [AAL09, BX03a, BLS<sup>+</sup>05a, BH05a, BH07, CW03a, CKPS01, ELW02, ELS<sup>+</sup>02, HTW02, LW00a, LZ08, LLK<sup>+</sup>04, RWY07, Sch05, WY01].  
**Superconvergent** [BXX07, WZ07].  
**Superlinear** [AK07, BK01]. **Superlinearly** [LF99]. **Superreplication** [BBMZ09].  
**SUPG** [EM03, San03]. **Support** [BHV08, NT02]. **Supported** [kDH07]. **Sure** [HMY07]. **Surface** [BMN04, Daw06, DDE05, FGS07, GR07, HW09a, STWW03, Sch02b, TT00].  
**Surfaces** [Bar09b, CP08, DDE03, DD07, Dem09, Gib04, HLP08, ORG09, Zor00].  
**Surfactant** [BGN03, BNW06]. **Sweeping** [KOT05, QZZ07, TCOZ03]. **Symmetric** [BFV09, BF09b, CDS03, DDE03, DL02, GLQZ02, Hip02, HS09, LF99, LBD<sup>+</sup>03, Ovt03a, Ovt03b, Sch05, SVW02, SS03b, SW05b, Vic04]. **Symmetries** [WZ04, WZ05]. **Symmetrizable** [ZS06].  
**Symmetry** [Ran08]. **Symplectic** [MRT02a, MRT02b]. **Synthetic** [BB09, Van05]. **System** [ACS09, BB01, BHPS09, BACF06, BMMS05, BMM05, Bes04b, Bes08, CMMR01, CS02, CS03, CD04, CHD07, CHS00, CKSS02, CG05a, CG05b, CMM03, CMMR03, DS07, DMC00, DLV08, DGS01, Fil01, HMN02, Jün01, KMM00, Lee99, LMW06, LMW08a, Lin09, MMM04, MMSW06, Med07, Rin03, RLK09, SSTT05, Sta05, Vas01, Wol00, YD08, oWZ06, DGS03]. **Systems** [ADN00, ADBN08, AMT04, Bad05, BOL00, BP05, BHV08, Bos07, CDS03, CET09, CYN00, CS99, CW06a, DL09a, DER07, DV05, DGK03, DL06, EL09, EF01, EG06a, EG06b, EG08, GW07, GM01, HDVV09, HK01, HTCP09, HPS05, IK08, Jay07, JJ06, JW00a, KK09, KDN00, KD03, LMR<sup>+</sup>05, LMW08a, LMW08b, MST07, Mic02, MRT02a, MRT02b, MP02b, NP00, OS07, PW99a, PW99b, RP02, SN04, SVW01, SVW02, SVW04, SY00, THBS09, YD08, ZS06, Par06].

**Talbot** [WT06]. **Taming** [WH08]. **Tau** [CW08b, CW08c]. **Taylor** [NJJ07].  
**Tchebycheff** [BP05]. **TD** [BF08].  
**Technique** [CCF09, CL05b, Gue04].  
**Techniques** [Gui03, ZLAT08].  
**Temperature** [BDS01, Küg03, RW00].  
**Tension** [GR07, Sch02b, TT00]. **Tensor** [Bad05, DM08, JK09]. **Tensor-Krylov** [Bad05]. **Tensorial** [Gib04, SWL09]. **Term** [LBH03, PF02, PFF08, ZLAT09].  
**Terminations** [Jia04]. **Terms** [BRS08, DR05, JKR01, Luc08, Nik02, OD09, Par01a].  
**Tessellations** [DEJ06]. **Test** [BHPS09, Wan01]. **Testing** [Böt06]. **Tests** [FL05]. **Tetrahedral** [KK01, Kun01].  
**Tetrahedron** [AS05b]. **Thalmaier** [KHY09]. **Their** [BG05, DK08a, Du01, Lu99, PY04, BW06, MST06]. **Theorem** [FLT08, FL05, Kup06a]. **Theorems** [BG01].  
**Theoretical** [DL09a, LMPQ04, MMR06, Par06].  
**Theoretically** [kDH07]. **Theories** [EG08].  
**Theory** [AQR06, AP02, Cai03, CHK01, CZZ06, DV02, FS01, Guo06, Guo09, Moo05, NS03, Pal04, PD05, SV03, SS00b, EG06a].  
**Thermally** [BPS09]. **Thermoelasticity** [Cop07]. **Thermoviscoelastic** [CF03].  
**Theta** [Hig00]. **Thin** [ACPC02b, BGN03, BNW06, BHN02, RSS04, RHA03]. **Third** [MS00a, She03]. **Third-Order** [MS00a].  
**Thomas** [BR09c, DL08b, WTW00]. **Three** [AH06, Bea04, Bel04, BGM07, CPR<sup>+</sup>03, CG05b, Cod09, DZ08, DDP00, DK99b, GGGS08, Guo06, Guo09, GZ09, HLP08, HZ03, KLPV01, Kim08b, KT09, KWD02, LM07, LMW08a, LZ08, Pon07, RD03,



SGM01, Van05, WTW00].

