A Complete Bibliography of Publications in the SIAM Journal on Optimization

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
FAX: +1 801 581 4148
E-mail: beebe@math.utah.edu, beebe@acm.org, beebe@computer.org (Internet)
WWW URL: http://www.math.utah.edu/~beebe/

12 March 2021
Version 3.33

Title word cross-reference

(k + 1) [BHKM14]. (Lr, Lr, 1) [SVD14].
(n - 1) [JMW08]. + [BAC11, Las10]. 0
[BZ04, Che15, Las02, LS91, RQMG12]. 0.999
[Mas97]. 0 < q ≤ 1 [WL11a]. 1
[BZ04, CCFP05, Che15, HAN11, HL06,
Las02, LS91, RQMG12]. 1/k² [AP16]. 1024
[GR94]. 2
[DV16, HL11, IS02b, Lin08, Ris94, ZL02]. 3
[STY15]. 4 [STY15]. 5 [Eck94]. α [MLRR93].
B [FT07, HMW13, MS11c]. b ≤ 3 [VJFC18].
C [HK09]. C₁⁻¹ [BDS10, BK10]. Cᵏ⁻¹
[Luc95]. D₂ [Dan93]. ℓ₀ [SBFA17]. ℓ₁
[DV14, LMW16, CCR17, DLR16, DV16,
KV17, CO12a, GP04, HY208, ZL12]. ℓ₂
[SBFA17]. ℓₘ [LL09]. ℓₙ [WL11a]. ε

[BBR16, BPT97]. F [MS11c, MP97]. K
[PW07, PH18, SM93, BHKM14, CJ18,
DV16, WDST14, Zha20]. Kᵣ,n [dKP12]. Kᵣ
[dKP12]. L [ZN09]. L¹ [CHW12]. l₁
[MU14, BL93, LS98a, MN93]. Lᵦ
[JLW16, Las16, Li93b]. LDLᵀ [RB18]. M
[MST11, LS98a]. Zⁿ [LM20a]. O(1/k)
[MOP20]. U [Har14]. VU [Har14]. n [Loc15].
N − k [BV10]. ∇u [Cel07]. O(1/t)
[TY12, YN17, Nem04]. O(n³/ln n)L
[Ans99]. O(n) [Roo15, Roo06]. O(n³L)
[McS96]. O(n log Tr(XSⁿSⁿ)ε) [LT10b].
O(√L) [AZ05, GT92, HY96, McS94]. P
[CX08, SM18, XY00]. p > 1 [SM18]. Pₚ
[PS97]. Pₚ(κ) [DIRPR20, IPRT00, LR10]. P₀
[CC99, CY00, QI99, RG00, ZL03]. Ψ
[GL08b]. R₀ [CC99, FCF07]. σ [RZ01]. T
[Chu03, Chu09, RQMG12]. u [Cel07, Ous99].
\[X^{1/2} S X^{1/2} \leq [LM04]. \] Z [MN96].


Abstract [Ber17, BR07, CT12, Gfr07, IK14, LN14a, LN18, NY02, Och19]. Accelerate [JLZ20]. Accelerated [ALR03, AP16, AFGO20, CC19, CDHS18, DJ93, Far20, FR15, GN19, HM16, JST12, KMM19, LY19, LLX15, MS14, NS17, RFNP14, VSBV14, WR12, Xu17, ZW18]. Accelerating [HM15, RCGR18, YM14]. Acceleration [ADR19, CMV19, IH14, LS13, LHM19, NN11b, Rd20, ZOB20]. Accuracy [GT19, SSSZ10]. Accurate [FFK98a, XA18b]. Achieving [NOS17].

Acoustics [Hab98]. Acting [vAPA19]. action [ZC91]. Actions [LN19]. Active [BHHK00, BM18c, BRZ20, BD\,+\,16, CWH06, CH16, DIS04, DLR16, EI06, FFK98a, FJS98, FT02, FT07, GLT03, GL15, HZ06a, HIK03, HR15, IS08, JK15, KR02, KR03, Lew02, LT10a, OW06, SY16, ZC20]. Active-Set [CH16, DIS04, FT02, FT07, GL15, IS08, JK15, ZY16, BM18c].

Activity [LW11b, LFP17]. Actual [WLZY07]. Actually [AP16]. Acyclic [DK18]. Adapted [NT19]. Adaptive [AA06, AD06, ACDO8, ADL08, AILT14, ALT19, AH16, BGMT19, BB19, BN18, BD09, CSJY07, CBJF97, CNQ07, DP19, Don16, DFS03, Eic09, FS08, JLW16, MWDS18, NWW09, OP19, PW06, RPK03, SHP18, SV07, SY13, SL15, SAW99, SZ98, Tse98, YKI04, ZU11, Zie14].


Affine [BM16a, CB00, CG17, GLH21, JRT97, MT98, Pot08, Rob07, She14, dGJ18, GT92, LT92, Mas97, MW06, RV93, TM95]. Affine-Invariant [dGJ18].
Agents [Gar93]. Ahead [HN05].

Alem [EA99]. Algebra [BZ04]. Algebraic [Bar08, Chu09, CP17, Fay06, FFG99, GE14, HL91, Las05, LP10, Mat05, NR09, Pha20, RFB +11].

Algebras [Chu03, GJ17, LT20, PA14, RSS14].

Algorithm [Alv04, AF01, Ani02, AGJJ00, AKS00, ABGJ14, ARS07, AC18, AL20, AD00, AD06, AILT14, BER04, BHM18a, BWW12, BE14, BGMT19, BDMs09, BG+12, BB19, BPRS19, BPR20, BKR17, BGNW05, CTG12, CH02, Chr20, Chu09, Com14, CGST96b, CVV99, CSV09, Da06, DSK20, DP00, DHL15, DV97, DEAM97, EA99, FRMP18, Fle01, GPR02, GL12, GL14a, GLRS15, GM12b, Gon99, GOST01, GSW97, GOP17, HSS17, HV01, HNE16, HL14, HL08c, HHY18, HZ06b, HLY16, Id13, IH14, I02c, JRT97, JLW16, JL19, K00, KNS11, LY19, LPS08, Pat98, PRS16, PQS01, PW06, PTJY10, Pul00, RN09, Ric11, RFNP14, RW18, SPT08, ST10, SPS18].

Algorithms [SSK98, SPM18, Sol98, SVD14, Teb97, TSP18, Tor97, TDZ20, ULC20, VSBV14, WLLY16, WLLY16, WLY16, Wr99, XD20, Yl08, Yin99, YLZ02, YK04, Zha98a, ZK14, ZSX19, Zha98b, Zha20, dGJ18, BT94a, BS94, CGST93, Dan93, Dix91, Eck94, Ghi92, IKR+91, JY94, JYS91, KKM93, LT92, LT93, Msc94, MT94, MK95, Mon98, Naz91, PQ93, Qi95, ZC91, ZTD92, ZTP93, ZR93, Zh96].

Alem [EA99]. Algebra [BZ04]. Algebraic [Bar08, Chu09, CP17, Fay06, FFG99, GE14, HL91, Las05, LP10, Mat05, NR09, Pha20, RFB +11].

Algebras [Chu03, GJ17, LT20, PA14, RSS14].

Algorithm [Alv04, AF01, Ani02, AGJJ00, AKS00, ABGJ14, ARS07, AC18, AL20, AD00, AD06, AILT14, BER04, BHM18a, BWW12, BE14, BGMT19, BDMs09, BG+12, BB19, BPRS19, BPR20, BKR17, BGNW05, CTG12, CH02, Chr20, Chu09, Com14, CGST96b, CVV99, CSV09, Da06, DSK20, DP00, DHL15, DV97, DEAM97, EA99, FRMP18, Fle01, GPR02, GL12, GL14a, GLRS15, GM12b, Gon99, GOST01, GSW97, GOP17, HSS17, HV01, HNE16, HL14, HL08c, HHY18, HZ06b, HLY16, Id13, IH14, I02c, JRT97, JLW16, JL19, K00, KNS11, LY19, LPS08, Pat98, PRS16, PQS01, PW06, PTJY10, Pul00, RN09, Ric11, RFNP14, RW18, SPT08, ST10, SPS18].

Algorithms [SSK98, SPM18, Sol98, SVD14, Teb97, TSP18, Tor97, TDZ20, ULC20, VSBV14, WLLY16, WLY16, Wr99, XD20, Yl08, Yin99, YLZ02, YK04, Zha98a, ZK14, ZSX19, Zha98b, Zha20, dGJ18, BT94a, BS94, CGST93, Dan93, Dix91, Eck94, Ghi92, IKR+91, JY94, JYS91, KKM93, LT92, LT93, Msc94, MT94, MK95, Mon98, Naz91, PQ93, Qi95, ZC91, ZTD92, ZTP93, ZR93, Zh96].

Alem [EA99]. Algebra [BZ04]. Algebraic [Bar08, Chu09, CP17, Fay06, FFG99, GE14, HL91, Las05, LP10, Mat05, NR09, Pha20, RFB +11].

Algebras [Chu03, GJ17, LT20, PA14, RSS14].

Algorithm [Alv04, AF01, Ani02, AGJJ00, AKS00, ABGJ14, ARS07, AC18, AL20, AD00, AD06, AILT14, BER04, BHM18a, BWW12, BE14, BGMT19, BDMs09, BG+12, BB19, BPRS19, BPR20, BKR17, BGNW05, CTG12, CH02, Chr20, Chu09, Com14, CGST96b, CVV99, CSV09, Da06, DSK20, DP00, DHL15, DV97, DEAM97, EA99, FRMP18, Fle01, GPR02, GL12, GL14a, GLRS15, GM12b, Gon99, GOST01, GSW97, GOP17, HSS17, HV01, HNE16, HL14, HL08c, HHY18, HZ06b, HLY16, Id13, IH14, I02c, JRT97, JLW16, JL19, K00, KNS11, LY19, LPS08, Pat98, PRS16, PQS01, PW06, PTJY10, Pul00, RN09, Ric11, RFNP14, RW18, SPT08, ST10, SPS18].

Algorithms [SSK98, SPM18, Sol98, SVD14, Teb97, TSP18, Tor97, TDZ20, ULC20, VSBV14, WLLY16, WLY16, Wr99, XD20, Yl08, Yin99, YLZ02, YK04, Zha98a, ZK14, ZSX19, Zha98b, Zha20, dGJ18, BT94a, BS94, CGST93, Dan93, Dix91, Eck94, Ghi92, IKR+91, JY94, JYS91, KKM93, LT92, LT93, Msc94, MT94, MK95, Mon98, Naz91, PQ93, Qi95, ZC91, ZTD92, ZTP93, ZR93, Zh96].