**Three-Dimensional**

[BGM07, DDP00, GGGS08, HLP08, KWD02, LM07, LZ08, Pon07, RD03, Van05].

**Three-Field** [Cod09]. **Three-Level** [KT09, SGM01]. **Three-Point** [DK99b].

**Three-Scale** [DZ08]. **Thresholding**

[GH05]. **Tikhonov** [FDFD09]. **Time** [AC00b, AGH00, Aya00, BHN09, BDL06, BBD02, BHV08, BS06, BS03, CD04, CL05b, CHL09, CM00, Da08, Den08, DS09, EM03, EHR07, EB08, Ger08, GFD00, GPD04, Gra08, GMS05, Gui03, HW09b, HL00, HTCP09, Han06, He03, HS07a, HL03a, HMN02, Jia04, JLM08, KR05, LFB02, LWX00, LMTY04, MST05, MS01b, OP00, OZ08, Pao01, QS08, RW00, RW07, Sch09, SS00a, Sch02b, SK03, SR02, Tha08, TW06, VW04, WW07, XT06, DER07, HW09a, JR05, LX09, LL06, PR01, Pro08a, Rin00, BNV06a].

**Time-Averaged** [JLM08].

**Time-Continuous** [Gui03].

**Time-Dependent** [BHN09, DS09, EM03, Ger08, Gra08, GMS05, He03, HS07a, HL03a, KR05, MST05, Tha08, WW07].

**Time-Depending** [AC00b].

**Time-Discretization** [EB08].

**Time-Domain** [AGH00, Jia04, VW04].

**Time-Harmonic**

[BDL06, CM00, HMN02, CL05b].

**Time-Periodic** [Pao01]. **Time-Space**

[CD04]. **Time-Stepping**

[BS06, HTCP09, LMTY04, XT06].

**Timestep** [Hig99, Ber09]. **Timestepping**

[Lam05]. **Timoshenko** [CCS06, HO09].

**Tocher** [SBM01]. **Toeplitz** [BD07, CYN00].

**Tomographic** [RF03]. **Tomography**

[MMM04, RS00]. **Tool** [Moo05].

**Topological** [LR02]. **Topology** [Hac07].

**Total**

[CS01, DK00, FS04, FV03, FS09, SWB<sup>+</sup>04].

**Total-Variation-Diminishing** [FS04].

**Tracking**

[BHSI08, Cha07, GLL<sup>+</sup>03, GM00b].

**Tractability** [YH06]. **Traction** [KMM00].

**Trajectories** [Ju00]. **Transfer** [ETW08].

**Transform** [BR09a, WT06, Sar03].

**Transformation** [KDW08, LS06a].

**Transformed** [NS09]. **Transforms**

[CZ02, LFPS06]. **Transient**

[BC06a, BF09b, FK05]. **Transition** [DJ05a].

**Transitions** [CP00]. **Transmission**

[HM06, Jia04, Tid02]. **Transmissions**

[JW06]. **Transport** [BB09, BCC08, BHN02,

CG08, CDG08, Gie05, Gui03, JPT00, KU02,

MRS00, Rin00, SW05b, Van05].

**Transport-Projection** [BHN02].

**Transport-Reaction** [CDG08]. **Treatment**

[DMC00, FGNQ02]. **Tree**

[JD04, sQIXsJjB05]. **Triangle**

[Cao05, Hel09, LSX08, TWV00]. **Triangular**

[AR08b, BXZ07, Beb07, CET09, CJRT01,

QZZ07, SWL09]. **Triangulation** [DFK00].

**Triangulations** [FQ00]. **Tridiagonal**

[BOL00]. **Trigonometric** [YD08].

**Trivariate** [AS05b]. **Truncated** [MM03].

**Truncation** [CI06, MTW03]. **Trust**

[AG09, BM06, GK09b, Hig99].