Alizadeh [KSS99, LM05].

all-inclusive [WZ95].
allowing [AW94, Ye92]. Almost [Fus14]. Also [Las04]. Alternating [AAJN16, ARS07, Bec15, Bol14, BSR17, CS08a, GMSS17, HTY12, HLR16, KRR99, MS13, NT19, STY15, TY12, Tse97a, YPC18, ZYL20]. Alternative [JLL09, Mut01]. Always [Ros14]. Ambiguity [RR15, RW17]. Ambiguous [Cal07, ZJS18]. Ample [DR01]. Analyses [CM16]. Analysis [AB18, AWW09, AZ19, AD03, AC02, BDMS09, BT19, BH96, BLY14, BLT17, BKS96, CLMP10a, CLMP10b, Cap02, CHW12, CT12, CQTO3, CJ18, CSS19, CCN+18, CRS18, Dav15b, Dav15a, DGT20, DMZ12, DR07, EW09, EH20, FMP18, Far20, FRMP18, GY17, GM17, GM19, GLY96, GG08, Gon14, GZ17, Gre00, Gui16, GLY12, GLYZ14, GXZ17, HL98, HLZ08, Har14, HKP18, HV01, HMN10, Her09, HS11, HLR16, JFX17, KKT20, KL10, Kor00, KN11, LR10, LRP16, LP08, LN11a, LN18, LM20a, LXL11, LRX14, Lov11, LJ16, Luc09, LM20c, Lu97, Mal07, MMP+17, MO07b, Mor07, MOR15, NA20, NC16, NO09, PS20, PMDL10, RHL14, RW18, Roy20, SBD+11, See97, Sen07, ST14, SKB18, SW07, Wal08, WHY+19, XB99, XB20, YT02, YNS20, Zas13, ZZX16, ZN05, ZW12b, ZN14b]. Analytics [dF09, dKLS15, BKT99a, BT96, CT93, Iof94, JY94, Lew96, LT92, MS94b, SZ92, Zhu96]. Approach [AAS17, ASNP16, AT03, Ani05a, ACB20, ALSV18, APR14, BQX15, BP05, BEET12, CT06, CP18, Chn09, DLR14, DEA99, DMV17, FLLR14, Fay06, FS03, GHKL17, GV14, GJN06, HLZ08, HCKK11, HKK17, KU15, Las10, LM18, LP15a, LF98, LLR16, Lu09, LA08, MPB02, MST11, MGGS09, NJLS09, No09, PFA17, PR07b, PC03, Ram18, RQMG12, RADK05, SI13, Sch08, SL15, ST09, Tse97, TP02, WZSY08, Wu96, WZZ18, Xu06, YH01, YB16, YP20, YT02, YLZ02, AEGS93, CL96a, Iof94, TYF96, Wan95]. Approaches [Ani05b, Kan99, Tuy00, YZ10, dKL10]. Appropriate [DHML01]. Approximability [Ete20]. Approximate [ABCFR20, AD19, BM07, CCFP05, Ded00, DO19b, ESCL18, Fis99, GLN07, GKPV01, GJN06, GHNS19, HS19, Kiw04, Kiw06,
Kiw08, KS05b, LN14a, LJ16, NO09, SZ14, ULC20, dF09, d’A08, RW07.

Approximately [DV14]. Approximating [Erg19, GdW00, IPS11, Onn94, PW07, SCRS00, Tse03]. Approximation [AMH05, AST10, ABP18, BY11, BZ08, BV18b, BD09, CSS19, CST19, DLW99, Don14, EL14, EN14, GHKL17, GL12, GL14a, GW20, GL10, HLL98, HL08c, HCH20, Jan06, JL20, KsdM01, KTO8, KS15, LHY9, Las05, Las06b, LB18, LN02, LJ02, LN03, LX14, Lin20, LZ14, LA08, Luk08, LSTZ07, MX06, MU20, MBW09, NJLS09, Pan16, Pat98, POLW20, RsvdVH16, SB18, Vil05, XHL14, YKI04, dP02, DJ93, GK94].

Approximations [ACN15, ACS14, AFGG11, BK12, BTO2, CCL09, CH97, CWZ12, DFR07, Gür10, Har14, INT17, JL05, LW15, Lov11, MP16, MHL15, MP07, NS07, RsvdVH15, RK03, Sm00, Sva02, ZVP06].

Arbitrary [CGT20, CERS18, PA19, BF96].

Arbitrary-Order [CGT20].

Arc [Pul97].

architectures [AM94].

Arising [FV07, FGG07, GMO14, SDGM99, VZQD17, GMS92, JYZ94, PR93, dCST15].

Arithmetic [Wri01].

Array [Che01].

Ascending [BBTT12, PS10a].

Aspects [FWKS15, LS97a].

Asplund [BW07, NT02].

Assets [BCM03].

Assignments [Ans00, MP10, PRR20, BCT93, PR93].

Associated [CDZ17, GHR14, LM04, MP10, ZL01, ZW12a].

Assuming [EA99].

Assumptions [Sal17, D96].

Asymmetric [SHP18].

Asymptotic [BC09, BNT04, BKM20, Chat02, FB03, LS20, Twit03, YNS20, Zhu96].

Asymptotically [Li10, LST20].

Asymptotically [HY96].

Away [BRZ20, PRS16].

Away-Step [BRZ20].

B [FT02].

B-Stationary [FT02].

Back [HTY12].

Backtracking [CC19].

Backward [ACP11a, APR14, AP16, AC18, AD15, BFO19, BPR20, BAD18, LFP17, MTO2, SAL17, TSP18, VSBV14, CR97].

Backward-type [LFP17].

Bad [Pat17].

Balance [Fre95].

Ball [AY08, Lim11, Szy16, WX16, Yil08].

Ball-Constrained [WX16].

Ball/Sphere [Szy16].

Balls [AST10, LTY12, NS94].

Banach [BP07, BKM20, CT03, D97, DGLM14, DFR07, DS12, GY14, HS06, HSK15, Hu07, HK92, Iof94, KT03, KSS19, KSR11, KT08, KNT10, LPT07, LNO5a, LNO1b, LNO18, RZ01, Sab11, T10, ZN04, ZN05, ZN07a, ZN07b, ZN08, ZN09, ZN10, ZN11, ZN14b, Zhu02].

Bandit [AFH13].

Bandwidth [Id12].

Barrier [AD09, Aus99, BER03, BTZ97, BMSS19, CL14, FG04a, GKR20, Gål97, MO10, MSS15, NW09, Ren96, Sch09, SW11, SOT09, YY03, Arv96a, GLW91, M96, MW94, Pow95, WR95, Gon91a].

Barrier-Based [CL14].

Barriers [Fay02, HL02, Mit94].

Barzilai [CPRZ20, Ray97].

Based [AZ05, ABCFR20, BER03, BSV14, Bil02].
BLPP16, BCS99, BKMW20, BR19b, CX99, Chr20, CL14, CP01a, DIPR20, DD19, DV97, DEAM97, DSD12, DFR18, FLLR14, Fle98, FV16, FV99, Gf14, GV15, GG08, Gon99, GRVZ15, GR12, Gui16, HFD14, HSW14, HSK15, HNKK17, HFD16, HS17, IdW16, IJOT19, IS10, JKW15, Kal18, KCS97, Lau01, LJ20, LR10, LZ03, LP15c, LM05, LMO06, LS98b, Man04, ML05, MO07a, Men17, MLLB08, MCB09, MP10, PRRL97, PGGH18, Pat16, PMR19, POLW20, PRT02, PTZ05, QWY04, QCLP19, RQMG12, ST10, SSW16, SK06, ST14, SM18, SL15, SVD14, Sva02, YP20, YL11, Zha98b, dKLS15, AH16, CM11, JY94, Mon98, BHHK00, NE19.

Bases [CP08, Spa14].

Basic [BGLW08, BLY14, JPT13, KS18, LJ02].

Basis [KKS03, SW07, WS11].

Batch [CKL97].

Bayesian [WZZ18].

Be [BS19, Lau94, Wri95].

Beats [Bom15].

Behaved [Li10].

Behavior [Abr05, BM20a, BCGH08, CB00, DIL16, GHNS19, LM04, Nf01, Tnt03, Bln02].

Belief [HlP18, HP18].

Beliefs [DG20].

Benchmarking [MW09].

Bend [MW06].

Benders [RCGR18, WA15, Zpr00].

Benson [Qiu08].

Best [BQX15, CCM20, CU99, CST19, DLW99, LN02, LJ02, LN03, Luk08, Pan16, Pot14, BL91, SM93].

Between [Bac15, BGV20, EF02, INT15, AP14, BO17, HLB20, HN07, LH02, SZ14, WX20a, Zha96].

Beyond [BSTV18, DHL15, ZMB120].

BFGS [AGJJ00, BB19, BTZ92, Da102, GG18a, GL18, HAG18, KOn98, LF01, NN91a, XNB20, YMT04, ZC10].

Bi [LCPS20].

Bi-parameterized [LCPS20].

Bicriterion [CJK98].

Bicriteria [Dw11].

Bienstock [Mas20].

Bifunctions [JW14, KQ19].

Bifurcations [RM08].

Bilevel [AAS17, BDM16, BM16b, BNL16, BCD20, CCLW14, Chr20, Dgj09, DMZ12, DZ14, Dkm18, Jllp16, LSS19, NWy17, SS17, Sol07, WX17, Wtkr13, XYZ15, YK18, YZZ97, Ye04, YZ10, ZZ96].

Bilinear [BFS16, DRT17, Gad14, MS19].

Bin [EL08, EL10].

Binary [BHM18a, BT00a, BMZ01, BV06, GVA11, GdW00, KL10, Nst18, Ppa16, STK17, XL14, ZJS18, ZT92].

Biobjective [KiRk14].

Biological [BMPH06].

bipartite [Grg95].

BiQuadrate [LNYQ10].

Bisection [SM99, PR95].

Bivariate [MN09].

Black [LLRV19, Vav93].

Black-Box [LLRV19, Vav93].

Bland [DHL15].

Block [BT14, BPS15, CN17, CH02, CHLZ12, CP15, DL15, DLR16, GG18a, Gk96, GL08a, HM15, HY15, LUZ15, Lu17, MZ99, MN96, MS13, NT19, Och19, RHL14, SBT16, SY19, STY15, Wri12, XY15, Xu18, GMR91, SM91].

Block-Angular [CN17, MZ99].

Block-Coordinate [CP15, Wri12].

Block-Decomposition [HM15, MS13].

Block-Diagonal [Gk96, GMR91].

Block-Diagonalization [GL08a].

Block-Iterative [CH02].

Block-Regularized [NT19].

Block-Separable [SBT16].

Blocks [BFM98, Gk94].

Bodies [GPT10, LRO05, TP02].

Boosted [AV19].

Boosting [LM20b].

Bordered [GK96].

Borwein [BWY10, CPRZ20, Ray97].

Both [ZZN18].

Bound [AKS00, FL98, HP99, LT99, Li10, LM99, MN98, uDR15, MT04, PRRL97, RvH15, RSvdH16, Ulb01, Vui14, YZ19, BT96, Ech94, Ltu94, Ltu96, LT92, LT93, LL94, MT91, NE19].

Bound-Based [NE19].

Bound-Constrained [LM99, uDR15, Ulb01].

Boundary [DD98, ET07, Gtds06, KS99, Man99, SKR16].

Bounded [CWP20, DGR17, DK10, FL19, MGGS09, Plu10, ShI18, LS93].

Boundedness [MTO14].

Bounding [Cap02, HP07, SO17].

Bounds [AMS16, Ans00, BNT04, BDDM19, BCD18a, Bom15, BHS15, CGT20, CX08,.
Circulant [Dah99]. Circular [HL06].
Clarke [BDLS07, DF19, JBK+18]. Class
[ASNP16, ABCFR20, Ani05a, ARS07,
AST10, BPL12, BTT06, Ber97, CB14,
CLO14, CLP16, CH17, Chr20, Chu18, CS15,
Dah99, DIS04, Dax09, DLR14, DSZ17, EA99,
GAP08, Gf13, GST11, HM16, HJO02,
HK06, HL17, HL20, HF14, HGA15,
Ios01, IK00, IK16, KR02, Lau00, LM02,
LT10b, LH04, LZ03, LZ19, MG08, PO8,
PT18, PLS08, PS10b, Pul00, QY14, SU14,
SA04, SHP18, SW14, Sol07, Sta99, SH97,
Sva02, WA15, WCP17, Xu06, XLZH19,
YFHS16, YPC18, Vin99, YL11, ZK99,
ZCT10, BT94b, BLN92, CGST93, DL91,
MS94a, Sar95, ZTP93, Zha94b, dRT92].
Classes [CN17, CHLZ17, LBP20, PR07a].
Classical [BT04, Di96, TP16].
Classification [Sch92].
Clique [MPB02].
Closed [CL14, DLW99, JPT13, KS18, Las11,
LN05b, LNP07, Rut17, SYZ19, ZN11, Zhe20].
Closed-Form [Rut17].
Closing [WX20a].
Closure [DG09, GVJS10].
Clusters [BH96, PM15].
Clustered [CL14, DLW99, JPT13, KS18, Las11,
LN05b, LN07, Rut17, SYZ19, ZN11, Zhe20].
Coercive [BS15].
Coercivity [ZM96].
Cooperation [ZM96].
Cooperative [ZM96].
Combination [CGST96a].
Combinatorial [ABGJ14, BYZ00, BNT04, EAV10, FHKM06,
MS02, VD06, ZAC17, Al95, Onn94].
Combined [HYF05].
Combining [AA20, BCD+18a, IH14, RK19, YZ10].
Commodity [JJ15].
Communicating [FFG99].
Communication [ZM06].
Commendation [MS02].
Communication [ZM06].
Communicating [FFG99].
Communication [ZM06].
Commute [ZM06].
Communication [ZM06].
Commutativity [ZM06].
Commutative [ZM06].
Communication [ZM06].
Communicating [FFG99].
MS10, MS11c, MS12, MS13, NS98, Pap16, PS20, Pot14, RW18, SP97, Shi17, Spa14, Vav10, Yun14, dKV16, HH96b, JY94, Ren95, Tod92, Vav93, Ver96, Zha96, dRV92.

**Component** [CCN$^+$18, EH20].

**Components** [KLW18, TY11].

**Composite** [ACS14, BH14a, BH14b, CC19, CGT11, CT03, CPS18, DR18, FGO14, GL12, GL14a, GN19, HM15, HM16, HLY16, Jey91, JL03, JLZ20, KMM19, LST16, Lu17, MS20, NC16, NY05, SFMF20, THG17, TDFC18, Xu17, Iof94, TZSW96].

**Composition** [YWF19].

**Compositions** [KLW18].

**Compound** [EN14].

**Compressed** [AI11, AI12, CWW18].

**Compromise** [BNL$^+$18].

**Computable** [Den97].

**Computation** [BGV20, BM07, CH17, DW15a, DJS13, GLR14, HF14, KS12, Pan94].

**Computational** [AHLN16, BLG13, CCLW14, FWKS15, FL16, GR03, Lu09, Mit00, OF03, RS97, SBT16, Wri98, Zas10, ZK15].

**Computationally** [HNO15, LT01].

**Compute** [BCD$^+$18a, MPR10, MGGS09, Dan93].

**Computing** [Aus10, Bac14, CST19, EZ10, For05, FT02, FT07, GLTP98, GL08a, HH96a, INT15, PT18, PVZ07a, Pot12, Sag16, Spa14, XLD99].

**Concave** [AHLN16, Del19, GKPV01, HM16, MOP20, Nem04, BD93, FM94b, GMR91].

**Concavity** [GVJ06].

**Concept** [MS02].

**conceptual** [SZ92].

**Concordance** [Gü17, CM11].

**Concordant** [Fay02, KU15, Lu17, MS15].

**Concrete** [GNL11].

**Condition** [AZ90, AB12, AMS10, AFSS19, Ani00, BM17, CWY11, CCH05, CCP08, CC14, CH17, EF02, FS12, FGO14, FV99, HSS20, JJ15, Kel99, MP97, MY09, Mat05, MS11b, MPR10, NF01, OF03, Pat16, QW00, QW01, Ren96, VD06, YZ13, YZ19, Zas05, Zol03, NT02, Ren95, War92].

**Condition-Based** [FV99].

**Condition-Measure** [NF01].

**Conditional** [Bac15, BPS15, BSR17, ET19, GH16, HKMS20, HCH20, KS16b, LZ16, SFMF20, dF09].

**Conditioning** [CT13, EF02, Fle98, NRP19, Pat16, Wir98, AW93].

**Conditions** [AAS17, AHSS19, Aus10, BT04, BYZ19, BT00a, BE14, BTKNZ99, BH19, BOT06, BPC11, BGM$^+$16, BCW08, BHP18, BCS99, BKKMW20, BHR19, BKS16, CLMP10b, CT02, CdlRT08, CHW12, CM20, CNY14, Che15, CW18, Chu18, CHL16, CDZ17, DZ14, DKL18, DLW99, Dol20, EWO9, FB15, Gfr07, Gf13, Gfr14, GM15, GJN06, HS06, HN09, HJ02, HS11, HN04, JD03, JL03, KT18, LP06a, MM11, ML05, MY10, Ni05, PY97, Pen17, RT06, SN07, SDR20, SPM18, SKR16, TM15, WX20a, WY01, WYO3, XY10, YZ97, Ye99, Ye00, YZ10, YZ16, ZFL06, ZN11, Znu02, Di96, DFKS11, Gil97, JSC95, KS10, Sta92].

**Condor** [CF01].

**Cone** [AMRS16, AKK14, Aus15, BBW18, BF08, BMG19, BA13, CT06, CYZZ19, CH17, CST19, Don14, EI06, FM13, FSF12, FLT01, GVA11, HYF05, HW10, HNKK17, JY04, JL18, JBS10, KFF09, Kas10, KXS08, LP15a, Lim11, LY07, MOS14, NT16, OOR17, OR11, PC08, Sha97, TW14, Tse07, YZ16, ZY14, ZN14b].

**Cone-Constrained** [JY04].

**Cone-Continuity** [AMRS16].

**Cone** [BP07, CM20, Chu03, CY10, CL14, Fay02, FG04a, GS07, HL02, KT00, LS91, NT98, PA14, Ran06, Ros14, RT19, Sau20, Yos07, ZW12a, ZVF06].

**Confidence** [Lu14, VOG08].

**Configurations** [RO18].

**Conflicts** [EL08].

**Conformation** [Wu96].

**Conic** [AB08, AT06, BTNR02, CCH05, CCP08, CP01b, DJV06, DSZ17, EF02, FV99, Fre03, GL15, JR08, KKT20, KM19, LP15a, LFJ$^+$11, MO09, MDV12, MOR15, NS14, Ni05, OHF12, Pe00a, PR20, PRT02, PFA17, PH18, RSKW19, SOT09, SH15, SAV14, STY15, WA15, Zha00, ZN05].

**Conic-Constrained** [GL15].

**Conic-Quadratic** [BTNR02].

**Conical**
[DLW99]. Conjecture [GR10c]. Conjugate
[BT96, BW05, DO19a, DHL+99, DY99,
DK13, GP19b, HZ05, HZ14, IY09, IS02a,
Luc09, NYF11, PP18, QQS03, Ren96, TK02,
GN92, Ikr+91, Ort91].
Conjugate-Gradient [Ren96]. Connected
[HK91]. Connections [RR15].
Connectivity [YmZS15, GMS92].
Consecutive [HL06]. Consensus
[SLWY15, SY18]. Consequences
[AMS10, AMRS16, AHSS19, AFSS19].
Conservative [Sva02]. Consistency
[HS19, Ram18]. Consistent
[Den14, KCS97]. Constant
[BHG07, GSZ14, MS11b, QW00, QW01,
Q16, SW14, SW15, Zu03]. Constants
[AC02, SK06]. Constrained
[ANT16, AMS10, Ani02, AKK14, AO18,
AFS14, ACP11a, ACP11b, AD06, ACD08,
AST10, ACL99, BQX15, BCL07, BBTT12,
BE14, BHHK00, BG08, BGM+16, BM18c,
Bom15, BMSS19, Bp07, BM20b, BCN08,
CKP12, CGT14, CM20, CTW19, CS12,
CDM20, CV17b, Cpr2z20, CNW10, CO12b,
Crs18, DV97, DEAM97, DR14, DGN12,
DW10, Dos97, EA99, FLR02, FLLR14, FS96,
FIS10, Fle14, FV16, FM13, FM97, FS05,
FLT03, GP19a, GHKL17, Ger08, Ger11,
GMS02, GL15, GKR14, GHHL05, Gou99,
GSW97, HP19, HZ06a, H96a, HR14a,
HSS20, HK06, HK10, HSW14, HY06, Iid12,
JAL15, JY04, JST12, JL16, KK02, KLT07,
KMM19, KS16b, Kr02, LLS05, LNP98,
LM02, LT99, LT00, LT10a, Lj02, LN08,
LST16, LM09, LY11, LLS06, LL09, LLS10,
LRL16, LFJ+11]. Constrained
[LSL08, MN08, Mr17, uDR15, MP99,
MRS14, MBW09, NS07, ND10, NR20,
POLW20, Pen19, PC03, PM15, Q99, Q900,
QLSZ18, RSKW19, RN98, SS05, SU14,
SSW16, SZY16, SBT16, SVO7, SY13, Sol98,
SW99, SLMO5, TDKC14, Tse02, Ulb01,
WX16, XSLZ11, XA18a, XHL14, XYZ15,
Xu17, Xu18, XLZH19, YH01, YLQ03, Zas05,
ZJS18, ZL20, ZC20, Zhu02, ZU11, Zie14,
dKHL17, vAS14, BCT93, BNS95, Bur92,
BTZ92, EA95, FMS04, G197, GR94, GK95b,
GLW91, MMZ95, NN91b, PZ94, RS94,
War92, Wri92]. Constraint [AHSS12,
AMRS16, AFSS19, BM20a, BDdSM15,
BH19, BKMW20, BHR19, CS08b, Dz98,
Dol20, FLN10, Fle12, Gfr11, GY17, GM17,
GM9, GJLVP14, GVJS10, GXZ17, Her09,
HY16, IS02b, IS04, JLD03, Kan14, KS10,
KNT10, Li07, LNS00, Lj02, LN03, LN05a,
LN08, LPR98, NKT10, SD0a, Son06,
Sor97, TAW06, VR05, WB16, WA15, Ye00,
ZN04, ZN07b, ZW12b, dSTVB18, FM91].
Constraints
[ABMS08, ASS18, AHSS19, Ani05a, Ani05b,
Ani17, BT04, BT00a, BE06, BDM16, BM18a,
BCU00, BMW10, BFM14, KS16, BL09,
BA13, CCL09, CGT20, CdlRT08, CSW15,
Chu16, CS15, CGST96a, CGST96b, Co12a,
CZW18, DFNS05, DZ07, DR03, DHR07,
DW15b, DV06, DFS03, DK10, FFK98a,
FJS98, FRMP18, FLRS06, FHN09, FP98,
FT02, FT07, GLC2Y18, Gfr07, Gfr14, GY17,
GLT03, GNS08, GLHZ11, GLN11, GLY12,
GY14, GLY14, HLB20, HCH12, HW10,
HJ02, HH06, HK09, HK10, HS11, HR12,
HR14b, HL06, dMM10, HMP+08, HS17,
HY16, IRL01, IS08, IS12, Jey03, JR00,
KDB09, Kan14, KS10, KS14, KN98, KCS97,
KU15, Ku08a, LRP16, LT02, LLCN06,
LN03, LXL11, LX14, LMX17, Lue08, LA08,
LST207, LZ10, Mal07, MX06, Men17, Nga15].
Constraints
[NTA04, OHF12, PS10a, PZ98, PZ00, PZ03,
PS11, PY97, RB05, RT06, RR08, Sch09,
SW11, SFR14, Sch01, SSSZ10, Sha97, SKR16,
SU10, SKLO9a, SXMW13, STY15, TAW06,
Tr05, War14, WJ00, WBME14, WK19,
Xu06, XY10, Xu20, Ye99, Ye00, YZ16, Zas13,
ZXZ16, Zie14, vAH14, vAP19, vDF11,
BM94b, CJ18, CGST93, FM94b, GK94,
GMS92, He93, LS93, Li96, MT91, Out94].
Construct [YZ13]. Constructing [ZFL06].
constructive [Wan95]. Contact [BTKNZ99, BHK002, BHK+09, KP98].
Containment [ALSV18, KTT14, KTT15, PR07a].
Containments [Jey03]. Context [VD06].
Containment-Smoothing [Jey03]. Continuation [CX99, CC99, BHKO02, BHK+09, KP98].
Continuation-Smoothing [Jey03]. Continuity [AMRS16, BSTV18, CM17, CKS17, Gri19, Rob07, SW07, TM15, Gow92].
Continuous [AFFG14, BK12, BBW07, FHKM06, FHN09, GH16, Her09, HL14, Hol04, dM08, HLY16, HK92, ISU12, JY04, KFF09, MW97, Wu96, Ch93a, LP93].
Continuously [Luc92]. Continuum [TY04]. Contour [LSW06]. Contracting [DN20].
Contractive [CC99]. Conundrum [MRS16]. Converge [Las04]. Convergence [AA06, Abs05, AA20, AOH98, AMHL05, Alv04, ASS18, Ani05a, AD19, AP16, AC18, AH16, ADR19, BCL07, BSV14, BD17, BT14, Bec15, BH20, BF01, B010, B16, BF96, BDMS09, BT94b, Bol14, BPR20, BL91, BLY14, BLT17, BS94, BGNW05, CM16, Cha02, CT93, CNQ97, CR97, CW14, CSS19, CK00, CMV19, CGST96a, CGST96b, CSV09, CP01a, CY14, DSP10, DLH+99, D99, Dai02, Dav15b, Dav15a, DGT20, DV97, DEAM97, DJV06, DL03, EA99, FIS10, FS12, GO94, FLT02, FGL+02, FLS06, GAP08, Ger08, Ger11, Gon14, GT97a, GT97b, GOST01, GR10a, GR10b, GLR15, GW19, Gru19, GY20, Gui6, GXZ17, GL18, GOP17, GP19, GP19b, HZ08, Hdr02, HN07, HL14, Hol04, dM08, HLR16, HLY16, HK92, ISU12, JPS99, JZ920, JW14, JE19, KT03, KN05, KFF09].
Convergence [KS14, Kiw04, Kiw07a, KP98, KRZ17, Kor00, Kuc08a, LY94, LRW98, LPW12, LF01, LN07, LUK15, LP15b, LFP17, LM15, LW15, LYS17, LM05, L16, LS02, LM20c, LSZ98, SL08, MM00, Man91, Mc98, McS96, ML05, MO10, MS18, MM05, MER18, MGR18, MOP20, MT98, MT99, NT06, NC16, NRP19, NOS17, Nem04, NT16, NK10, Och19, OR16, PP16, PW17, Pul00, Ran06, RHL14, RKG08, ST13, SU15, Sch01, Sch16, Sch96, SD20, SDm00, ST14, Sim11, Sol98, SZ98, TY12, TBZ16, Tel97, TP20, TWB+03, Tor97, TDZ20, UL20, VGO18, VJFC18, WB05a, WB05b, W98, WLW15, WLY16, WHY+99, WCP17, WS11, Wt05, YY95, YF00, Yin99, YNS20, YN17, YLY16, YZS19, Z10, ZM20, ZM96, dF09, dKHL17, BQ95, BKT99a, Boy95, CGST93, EM91].
conversion [GN92, GHS95, Gur94, Ius91, Kan96, KS91, Kup96, L93a, LT92, Mos98, Pow95, SZ92, Tor91, Tse91, Tse92, TM95, ZTD92, ZTP93, Zha94b, Zht96]. Convertent [Ani02, BHG07, BB19, CH15, CH16, FH16, FIS16, FS05, F96, GH16, GR14, GKV03, IS02c, JLLP16, LAS06a, LT02, LSW06, LST20, MBW09, PNA10, PS98, PS10b, Q00, QLSZ18, SP97, SS00, STY15, Sva02, Tse02, Wat00, BMBM14, ZK14, ZOR20, ZL03, ZW12a, ZCT10, BH14b, CH93b, EW94, L93b, McS94, PY93, ZT93].
Converging [LCC+20]. Conversion [KNN98]. Convex [AF+13, APX17, AB12, And00, Ans98, 