**Trust-Region** [BM06, GK09b, AG09].

**Turán** [Peh09]. **Turbulent**

[BRLM03, KB02]. **Turning** [GS03a]. **Two**

[Arb04, BRLM03, BH09, BHD06, BX02,

BLS08, BH05b, CMX09, Cha07, CG05a,

CHL09, DDO07, DB03b, DKW08, DK99b,

FK01, Fen06, GMM07, GM00a, GR07, He03,

KL05, KW06, Kop03, Lin07, Lin08, LZ07,

Mar05, Med00, Mic03, MX07, Neg08, Not07,

RSS07, SW04a, SE05, TT03, TW06, TK01,

TV05, Wan00, oWZ06, BX07].

**Two-Dimensional**

[BLS08, BH05b, DDO07, GMM07, Kop03,

Lin07, TT03, TW06, TV05, Wan00, oWZ06].

**Two-Grid** [CMX09, MX07, Neg08, Not07].

**Two-Layer** [Med00]. **Two-Level**

[FK01, He03, KW06]. **Two-Phase**

[Fen06, GR07, Mic03]. **Two-Point** [DK99b].

**Two-Scale** [Arb04, LZ07]. **Two-Sided**

[RSS07]. **Two-Step** [SW04a]. **Type**

[AJG04, AMR02, AMR03, BH07, BM02, BKT09, BT02, FG99, GP07, HO08, Hau08, HMS02, HOS09, KPT05, KK01, LRV00, LRR00, LLK<sup>+</sup>04, Man06, MM03, Med07, PF02, PFF08, PZ04, QX06, QS08, XLC02, YS02, YA05, ZB00, MKB07].

**Ulam** [JK09]. **Ultra** [BMPT09].

**Ultraspherical** [PP00, dP07]. **Unbounded** [BS08, HB00, HSW05, KDZ09, MST05, SGM01, She00]. **Uncertain** [Hla01].

**Unconditional** [SL06]. **Unconditionally** [BJ03]. **Unconstrained** [DP00, WK01].

**Underdetermined** [CW06a]. **Underwater** [ADZ09]. **Unified** [ABCM02, Bac06, BC09, Bur05, CY07, CGL09, YZ07]. **Uniform** [BK02, BDL06, Da08, DM06, Des09, DE08, GS09, GS07, KU02, LW00a, LRV00, Pin04, PW09, WW07, Zha08, CW03a]. **Uniformly** [JPT00]. **Unilateral** [Bel00a, Cop07, RC01].

**Unit** [Xu03]. **Unsteady**

[BACF06, Mor01, Ven09]. **Unstructured** [BX03b, BXZ07, KMS05, Küt01, Lin06].

**Unsymmetric** [LS08, Sch07]. **Updates** [SV02]. **Upper** [VV09]. **Upscaling**

[Arb04, AB06, KM06]. **Upwind** [BC05, BGP05, Bre05, Kop03, Mis05, SV03, TF04].

**Upwinding** [ER02a]. **Use** [DK08a, WF08].

**Useful** [AK09]. **Using**

[AGG06, AQR06, AAL09, BC06a, BWWW08, Bur05, CK01, Cod09, CP08, DL05, DGK03, FS01, FL05, Hel09, JK09, KDW08, KHY09, Kup06b, Luc08, Ova07, RP02, Rie05, RHA03, ST07, She00, SWL09, Ste03, WN00, Woh00, YH06, GSWY08, Zha08]. **Uzawa** [Bac06, BMN02, IC00, NP05].

**Validated** [DLM07]. **Validity** [Say09].

**Valuation** [ALY01]. **Value**

[AA08, AKW05, Ber04, Ber02, BK03, CS02, Cou09, DKS02, Dos04, EP08, FVV08, Her03, HMS09, JCK08, KS01a, KLS03, KW01, LLK<sup>+</sup>04, Pal04, Pao01, Rod07, SP02, Spi07].

**Valued** [FR08, GK09a, XY07]. **Values**

[Chu00, DK08a]. **Vanishing**

[BH05a, FN09a, yGpMT01]. **Vanka**

[Man06]. **Vanka-Type** [Man06]. **Variable** [ADZ01, Aya00, BF09a, BGMV08, DB03b, KF03, KT05, LW07, Sim05, ZLAT09].

**Variable-Order** [ZLAT09]. **Variables**

[BX02, SW04a, BX07]. **Variably** [WD00].

**Variance** [KHP02, MT09]. **Variant** [MR07].

**Variates** [GM05b]. **Variation**

[CS01, DK00, FS04, FV03, FS09, SWB<sup>+</sup>04].

**Variational** [AK09, Aza02, BTW03, BS07, BMN04, Bar04, Bel00a, BZ02, CCGHR03, CD03, EKS04, HS00, HS07b, kDH07].

**Variations** [AG03]. **Vector**

[FR08, FW09b, RD03, Sim05, WTW00].

**Vector-Valued** [FR08]. **Vectors**

[Che02, Gib04]. **Velocity** [BC06b, BLS<sup>+</sup>05a, CFFM08, DL03, GS03b, GM00b].

**Velocity-Changing** [CFFM08].

**Velocity-Correction** [GS03b].

**Velocity-Pressure-Vorticity** [DL03].

**Verification** [KDN00, KD03]. **Version**

[AC03, Ain04, BG01, BCDD06, Gou02, Guo06, GS07, Guo09, LS07a, SS00a].

**Vertically** [BK03]. **Very** [Ber04, Fer03].

**Via** [AK07, Xu00a, BR09a, BCT00, BHN02, CT00, CG05a, CG05b, Gib04, KF03, Kaw08, MT09, Pro08b]. **Vibration** [HO09, LFB02].

**View** [MTW03]. **Viscoelastic**

[EM03, HS00, Lee04, RS06]. **Viscoelasticity** [SW00]. **Viscoplasticity** [CHS00].

**Viscosities** [BDR09, PR01]. **Viscosity**

[AR08a, BIR09, CLG05, yGpMT01, KR05, Lep00, LW07]. **Viscous**

[ELM00, Kwe00, Oel02]. **Vlasov**

[Bes04b, Bes08, Fil01, Sch09, Wol00]. **Void**

[BNS04]. **Voltage** [PU99]. **Volterra**

[BPV01, BH05a, BS06, CHX03, CL00, Da08, LLRZ00, Rin01, SV00]. **Volume**

[AGW04, BGP05, BH08, CLT05, CHD07, CL05a, CKK01, CY07, CDZ03, CE05, DDO07, Des04, DM08, DGH03, DJ05b, EP08, ELL02, EHL07, Fil01, GHV00, JJ06, LR02, Mau09, Mer08, Mic03, Nic05, Nic06,

OPR09, PZ04, RWY07, SFNW05, SBM01, Wen05, WN00, Ye04, Ye06]. **Volume-Type** [PZ04]. **Voronoi** [DJ05b, DEJ06]. **Vortices** [Du00]. **Vorticity** [BC06b, DL03, vdVIB07]. **Vries** [MS01a].

**Wagner** [FL03]. **Walls** [QVZ01]. **Walsh** [Dic08]. **Water** [DMC00, Daw06, Sta05]. **Water/Surface** [Daw06]. **Wave** [Ain04, AGH00, BS08, BFP08a, Bar09b, BJT00, BGS05, CW03b, CGH05, CE06, CE09, CJRT01, FW09a, FG99, GHN03, GFD00, Gie05, GSS06, JRW02, JR05, KM06, KPY02, KPY04, Neg08, NPSK07, PS04, Per09, SW05a, oWZ06]. **Wave-Type** [FG99]. **Waveform** [BK00, GHN03, GH07, JW00a, JW00b, LW03]. **Wavelet** [CZ02, CD03, CHR04, DDU02, DKS02, KS08b, LPWE05, SWB<sup>+</sup>04, Ste03, Ste07, vPS03]. **Wavelets** [DS99, DL05]. **Waves** [ADF09, CM00, LPSS00, MMS03, PJ01, PJ02, SS07, Sto09]. **Weak** [AD00, AMR02, Ayo02, BMPT09, Ber04, BHN02, EJR08, LL00, MSTZ08, Pie05, SBBHP04, Waa08]. **Weakly** [AAL09, BPV01, CHX03, PPT05, VV08]. **Weighted** [BG01, BZ06, CW08a, DZ09, DLP05, FS01, Guo06, HSW05, HRW01, JY09, LMW06, LMW08a, SKJ02, WSD04]. **Weighted-Norm** [LMW06, LMW08a]. **Weights** [Peh09]. **Well** [BK03, CGLGP08, GT03, NS05, Nou01]. **Well-Balanced** [CGLGP08, GT03, Nou01]. **Well-Posed** [NS05]. **WENO** [BL03, WS07]. **While** [EF01]. **Whitney** [BR05, RB09]. **Widths** [KS01a]. **Wiener** [KHP02]. **Wigner** [Gou02, MPSS02]. **Wigner-Measure** [MPSS02]. **Without** [CW08b, Lin07, BMN02, GS09]. **Worsey** [AS05b]. **Writhe** [Can05].

**Yield** [Hla01]. **Yosida** [HH09, Ven09]. **Young** [Bar04].

**Zakai** [GPPP06]. **Zeros** [Boy02, GS03a, KDN00, KD03, Seg02]. **Zipper** [MR07]. **Zolotarev** [BT00]. **Zooming** [MG01].

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