AGJJ00, AV20, AI20, AFGG11, APR14, ACC93, AT06, AFGO20, BO17, BD17, BM20a, Bec15, BPS15, BTZ97, BPT97, BOT06, BY11, BP05, BCU00, BM14, BMRO, BDMS09, BCW08, BLY14, BCD+19, BHS15, BDL+16, BH14b, BGH18, BCGH08, Cal10, CG08, CKL07, Cha02, CM11, CCR17, CCF+20, CL14, Chu16, Chu18, CC02, CGST96b, CH13, CD27, DSS09, DD19, DENG, Den79, DLV99, DGN12, DNSD13, DN20, DR96, DK10, DL17, DR18, EZ10, EL09, FMP18, FLN10, FLY11, FRMP18, FGO14, FH14, FB00, FV99, FT08, FH09, FQ96, FLT03, GP19a, GL12, GL14a, GTdS06, GLY96, GM12b, Gon14, GKR14, GN19, GN20, Gui16, Güm14, GW25, GP19b, HTL14, HNO15, HHI20, HLTW14, HLZ08, HK14b, BGH18, BCGH08, Cal10, CG08, CKL07, Cha02, CM11, CCR17, CCF+20, CL14, Chu16, Chu18, CC02, CGST96b, CH13, CD27, DSS09, DD19, DENG, Den79, DLV99, DGN12, DNSD13, DN20, DR96, DK10, DL17, DR18, EZ10, EL09, FMP18, FLN10, FLY11, FRMP18, FGO14, FH14, FB00, FV99, FT08, FH09, FQ96, FLT03, GP19a, GL12, GL14a, GTdS06, GLY96, GM12b, Gon14, GKR14, GN19, GN20, Gui16, Güm14, GW25, GP19b, HTL14, HNO15, HHI20, HLTW14, HLZ08, HK18, HKMS20. Convex [HTY12, HLWY14, HHY15, HM16, HNO9, HJ02, Hu07, HLY16, HY15, HR15, IY09, JS02a, JMWO8, JF17, Jey03, JLD03, JL03, JST12, JLZO, KFK08, KKT20, Kiw97, Kiw04, KTO0, KS18, KNT10, Kuč08a, LRO05, LZ16, Las16, Len98, Lew96, Li97, LS97b, LNS00, LN03, LN05a, LN05b, LN07, LNPO7, LN08, LFL09, LI10, LN11a, LN14b, LST16, LMP+18, LM20a, Lim11, LFW98, LNS18, Lk15, LMO06, LFN18, LP10, Luc09, LPR98, LDDS20, Luk08, LS98b, MSFL17, MP14a, MZ99, MSQ8, MM05, MOP20, MG98, MT98, MS11c, MS14, M12, MARS10, Mur03, NR19, Nem04, NS07, NV99, Nes05, ND10, NY05, NKT10, Nga15, PS10a, PC08, Plu10, PW16, Qi16, QLSZ18, RN09, RS11, Ren16, Rev97, Rik11, RvdVH15, RVdVH16, RWO7, SS17, SS05, SD20a, SW15, Snu20]. Convex [SW11, SFM14, Sch16, See97, SKC12, ST14, Sol07, Son06, SMG14, SKL09b, SK98, Sva02, TY04, THG17, TDKC14, TDFC18, Tse97a, Vel15, WLWY15, Wim86, W10, WLY07, WSLZ17, XY15, Xu17, Xu18, Xu20, Yan09, YNS20, YN17, Zha00, ZWL10, ZFL06, ZN04, ZN07b, Zhe20, ZC12, ZMB+20, dKLI11, dBH07, AH05, BMR94, BT94a, CH93b, CGST93, FMS94, Gar93, GLW91, GK94, GÜ62, Ius91, JS95, KN93, LS93, LT93, M96, MS94b, NN91b, PZ94, See92, TK96, dRT92]. Convex-Concave [HM16, MOP20, Nem04]. Convex-valued [GTdS06]. Convexification [DRT17, FS08, VZQ17]. Convexifying [KS15]. Convexity [AP14, BSV18, BCD18b, Br07, CHPA16, DLV10, Fay06, GH16, Las09, Lin11, WLY07, TK96]. Convexly [CTW19, CT03]. Convolution [FMP19, IT18, MWDS18]. Coordinate [AB12, BT14, CP15, DLR16, DPW15, FR15, FB19, HY15, LLX15, LW15, NC16, Nes12, NS17, Och19, RK20, ST13, Xu18, Yun14, Wri12]. Coordinate-Descent [FB19]. Coordinate-Free [AB12]. Coordination [DMK+94]. Coordinative [Wan17]. Copositive [Bon15, BD09, NY18, PR07b, dP02]. Corner [ABP18]. Corrected [Val20]. Correcting [ST10]. Correction [BJK17]. Corrections [BDdSM15, ML05]. Corrector [DIPR20, DSR12, Gon99, JP99, KT14, KSS99, KJ17, LMT09, LP06b, LM05, Mia96, MT04, PTZ05, SPP08, Sim11, CLMS93, DL91, LMS92, MS94a, Pot96, TszW96]. Corrector-Predictor [DIPR20, LP06b]. Correlated [SFP11]. Correlation [LdQ11, PM15]. Corrigendum [KN04, QW01]. Cost [Abs05, AHN16, BGV20, BPT97, CHW12, MBW09, Pat98, XLD99, RV93]. Costs [ARS07, CCG15]. Costs-to-Move [ARS07]. Coulomb [BHKO02, HHO+09]. Countably [Gha17]. Counterexample [GR10c]. Coupled [ACS14, Bet19]. Coupling [ACP11a, CC02, GK94]. Covariance [HH96a, Lu09, ZJS18]. Covariances [HP07]. Covariate (QCL19). Covariate-Dependent [QCLP19]. Cover [AKT17, WLY07]. Covering [AI20, Aus15, BP15, DDDM19, DFO20, DFF01].
Jan06, WK19, Yi06]. CQ [SYZ19].
Criteria [GS01, XB99]. Critical
[CD00, CM20, CSV09, FIS20, GVJ06, HLB20,
HNP00, JRS09, OOR17, OR11, Spa14, Sch92].
Criticality [MS19]. Crossing
[Mut01, dKP12]. Cryptography [ZÁC17].
crystallography [DHLN92]. Cube [EL14].
Cubic [BM17, CD19, CGT14, Lie20, YZS19].
Cubic-Regularized [CD19]. Curse
[HN19]. Curvature [CW18, FLP19, Zha96].
curves [IKR +91]. Curves [Wen97].
Curvilinear [LRR98, DEG +91]. Cut
[Bar96, BS19, Lau01, LSW06, LB00, Pfe08,
RR08, SM99, TZS02, BZM01].
Cut-Generating [BS19]. Cuts
[AL14, ABP18, GV00, Gui20, HAN11,
Luo97, Mas20, OG03, ZPR00]. Cutting
[AWW09, An98, BM14, BLST19, BBV02,
DSP10, DG09, FMW06, FGG04, GLY96,
GV00, dMM10, Kw97, Luo97, MP14a, Mit00,
MG98, NV99, OG03, Por20, SXMW13,
TZS02, AE9G93, Boy93, Boy95, KN93].
Cutting-Plane [DG09, SXMW13].
Cutting-Planes [BM14, Por20].
Cutting-Surface [dMM10]. Cycle [HL08c].
Cyclic
[BPS15, BLY14, MGR18, ST13, Yun14].
D [LN09]. D-Gap [LN09]. D.C
[AT03, TA98]. Damped
[ACR19, Lu17, SDR20, SW99]. Damping
[AA20]. Dantzig [Che05]. Data
[BRA +20, Chu20, Fil99, GJLPV14, Hol04,
JS20, LM18, LYSA20, Luc02, MMZ95,
MN13, No98, PR20, WZZ18, KSW94, LS93].
Data-Driven [BRA +20, WZZ18].
Data-Independent [PR20]. DC [Bon97,
FLY11, GLM98, JBK +18, LZ19, MM08].
Decay [CCH05, NA20]. Decentralization
[Van17]. Decentralized
[LdF08, SLWY15, SY18, YLY16]. Deciding
[ALSV18, BRS15, Ver96]. Decision
[GS01, HG16, NS18, QCLP19, YK18].
Decision-Dependent [NS18].
Decisions [AFFG14]. Decomposing [BFM98].
Decomposition
[AP18, ADL08, BHM18a, Bec15, BW07,
CSPW11, CV17a, CM11, DSN13, Ent96,
GJ17, GR12, Gui16, Har14, HM15, HHY15,
KBP19, KRR09, LZ03, LS20, LZ14, MÖ07a,
MÖ09, MÖ10, MS13, PT18, RCR18, SH13,
SZ14, SVD14, SAV14, TLT +18,
VJM16, WA15, XA18b, YL11, ZK14,
DKM +94, DMZ94, MTT95, ZPR00, Zen91].
Decomposition-Based [MO07a, CM11].
Decompositions [BWW10, EZ10, SVD14].
Decrease [Ke99]. Decreasing [RGY99].
Dedication [OS99]. Deep [CHP20].
Deficient [CGT14, CNW10]. Definable
[CH15]. Defined [See97]. Definite
[Chu03, Lim11, SH15, Fie95]. Deflected
df09]. deformation [Dan93]. Degeneracy
[Fle98, Fle14]. Degenerate
[An00, An02, Gfr07, ISU12, KJ17, Wri02,
Wri05, XYZ15, YTO2, TM95]. Degradation
[ABT00]. Degree
[Mar05, Mas20, NR09, Pap17, t177]. Delay
[MIM20]. Delay-Tolerant [MIM20].
Delayed [SY18]. Delays [Pul97]. Delivery
[CKL97]. Demand [CSW15]. Demands
[BRU97]. Dennis
[CY99, YWAS17, Don12, EA99, HL98].
Denoising [BC05]. Dense [Lás17].
Densities [BM07, CZZ19]. Dependence
[QW00, QW01, QZ08]. Dependent
[BM16b, CJK98, CSW12, KS05a, LY98,
NS18, QCLP19]. Depending [Cel07].
Derivation [WN16]. Derivative
[AO06, AO09, BBN19, BLG13, BFS14,
CTG12, CH17, CHN18, CSV09, CTG10b,
FLR14, GPR02, GR10a, GR10b, HK10,
LS06, LL09, LLS10, LRR16, LRRV19, LS02,
MWDS18, MW09, hRK14, ST10, SHP18,
WS11, ZCS10]. Derivative-Free
[AO06, AO09, BBN19, BLG13, BFS14,
CTG12, CSV09, FLR14, GPR02, LS06,
LL09, LLS10, LRR16, LRRV19, LS02,
MWDS18, MW09, hRK14, ST10, SHP18,
Derivatives [AD04, CV07, GJV16, GN20, KM09, LS13, LT10a, MS03, SC91, See92, War96].

Descent [SW07].

Deriving [AD04, CV07, GJV16, GN20, KM09, LS13, LT10a, MS03, SC91, See92, War96].

Detectors [AO05, BT14, BH20, BTMN01, BM17, BSR17, CT13, CWW18, CC19, CD19, CQT10a, Chu16, CQS02, DL15, DLR16, DAJJ12, FR15, FB19, GRVZ15, HZ05, HY15, JZ20, LW15, MGR18, Mur03, NYF11, NC16, NL14, NS17, NLZ10, NT19, Pat98, QWY04, RZ01, RK20, ST13, Sch16, Tse99, YLY16, Yun14, ZMB +20, Zhu95].

Description [Kum16, SPW15].

Design [Bar96, BTN97, BTKNZ99, BRU97, FGM12, GHK17, GNL11, JKK98, KNX16, LLS05, Lau00, LRP16, MPSU19, PW05, Rag13, RGBR18, RS97, SCR50, YZ13, BTB93, BTN94, GMS92].

Detecting [NYZ18].

Detection [BCW14, BCN10, Kel99, LLZZ19, RSKW19, LP93].

detectors [GK99].

Determinant [DZ07, WST10, YST14].

Determinant [DZ07, WST10, YST14].

Deterministic [AADD09, BH20, Gri19, Pan19, XA18a, YNS20].

Deviation [GZ17].

DF [SHP18].

Diagonal [BJKJ17, Don16, GKE96, KK92, SK06, ZNW99, GMR91].

Diagonalization [GL08a, JL16, ULC20].

Diameter [Ris94].

Dictionaries [AAJN16].

Differences [APX17, AV20, CPS18].

Difference-Max [CPS18].

Different [EF02, Pic13].

Differentiability [MS20, Sal17, AB18, Jey91, LsDz18, Sha94].

Differentiable [BTT96, FSF12, FLT03, GKR14, JS20, Li96, Li97, SW99, ZA14, Zhe20, Luc92, TGF96].

Differential [BCL07, CW14, DR00, HV05, KRT07, QW20, VJFC18].

Differentiated [HAG18].

Differentiation [Gfr14, MA00, vAPA19, Dix91].

Dimension [GHRT98].

Dimensions [BCT19, HIN10, LRWW98, LPW12, MN09, Zha94a].

Dini [War96].

Direct [AA06, AF01, AD06, ACD08, ADL08, AILT14, ALT19, CMVV11, DT91, GV14, GRVZ15, VZQ17].

Direction [BoL14, DIPR20, GMSS17, HTY12, HLR16, IY09, JH14, KS99, LM05, MS13, RB18, Sin11, STY15, TY12, TT98, ZL20, dPT01].

Directionally [TZ10].

Directions [AADD09, BH20, BPS99, FGM17, KN02, KN04, QWY04, SSK08, Tdh00, MOn98].

Discontinuous [MA00, MS06a, AW94].

Discrete [ALT19, BBLZ17, DFR07, FHN09, GHZ99, GdW00, ISO2a, KP98, KsdM01, MN09, Mar05, MO10, Mur03, RV06, RN08, Sag16, TMHP06, YK10, vdLT07, An06b, Ra96].

discrete-time [Ra96].

Discretizations [Che01].

Discretized [ZT98, ZT96].

Discrimination [BM94a].

Disjunctions [MR10].

Disjunctive [Gfr14].

Dispersion [HLTW14, WX16].

displacement [BL95].

Disposal [G10, J15].

Distance [AT03, AAZ15, BQX15, CLPT06, DPW15, DSV17, INT15, LH02, MPSU19, MP10, MW97, NY05, PR20, PP12, RO18].

Distances [BG20, BNL16, dEH01].

Distributed [AH19, BJKJ17, BBG +20, DW15a, DSK20, FVO7, dMo8, HDF16, id13, IH14, JRJ10, KS12, KNS11, LZ18, LYSA20, LL20, MIM20, MARS10, NOS17, Pan19, PB17, SB18].

Distribution [BRU97, HP07, SO98, dKLS15, CD92, FM91, FM94a].

Distributionally [BH18a, CDL14, CCN +18, DM20, GZX17, LM17, MU20, Sln17, XA18a, ZXZ16, CJ18].

Distributions [BCM03, Pf10, vAh14].

Divergent [RZ01].

Do [LM19].

Dogleg [X99].

Dominance [CS15, DR03, DHR07, DR14, DW15b, GNS08, HSS17, dMM10,
Lue08, OR02, RR08, SXMW13, CJ18].

**Dominant** [BBMW16]. **Double** [DGN12, JBK+18, KRZ17]. **Double-Layer** [KRZ17]. **Doubly** [CST19]. **Douglas** [BM16a, BD17, BM20a, BH14a, CM16, DP19, Dav15b, LM20c, TP20]. **DQA** [BMR94]. **Drawings** [MW06]. **Driven** [AA20, BRA+20, WZZ18]. **Drops** [CGTZ14]. **Drum** [CU99]. **Dry** [AA20].

**Dual** [AHO98, And00, BER03, BER04, BF08, BCD+18a, Bom15, BH14a, BCH14, BR19b, CERS18, CLO14, Chn09, CV17b, CMV19, CP01b, CH16, Dav15a, DHLN92, DR13, DM20, FK00, FB19, FIS20, FG98, Fre03, FKS02, GKR20, GG03, GLTP98, GOST01, Guo00, Guo10, HS17, HIK03, HSW14, JR08, JS00, KPF19, KJ17, KR02, LCC+20, LN14b, LS04, LMO06, LJ16, Lsz98, MP18, ML05, MZGS08, MS00, MS03, MT99, MDV12, NO09, NT98, NS14, OR02, Pan05, Pan16, PRT02, PFA17, PS98, Pot08, Qiu08, RT19, TWB+03, Toh00, TDCF18, TDZ20, Tüit03, Val20, Wri00, Xu17, Xu20, YY03, YT10, ZZST20, dPRT01, AZ05, GT92, Ius91, Mel92, MTT94, MKT95, Mon98, RV93, Wan11, ZTD92, ZT93, ZR93, Zhu95, Mon97, Zha98a]. **Dual-Degenerate** [KJ17]. **Dualities** [FLN10]. **Duality** [AAS17, AZ09, ABD+18, AT00, BAC15, BE06, BTT96, BT20, BM07, BR19b, BAC11, Chn18, Chn20, Com14, Dax09, DG20, DO19b, FLY11, FB13, FL16, FMP14, Gha17, GAD20, GF08, Gör10, HL08b, HY02, IS02a, JL10, KM19, LCC+20, Lem98, LFLL09, LP15c, LV19, MRS16, RTW97, RR08, SW14, XSLZ11, YWAS17, ACC93, BT96, Tha94]. **Dualization** [Pen07]. **Duals** [BTT96, KKW05]. **Dykstra** [PB17, Pan19].

**Dynamic** [ASNP16, Ber17, BG08, BZ08, BHT16, BT19, CBF97, Che09, DM20, ESKL18, FV07, Gu15, HNO15, HN19, LD08, LCC+20, MP07, NA20, Pul97, SZ14, XA18b, Wri01]. **Dynamical** [APR14, BDL07]. **Dynamics** [ACR19, AL20, DD20, GAP08, SDR20].

**Earliness** [CKL97]. **Easy** [Shi18]. **Economics** [vdLTY06]. **Economies** [JJ15]. **Edge** [CZZ19, Fle98, ZSY10]. **Edge-Colorings** [CZZ19]. **Edmonds** [DHL15]. **Effect** [ABT00]. **Effective** [HCH12, Wu96, Lau94]. **Effectively** [GLTP98]. **Effects** [Wri01]. **Efficiency** [Kw97, Ns12, NS17, Qiu08]. **Efficient** [BER03, BS19, BR08, CCFP05, GL10, HZ05, HNO15, HIK11, JL19, LT01, LST18a, LLST19, LWZ15, LPV05, LSW20, Pyt98, Ren16, Rot09, SSW16, SK06, SKC12, STY16, Win08, XS99, XY97, XY00, ZY14, dBdH07, And96a, WZ95, YG91]. **Efficiently** [LST18b]. **Eigenfrequency** [SKL09a]. **Eigenvalue** [AINT17, An00, ANP08, Lie20, Men17, Nol98, Ous99, SF95, SW95]. **Eigenvalues** [AK08, CC18, GMO14, SNT16, Ove92]. **Eigenvectors** [TP16]. **Ekeland** [GKNRP17, LN11b]. **Electronic** [EA99]. **Electric** [PMDL10]. **Electrical** [SDGM99]. **Electronic** [SDGM99]. **Elementary** [LP15c]. **Elements** [SV07, ZT92]. **Elimination** [AY08]. **Ellipsoid** [BHS15, Dau06, FV99, Yil06, ZO03]. **Ellipsoidal** [BDPP14, GLRS15, Gür10, HP09]. **Ellipsoids** [Am02, INT15, LH02, LH04, Yil06]. **Elliptic** [Bet19, CHW12, CK99, HS11, HR12, RT06, Vo08, Xu19]. **Elliptope** [DCST19]. **Elliptopes** [dCST19]. **Embedded** [GHW08]. **Embedding** [BQX15, HL08c, PFA17, Qi16]. **Emission** [JS00]. **Emphasis** [ACB20]. **Empirical** [CGC15, LLX15, PP16]. **Endogenous** [RS15]. **Energy** [Wu96, vAS14]. **Engineering** [SDGM99]. **Enhanced** [BOT06, GYZ14, KS10, LZ19, LLZZ19].
Entropic [LX14]. Entropy [BCM03, CS16, SW07, WN16, BL91, BL93, BH05, DHLN92, PY93]. Envelope [BPR20, JMW08, TSP18, Wri00]. Envelopes [BDL18, Loc15, PW16]. Epi-convergent [BH14b]. Epi-Derivatives [MS03]. Epi-Differentiability [MS20, AB18], epi-pointed [BD02]. Epiconevergence [CT03]. Epiderivatives [FB03, KM09]. Equalities [DEAW99, Zua03]. Equality [AO18, BT20, BG08, BCN08, CGST96a, CNW10, CRS18, DV97, DEAM97, DFS03, DK10, FS96, HR14a, LNP98, LY11, MX06, WJ00, Gil97]. Equality-Constrained [AO18, DV97]. Equation [CT13, FS17, YLQ03]. Equations [BW02, CNQ97, CSS19, FP97, GLT04, HV05, IS02c, LYS20, LRX14, MP99, Pen00b, QV14, QW20, Roy20, SH97, SSQ04, Ulb01, Ulb03, ZK15, ZN07b, ZN10, Dan93, DML94, LNP98, LY11, MX06, WJ00, Gil97]. Equilibria [CCM20, DJs13, GNRPT16, HF14, KS12, Pot12, RS15]. Equilibrium [BNL+16, BHR19, CSW15, DFNS05, Ete20, FK10, FLRS06, FB00, FP98, Grf14, GY17, GLY14, GKNRP17, HM15, HS11, HSK15, KS10, KS16a, KKSW19, LX14, Sag16, SU10, XY10, DFKS11, JSC95]. Equivalence [ET19, HLB20, TTYF96]. Equivalent [Las02, Mat05, QCLP19]. Equivariant [FSP15]. Ergodic [Bia16, DAJJ12, MS10]. Erratum [ACD08, FT07, Ger11, HL20, Kea11, MZ00, OOR17, ZT98, dKPS09a]. Errors [BT00b, XBN20, Zas10]. Essentially [BM98a, BM98b, TZ10]. Estimates [CCH05, CK99, KS05b, Mar05, Zua03, BL91, BL93]. Estimating [AAZ15, CSW15, MP10]. Estimation [BH03, BT20, CPS18, DGT20, GHZ99, HCH12, HH96a, LYS17, OS17, PW05, QCLP19, RTBG20, MN93]. estimator [LS98a]. Estimators [NK10]. Euclidean [And96a, BQX15, BD17, BCGH08, CBJF97, DDP15, DKVW17, GMM17, GJ17, LT12, LT20, Mar94, MBW09, QZ00, RO18, RSS14, XY97]. Euler [BCL07]. Evaluation [AM94, BGM+16, CGT11, CTG14, CTG20]. Evaluations [AF01, AILT14, BGMT19, Pic13, PW06, SOT09]. Evasion [PMR19]. Evolution [CDL16, Mor07]. Evolutionary [Bet19]. Exact [AUS15, BDPP14, BCWW15, CG08, CYZZ19, DL17, FS12, FT08, FSF12, GAD20, GY14, HNE16, HY02, HN03, JL18, KS10, LCC+20, LP15c, MY10, RK19, RQMG12, RP03, STKI17, Sch12, SW15, SBFA17, SXMW13, THG17, YZZ97, Zas05, Zas13, ZA14, Li96, Lucy92, PZ94]. Exactness [DL01, KS18, SL14]. Example [HPU19]. Exceedance [MU18]. Excess [ST03]. Excessive [Nes05]. Exchange [ET19, HW10, OHR12, ZWL10]. Execution [MCL10]. Existence [AZ19, CGTZ14, FB00, HF14, JS20, KQ19, KP98, KTO8, KRT07, OR16, Sha94, SSK98, Wan95, Zas00, BL93, Ver96, ZT92]. Expansion [BC09]. Expected [CT12, DR13, PS20]. Expensive [BLG13]. Experience [FL98, GR03, Mit00, OF03, ZNB+93]. experimental [KBS03]. Experiments [BV10, IKR+91, KHZ95, Kea11]. Explanatory [OF03]. Explicit [AZ08, ESKL18, HW10, KW10, Las02, LT10a, OHR12]. Exploiting [FKMN00, KKW09, CL92, Hen95]. Exploits [HZ16]. Exponential [DT98, NA20]. Exponentially [XZ18b]. Exposed
Exposing [BM94b]. Expressing [FFG99]. Expressions [Rut17]. Expressive [Sau20]. Extended [AAS17, Ber96, BA13, CPS07, FLN10, FGM17, GLT03, GR12, Ks05b, MS20, MTZ03, PM15, SY19, WYAS17, ZR93, Zhu95]. Extended-Real-Valued [MS20]. Extending [BCT19, Zha98a]. Extension [GF08, LL94, BMR94]. Extensions [AG14, Den14, FHN09, VR05]. Exterior [YT10]. EXTRA [LL20, SLWY15]. Extraction [KPV18]. Extragradient [CV17b, IJOT17, IJOT19, MOP20, MS10, MS12, MS14, MSS15]. Extrapolation [LZ18, WCP17]. Extremal [MTZ03, Tha93]. Extreme [GLdS05, GTdS06, GHHL05, LB18]. Face [FGM17]. Faces [NPS10, Sau20]. Facet [DGR17]. Facets [EB20, GMS92, RT05]. Facial [DKVW17, KW10, LMT18, PFA17, HP94]. Factorable [GW93]. Factorization [AO18, GV15, SE99, Shi17, Vav10, WW20, YPC18, JY92]. Factorization-Free [AO18]. Factorizations [Gou99, HL20, Wri90]. Factorized [ZCDO00, YY95]. Factors [RTBG20]. fails [Mas97]. Fair [DFO20]. Families [ABP18, Lås17, SY13]. Family [HLR16, JRT97, MT99, PA09, YMT04, ZCD00, Mon98, YY95]. Fan [DV16]. Farkas [Bar08, BW05, DGLM14, DMV17, FLN10, LZH14]. Farkas-Type [BW05, DMV17]. Fast [ACR19, BC05, CU99, Da06, DLR16, GM12b, GH15, Gk94, Gro95, OS17, PMR19, BH95, KF18a]. Faster [AP16, Fle01, Fox95, HL17, HL20, TDZ20]. Fastest [BDPX09]. FATCOP [CF01]. Fault [CF01]. Feasibility [AH10, ALSV18, BD17, BF08, BEET12, BCGH08, CG08, DLR14, DIMS18, FP98, GMSS17, GLY96, HL14, Liu20, LS98b, NRP19, TZS02, WLWY15, Gar93]. Feasible [AGJJ00, BH20, BDL16, CLMP10a, CW06, DIPR20, DGL10, Fil99, FS08, Gon14, GVJS10, GJR08, HR15, JRS10, LT01, LNS18, Pfl08, WY15, WT04, YLQ03, YP20, JRW94]. Feedback [AFH+13, RS97]. Fejér [ACS14, CP15]. Fenchel [AAS17, BD02, Boy93, Boy95, BT96, FLY11, GF08, IS02a, LCC+20, LFL09, See92]. Fenchel-Type [IS02a]. Fermat [NARS14]. Few [CC18]. Fiber [ZM06]. Filter [AD04, Ber96, FGL+02, GKV03, GLT04, GST05, GLR14, GLR15, LY11, MU14, RKG08, SS05, ZSY16, WB05a, WB05b, FLT02]. Filter-Trust-Region [GST05]. Filtering [CK00, LDL+02, Gk93]. Final [BM16b]. Final-State-Dependent [BM16b]. Finance [KB08]. Finding [AO06, BCH14, CC18, DV14, DV16, EGG09, GL10, KL97, Luk08, MSFL17, NR20, YP20, JBK+18]. Finds [CD19]. Fine [Zen91]. Fine-Grain [Zen91]. Finally [ZT98, ZT96]. Finite [AA20, BER03, BD17, BDM16, BM16b, BRB19, CP01b, ESKL18, FG04a, GP04, Gu00, GVJ06, HML10, HG16, LY19, LSA20, Lev00, LLS06, MNP96, MNP98, PQ01, SV07, WLY16, Wri01, BL03, MN93, Zha94a]. Finite-Dimensional [BM16b, Lev00, BDM16]. Finite-Precision [CP01b, Wri01]. Finite-Sum [LY19]. Finally [AKS00, Sab11, ZK14]. Firmly [KL97, KT08, Tse92]. First [AI11, AI12, BT12, BV18a, BST18, BRB19, CGT12, CB14, CMV19, CS15, CSV09, DHR07, DO19b, DFR18, GLC18, Gr11, GL14b, GNS08, HM15, HN11, HO04, LS13, LJ16, LFN18, MP18, SS17, SLWY15, THG17, TDZ20, Wnl08, Wnl16, WY03, Xu17, YZ16]. First-Order [CS09, GL14b, HN04]. Fischer [BPC11].
FISTA  
[KF18a, AD15, OP19, TBZB16, VJFC18].
Fitting  
[BP12, LM18, KSW94, Fitzpatrick  
[BWW07]. Fixed  
[AKT17, BWW12, BPL12, BLT17, CP15, DFR07, FV07, Fie00, HY08, IY09, Iof11, KfL97, KT08, KRZ17, SL15, ZOB20, ZL01]. Fixed-Charge  
[AKT17]. Fixed-Point  
[HYZ08, ZOB20]. Fixed-Size  
[FV07]. Fixed-Width  
[BPL12]. FJ  
[FBM15]. Flexible  
[MIM20]. Flow  
[AHLN16, AKT17, BPT97, EB20, FG04b, LM16, McB98, RSE18, Vil05, Bon97, RV93]. Flows  
[BC09, BGV20, BCD18b, Cas00, FHMK06, KS05a, MS18]. Folkman  
[BT20]. Follower  
[DNSD13, Fay96, HK09, HSW14, HS15, HYY6, KJ17, LT10b, Lin08, LMO06, LSZ98, Mon97, Sim11, TKDC14, Tse97b, ZL02, AZ05, AB95, Ans96, Gon91b, Gon91a, HK06, NN91b, SG94, Zha96, dRV92]. Food  
[KS00]. Forest  
[Rot09]. Form  
[FV99, Rut17, WX19]. Forms  
[ZVP06]. Formula  
[CYZZ19, Lu.e95]. Formulae  
[PA19, vAH14, Fle91]. Formulas  
[CHLC19]. Formulation  
[BH19, CDF+94]. Formulations  
[ASZ08, BHM18b, BV10, BM18b, GACD14, Kal18, Lu14, Lu.e08, RR08, WZZ18]. Fortified  
[Tse99]. Fortified-Descent  
[Tse99]. Forward  
[ACP11a, APR14, AP16, AC18, AD15, BFO19, BPR20, BAD18, Dav15b, LFP17, MT20, Sal17, TSP18, VSBU14, CR97]. Forward-Backward  
[ACP11a, APR14, AC18, AD15, MT20, TSP18, VSBV14]. Forward-Backward-Half  
[BAD18]. Forward-Douglas  
[Dav15b]. Foundations  
[ABD+18, DR13]. FPTAS  
[HNO15, HN19]. Fractional  
[BR19b, BHG18, BHZ19, CZZ19, GL08a, Jan06]. Frames  
[PC03]. Framework  
[Aus09, BT12, BY11, FFK00, FH14, GLCxy18, GL12, GMM17, ND10, Pat98, TDFC18, AW93, FKM00]. Frameworks  
[IK14]. Frank  
[BCD+18a, BRB19, BRZ20, FGM17, PSM18]. Free  
[AB12, AB08, AO18, AO06, AD09, BTKNZ99, BBN19, BBLG13, BDDM19, BFMS14, CGT12, CWW16, CSV09, CHL16, CWN10, FLLR14, GPR02, GL10, HR14a, JJ15, KT14, KNX16, LLS06, LL09, LLS10, LRR16, LLRV19, LS02, MDWS18, MW09, QA00, RSS00, hRK14, ST10, SN07, SHP18, SKL09a, SKL09b, WS11, ZCS10]. Frequencies  
[BBF+04]. Friction  
[AA20, BHK02, BHK+09, Sta04, GK95b]. Frictional  
[KP98]. Frictionless  
[TP02]. Fritz  
[BOT06, KS10]. Fromovitz  
[GVJS10]. Front  
[MGGS09]. Frontier  
[DKVW17]. Fronts  
[BKR17]. Fulkerson  
[Chet05]. Full  
[HHY15, MRS14, MN14, MlOS14, MN16, Roo06, Roo15, CJ18]. Full-Newton  
[Roo06, Roo15]. Fully  
[MARS10, ZZN18]. Function  
[AF01, AILT14, BM20a, BDMS09, BG18, BGH19, CGT11, CL96b, CHLC19, DL01, FS97, GV14, GtL97, GLY14, HK06, HK09, HNO3, JPT13, KON99, KT14, LSW06, LY11, LL09, Men17, MST11, Ous99, PTZ05, PW06, SS05, Sch08, Sor97, SW99, SXMW13, TF96, U1b03, WHY+19, WS11, YY03, YZ10, ZZ16, FM94b, GLW91, Gon91a, JY94, Lsc92, MW94, SZ92, See92, Tba93, War96]. Functional  
[CHW12, CW18, DLV10, Fay96, GNRPT16, ILR01, Xu20]. Functionals  
[BH15, Cel07, CKS17, KKS03, Ls17]. Functions  
[ABD05, ABF14, AV20, AZ19, AFDO20, BER04, BDS10, BG12, BS19, BBW07, BNL+18, BBN91, BCU00, BM14, BGL13, BDL07, BM98a, BM98b, BW05, BH14b, BG19, CV17a, CX99, CQTO3, CCR17, CWP20, CH09, CDRM20, CHY10, CTM3, CGTM10b, CDZ17, DML01, DSS09, DF19, DRT17, DD19, DLR14, DMZ12, Don16, DK10, EH20, FMP18, FG04a, FB19, FH14, FB03, FGG04, FH09, FSF12, FLT01, Fus14, GN17, GN19, GN20, GVJ06, HZ020, Har09, HHY18, HP07, JMW08, JFX17, JL03, KKS03, KM09, KKK00, KN09, KZ00, Lu19].
KLW18, Kuc08a, LP10, LB18, LSS14, LS13, LN07, LN09, Li10, LN11a, LN11b, LLRV19, Loc15, LT20, LPV05, MWDS18, MZGS08, MY10, MS00, MS03, MS20, MN13, MA00, Mur03, NZ01, NY05, ND09, PA19, Pha20, Phu10, PW16, PR96, Qi99, QW20.

Functions [RG00, RGY99, Sch16, See97, Sen07, SVD12, SMG14, SW07, TM15, TSP18, TZ10, WST14, YZZ17, ZA14, ZFL06, ZT98, ZCT10, dBdH07, vAPA19, AW94, ACC93, BD02, CT93, GK95a, GIJT96, Li96, Lu.c95, MLRR93, Mar94, MS94b, PRL91, P294, ZT96].

Functors [Vel15].

Fundamental [HL14, SKL09a].

Funnel [CRS18].

Further [TSP18, Tse03, WZYB08].

Fused [HL17, HL20, LST18b, YLS+15].

fuzzy [NT02].

Gateaux [JS20].

Games [ABGJ14, HF14, KS12, MPR10, PS11, RS11, ZS19, vdLT06].

Gap [AP14, BT20, CW18, DO19b, GW18, LN09, Nes05, WX20a, XSLZ11, YWAS17, Tha94].

Gaps [GSZ14].

Gas [ALSV18, HPU19].

Gateaux [Jey91].

Gauss [ABD+18, CV17a, FMP14, Lim11].

Gaussian-Like [vAH14].

General [ABMS08, AZ08, BKT99b, CMY15, CC02, CGST96a, CSV90, DEAM97, DS12, FGL+02, GVS10, KR02, LT02, LY07, MP19, Pul97, Pul00, RT05, Ren16, Tse99, Wri00, YmZS15, YN17, Ekc94, NS91, ZTP93, FKM00].

general-purpose [NS91].

Generalization [HL17, HL20, MN09, SV14].

Generalizations [AHFH16, Don12].

Generalized [AINT17, AFS01, AD03, BDS10, BNL+16, BDM09, BHR19, BWH, BG18, CDL16, CSS91, CY14, DSSST20, DJS13, FDK10, FS17, FB00, Fra02, Gfr14, GJR08, HJB20, HSK15, HY06, JFQS98, JL19, JL20, JS11, KS16a, KKW19, KKW05, LZ13, LN09, Lie20, LRX14, LYS17, LT20, MN96, MA00, NARS14, Pen00b, PQ01, PW06, PR96, QLSZ18, QY14, RPK03, Roy20, SNT16, SMF20, SKB18, VR05, WX19, WA15, YZZ97, ZSL17, ZFL06, ZN07b, ZN10, ZZ16, ZAC17, dEH01, vAPA19, DFKS11, TK96, Tre95].

Generalizing [KF18b].

Generate [BKR17].

Generating [BS19, BTT96, BGP09, Boy93, DD98, KLT07, Lov11, LPV05, MP14b].

Generation [LS08b, RADK05, RR08, Mit94, Ye92].

Generic [DIL16, GL12, HS19, JS97, LP17, Lev04, LMH19, PW16, SS15, Zas00, JSV91].

Genuine [YF00].

Geolocation [RM08].

Geometric [DSP10, GM12a, GLY12, GYZ14, HL08b, IW16, NOS17, SDR20, SH15, JS95].

Geometrical [CN17, KKK20].

Geometry [ANRV04, AL14, BO17, BWW12, BG18, CM10, Fre03, Las09, MW97, Peñ00a, RFb+11, ST10].

Given [HP07].

Global [AKS00, Ani05a, BBW05, BT00a, CKS15, CX99, CC99, CVG01, CGST93, CSV90, CR04, DY99, DEAM97, EAA99, FLT02, FGL+02, Ger08, Ger11, GN92, GR10a, GS07, GH15, HPU91, HP09, HL98, Hus07, HMP+08, ISU12, JLL90, JLLP16, JSC95, JL05, Kan96, Las01, LL00, LS13, LF01, Li10, LP15b, LMZ15, Lov11, LS02, LSL08, MS11a, MT98, MW97, NZL10, Nga15, QWV04, Rag13, RKG08, Sch06, SK06, SZ98, TBW+03, TM95, VGO18, VS08, Vui14, WB05b, WS11, Wu96, XB90, Yn09, Zha00, ZC10, And96b, BKT99a, BD93, GIJT96, Hen95, RS94, RD95, Ser95].

Globalization [MU14].

Globally [BV18a, CH16, EW94, FHS16, FS05, FQ96, GR14, GKV03, LT02, QW04, SS00, Sva02, WX19, Wa00, WMBE14, ZOB20, ZL03, CH93b, Li93b].

GMRES [FP97, SAW99, WZ18].

GMRES-Accelerated [WZ18].

Gomory
Goodness [Che01]. Goodness [BS19, LL00].

Governed [AL20, Voi08]. Gradient [BP12]. Gradient [AL14, Mas20].

GPS [BS19, LL00]. Gradient-Based [Chr20, LJ20]. Gradient-Like [MS18]. Gradient-Type [HR14b]. Gradients [GP19a, HJB20, SY18].


Graph [GHR14, GSZ14, GL08b, LP15a, PVZ07a, PR07b, SM09, SL14, dP02, MOT95, PR95].

graph-bisection [PR95]. Graphical [CH17, CHN18, YLS+15, ZZST20]. Graphs [BDPX09, Dah99, H11, MRT15, Mut01, NOS17, Pan19, HP94].

Grid [AHLN16, CP01a, PMLD10]. Grid-Based [CP01a].

Grids [BV10, PC03]. Gröbner [Spa14]. Group [BHKM14, DW10, FdOF07, GH15, YST14, ZZST20].

Grover [BBW05].

Growth [Ani00, CDZ17, DL13].

Guaranteed [HZ05, MP19]. Guarantees [CCF+20, DSK20]. Guided [DG19].

Hadamard [Bac14, Rev97, WLLY16].

Haeberly [KSS99, LM05]. Hahn [DGLM14]. Half [BAD18, ET07].

Half-Strips [ET07]. Halfspace [Pan16].

Halfspace-Quadratic [Pan16]. Hamming [MP10]. Han [PB17].

Hand [GST11, Gre00, HCH12, KRT07]. Handling [AB08, EL10].


Hemivariational [HKK11, MS11c]. Hermitian [Lew96]. Hessian [Har14, AA20, AW00, BNS95, BMSS19, BCNN11, CK99, Flf95, GL01, GL03, Gur94, PCA19, PR96, XB99].

Hessian-Driven [AA20]. Hessians [BDS10, PC03].


Hierarchies [Don14, FSP15, Las14, dKHL17].

Hierarchies [JM18, KTT15, Mas20, dKL11].

High [AP18, BGM+16, Lin08, Mar17, Mas20, Pap17, Bon97]. High-Degree [Pap17].

High-Dimensional [AP18]. High-Order [BGM+16, Lin08, Mar17]. Higher [CMS93, GN20, KT18, MN09, Pen17].

Higher-Order [GN20, KT18, Pen17, CLMS93]. Highly [LST18a].

Hilbert [Alv04, BI98, DLW99, FI08, GP19a, IK96, K91, Kip96, LN02, LJ02, Luk08, RW16, Rut17, Sha94, WyW04, Zas10].

Histograms [BGV20].

Hoffman [AC02, BT96, LL94, Zua03]. Hold [CU99].

Hölder [GN17, GN20, LM12, ZN15].

Hölderian [MN14, Vui14, ZZN18].

Homogeneous [And00, Chu03, HLNZ08, LSTZ07, MZH20, NV99, Yos07].

Homotopies [GLM98, Wat00]. Homotopy [Bil02, BW02, SAW99, WBM14, XZ14a, IKR+91, Naz91, RHW93].

Homotopy-Based [Bil02]. Horizon [BZ08, HG16, XA18b].

Horizontal [Pot14, Zha94b]. Hot [CC18].

Hot-Starts [JKW15]. HPE [AMS16, GMM17, HM16]. HPE-Type
PLS08, QGD18, SOT09, STY16, TDKC14, VSBV14, Wal08, ZPR00, ZU11, Zie14, vAS14, CGST93, EHW94, Man91, Zhu96.

Inexpensive [CGT20].

Integration [DHL15]. Integral [FRMP18, FGM12, HKP18, LRP16, Zha96]. Integrality [DLR14, GSZ14, GW18]. Integrated [LL00]. Integration [BD02]. Interconnecting [XLD99]. Interdiction [DRT17]. Interior [AY08, ALi95, AHO98, AB08, AGJJ00, AT06, BER03, BER04, BHKK00, BCW08, BP97, BHN99, Cas00, CM11, Chau09, CO12a, DIPR20, DT98, EAV10, FFK00, FM03, FG98, FGG07, FKS02, GLY96, GS98, GG03, GG08, Gon14, GLTP98, GLHZ11, GOST01, GMO14, GK96, Gu00, GR10c, IS10, JKZ98, JR10, KSSH97, KSS99, Kuo00, KU15, LM02, LR10, LLCN06, LT10b, LS04, LM05, LY07, McS96, ML05, M07a, M09, Mia96, Mit00, MT03, MOT04, NS98, NT98, NT16, NWW09, PC08, PR02, PS97, PS98, Pot08, PS01b, Pot14, RB05, RB18, Ran06, Ro06, Roo15, SOT09, Sch98, SP97, SSK98, Sim11, SS97, SZ98, TWB+03, Tsh00, Tse02, WR18, Wri09, Wri01, YY03, YT02, YW02, Yos07, Zha98a, Zha98b, dKV16, BF96, CLMS93, CL96a, Gro95, HRV96]. interior [JS95, JY94, KKM93, LMS92, McS94, Meh92, Mit94, MTT94, MKT95, MW96, NN91b, Pot96, SM91, SG94, TZSW96, Tod92, WR18, ZTD92, ZTP93, ZT93, Zha94b, ZL03].

Interior-Point [AHO98, AB08, BER03, BER04, Cas00, Chau09, CO12a, DIPR20, EA01, FFK00, FM03, FKS02, GLTP98, GLHZ11, GMO14, Gu00, GR10c, IS10, JKZ98, KSSH97, KSS99, LR10, LS04, LM05, LY07, McS96, ML05, Mia96, MT03, MOT04, NS98, NT98, NT16, PRT02, Roo06, Roo15, SOT09, SSK98, TWB+03, Tsh02, WR18, WR10, YW02, Zha98a, BF96, HRV96, JS95, JY94, LMS92, McS94, MTT94, TZSW96, Tod92, WR18, ZTD92, ZTP93, ZT93, Zha94b, ZL03].

Interior [AADD09]. Interiors [BP07]. Interpoint [Pap17]. Interpolation [CRY99, DQQY02]. Interpretation [Hen15, JSC95, Lag93].
GL03, GR94, Gon91b, Gon99, Gou99, GST11, JST12, JS00, JM18, KKM93, LPN98, LT10b, Lie20, LM99, LRR98, Mai15, NLQT06, NW12, Ove92, PS97, Pyt98, Ray97, RSS00, SD00, Sor97, TK02, Toh03, Wan17, WG10, X99, Zha98b, AM94, BS95, BKT99a, Dun93, GMR91, GT92, MT91, NN91a, RD95, dRT92.

Large-Scale [ABCFR20, AT03, BBN14, BYZ00, BHN99, BHNS16, CB14, DGN12, DNSD13, FJS98, FM97, GMS02, GL03, Ios01, JS00, LNP98, Lie20, Mai15, NLQT06, NW12, Pyt98, RSS00, SD00, Sor97, WG10, X99, GR94, Ove92, AM94, BNS95, BKT99a, GMR91, RD95].

Large-Step [PS97, KKM93, GT92, dRT92].

Large-Update [BER03].

Largest [DV16].

larvicide [CD92].

Lasserre [GSZ14, JM18, KS18, dKL11, dKHL17].

Lasserre-Type [dKHL17].

Lasso [HL17, HL20, LST18b, LST18a, LST19, YST14, YLS+15, ZZST20, TBZ16].

Lattice [BDDM19, HW07].

Lattice-Free [BDDM19].

Lattices [MS06b].

Layer [KRZ17].

Layered [MT03].

Layered-Step [MT03].

LCP [AZ05, Gon99, McS96, MW96, PS97, PS10b, Pot14, SP97].

LCPs [Lin08, ZL03].

Leader [HP14].

Learning [AAJN16, APX17, BH15, BCNN11, dKHL17].

Least [BBT06, Bec15, Ber96, Ber97, BDMS09, BCWW15, CGT14, DLR16, FRW11, GLT04, GLX07, GSW97, HL98, KV17, Lin08, LV08, RM08, SM18, STY16, ZX14a, ZCD00, ZCS10, ZL02, ZC10, vdBF11, Dax92, Hei93, Hu94, KSW94, WZ95, Y995].

Least-Change [HL98].

Least-Squares [CGT14, GLT04, ZX14a, ZCS10, vdBF11, KSW94].

Legendre [See92].

Lemma [BT20, DGLM14, Bar08].

Length [H5W14, MBW09].

Level [ABMS08, BDM16, BM16b, Chr20, DMZ12, Fre03, LST18b, LNS18, SXMW13, ACC93].

Level-Set [LST18b, LNS18].

Levenberg [Ki96].

Levitin [HY06].

Lexicographic [RT19, ZAC17].

Lift [BZ04, BV06, Che05, LST20].

Lift-and-Project [BV06, Che05, LST20].

Lifted [AD10].

Lifting [BP15, KN20].

Lifts [FSP15].

Like [BR19a, MS18, PC08, QZ08, Teb97, ZCD00, vAH14, AM12, AH19, CT93, CT10b, YY95, AL20, BKJ17].

Limit [GKS18, GHNS19].

Limitations [San20].

Limited [BB19, GL03, GST11, HZ14, MN00, NN91a, ZNB+93].

Limited-Memory [BB19, GL03, ZNB+93].

Limiting [GS01, LM04].

Line [BLPP16, DK13, HZ05, HHY18, HST19, MW94, PS20, RW18, SU15, WB05a, WB05b, WG10, ZH04, dBDH07].

Line-Search [RW18, SU15].

Line-Search-Based [BLPP16].

Linear [AB08, Ans99, AH16, AC02, BER04, BC09, BK12, BGJ12, BBW07, BWY10, BM20a, BTN02, BZ08, BGW07, Bol14, BD09, BCWW15, BCD20, BNGW05, CT13, CLPT99, CLPT06, CLMP10a, CKL+14, CB00, CX99, CY00, CX08, CB14, CCH05, CSW12, CC14, Chua16, Chua18, CGST96a, DF19, DIPR20, DO06, DHL15, DY04, DK10, DS12, EAV10, Ent96, EF02, FC07, Fay96, Fil99, Fle12, FM97, FV99, Fre03, HFN09, FT02, FT07, GCPT18, GLTO3, GLDS05, GLVP14, GNS08, GT97b, GS07, GST11, Gre00, GK96, GNRPT16, Hab98, HW10, Hen15, HNE16, HLL08, HLL08b, dMM10, HZ06b, HMP+08, HY96, HY16, IPRT00, Ios01, JRT97, Jan04, JR08, JL20, KFF09, KH05, Kea11, KLR18, KSS99, KRZ17, Kor00, LLS05, LWW11a, LMT09, Las14, Lau01, LP15a, LTY12].

Linear [LYSA20, LR10, LN05b, LNP07, LN14b, LMP+18, LST20, LM20a, LFP17, LW98, LMZ15, LP06b, Lov11, LM05, MSFL17, MNP96, Man04, Mia96, MN06, MGR18, MT03, NS14, NY02, OF03, PS10a, Pau05, Pei00a, PVZ07a, PR20, PTZ05, PW17, Pot08, PW19, Pul00, QW00, QW01, Q16, QY14, RFRNP14, Roo06, Roo15, Rot92, RV18].
RP12, Sch16, Sch98, She14, SYZ19, SW14, SW15, Sim11, SS97, Stu00, SZ98, TBZ16, TAW06, WLWY15, WLYL16, WX17, WX19, WBYE14, WCP17, Wri99, XS16, XA18b, YLQ03, YT02, YW02, YM14, Zha98a, ZC09, Zha98b, ZL02, ZL12, ZK15, ZN05, ZN08, ZN14a, Zua03, dSTV18, AB95, Ans96, Bar93, Bos93, DL91, Fre95, GLT97, GV94, Gon91b, Gon91a, GT92, Gow92, Kan96, KSW94, KK92, KKM93, Lag93, Li93a, LS98a, LMS92, MN93, Man91, McS94, MS94a, linear [Mit94, MKT95, Naz91, O'L95, Pot96, Pow95, Ren95, SG94, Tod92, Tre95, TM95, Ver96, ZTD92, ZT93, Zhu95, dRV92].

Linear-Quadratic [BGNW05, LTY12, PW17, XA18b, ZR93, Zhu95].

Linear-Time [JL20, PW17, WX19].

Linearization [DLR17, KRR99, RQMG12, Vel15].

Linearizations [Kiw06, Kiw08].

Linearized [HLY16, LM16].

Linear Quadratic [BGW05, LTY12, PW17, XA18b, ZR93, Zhu95].

Linear-Time [JL20, PW17, WX19]. Linearization [DLR17, KRR99, RQMG12, Vel15].

Linearizations [Kiw06, Kiw08]. Linearized [HLY16, LM16].

Linearly [AFS14, Bon15, BMS19, BP97, CPRZ20, DGN12, Fle14, FS05, GH16, Gon99, JST12, KLT07, KMM19, LT00, LT10a, LST16, LCPS20, LL05, NR20, PC03, QLSZ18, Xu17, Xu18, ZL20, ZC20, FMS94, NN91b, Wri92].

Linear search [DO19a, FLLR14, MP18, TSP18, Me96].

Linear search-Based [FLLR14].

Linearized [BO17, SCR10]. Linear search-based [FLLR14].

Local [BO17, SCR10]. Linear search-based [FLLR14].

Locally [BNL+18, BMS19, BP97, CPRZ20, DGN12, Fle14, FS05, GH16, Gon99, JST12, KLT07, KMM19, LT00, LT10a, LST16, LCPS20, LL05, NR20, PC03, QLSZ18, Xu17, Xu18, ZL20, ZC20, FMS94, NN91b, Wri92].

Lipschitz [BR19a, BNL+18, BSTV18, BM98a, BM98b, CLP16, CDM20, CGT10b, Grl19, HHY18, KK05, LS13, NT06, Nen04, NT02, QZ08, RW16, RS96, SK06, ZC20].

Lipschitz Continuous [NT06].

Lipschitz-like [BR19a, QZ08, CGT10b].

Lipschitzian [BC14, CTW19, CS15, GO16, KK02, MN13, MN14, PHR91, War96, ZC10].

Liquidation [YLZ02].

LMIs [ZVP06]. Load [KS05a, SKL09b]. Load-Dependent [KS05a].

Local [Bol14, CX99, CC99, CY99, DLT03, EH20, EM91, FS12, FLRS06, For05, GR10b, GLR15, GHS95, Gur94, Har98, Hu07, JPS99, KFF09, LFP17, LM05, MS11a, MS11b, MRR18, MN16, NT16, Pap16, Pha20, PR98, SB18, SZ98, TBZ16, WB14, WB05a, WX20a, Wri05, YZS19, GK95a, Ser95, Vav93].

Local-Nonglobal [For05].

Local Linear-Quadratic [BGNW05, LTY12, PW17, XA18b, ZR93, Zhu95].

Local-Time [JL20, PW17, WX19].

Localizations [Kiw06, Kiw08].

Local Linearized [HLY16, LM16].

Log-Determinant Linear Quadratic [BGW05, LTY12, PW17, XA18b, ZR93, Zhu95].

Logarithmic [JR10, TY12, GLW91, MW94].

Logarithmic-Quadratic [TY12].

Lojasiewicz [SU15, BDL07].

Long [Sau20, SZ98, XA18b, Ans96, TM95, dRV92].

Long Horizon [XA18b].

Long-Step [ZS98, TM95, dRV92].

Lorenz [Sen07].

Loss [DJV06].

Lovász [Che05, Lau01].

Low [BDdSM15, CV17a, DV16, FRW11, FGM17, GG18b, HLB20, Hu19, JBAS10, LRWW98, LdQ11, LZSV20, LWZ15, MSFL17, MMBS14, SU15, TY11, Van14, GMS92, Tod92].

Low-connectivity [GMS92].

Low Rank [BDdSM15, CV17a, DV16, FGM17, GG18b, HLB20, Hu19, JBAS10, LHZV20, LWZ15, MMBS14, SU15, TY11, Van14, FRW11, LdQ11, MSFL17].

Lower [ABMS08, BDM16, BM16b, BDDM19, Chr20, Ch13, CPRZ20, DLT10, FLP19, FL98, GM12a, GLO8a, IdW16, Jan04, NZ01, PZ98, PRRL97, dKP12, MLRR93].

Lower-Level [ABMS08].

LP Relaxations [Las04]. LQP [YL11].

LQP-Based [YL11].

Machine [BCNN11, CKL97, CJK98, CP01b,
KB08, LM20b, Mai15]. Machines
[FM03, GLHZ11, DT91, Onn94]. Maciel
Major [FGO14]. Majorization [Mai15].
Majorization-Minimization [Mai15].
Majorized [LST16]. Majorizing
[LN07, WHY+19]. Manganasian
[CX99, GVJS10]. Manhattan [MP10].
Manifold
[CMSZ20, HSS93, KLW18, LMW16, SH15].
Manifolds
[AM12, BH19, FLP19, HU17, HHY18, 
LMWW11, RW12, WLWY15, WLLY16].
Mann [CG17]. manufacturing [AEGS93].
Many [Sab11, TAW06, Xu20, XLD99, ZT98, 
GK95a, GK94, ZT96].
Map
[HY16, LM04, Lu14, Gow92]. Mapping
[BH18, FKP10, HV05, IY09, LSdZ18, TY04, 
GLT97]. Mappings
[CH17, DPS17, EL09, Fay06, Grf11, GTdS06, KL97, KT08, LW08, 
LSZ04, NT06, Sab11, SY13, ZL01]. Tse92].
Maps
[AGH10, AG14, LPT07, NZ16].
Marginal
[CHY10, Las10, LSdZ18, QW20, War96].
Marginals [HP07]. Markov
[AP18, AH16, BDPX09, GS01, HG16].
Marquardt [Kiw96]. Mass
[GHGHLO6, MRT15]. Massive [FM03].
Massively [ZC91]. Matching
[DL17, INT17, MP14b, Bar93, Gro95, Ris94].
Matchings
[AGH10, AG14, LPT07, NZ16].
Material
[BTKNZ99, KNX16, SKL09a, SKL09b].
Materials [BGG+12, Sta99].
Mathematical
[ASS18, AHSS19, Ani05a, 
Ani05b, Bon97, BKS16, CSW15, CO12a, 
DFNS05, DR13, Dol20, FM12, FLRS06, 
FMB15, FP98, FT02, FT07, Grf13, Grf14, 
GY17, GLY12, GYZ14, GLY14, GXZ17, 
HK09, HS11, IK16, IS08, JR00, JR10, 
KDB09, KS10, KS14, LLCN06, LXL11, 
LX14, MU18, MX06, MN14, RB05, Sch01, 
SU10, Voi08, WJ00, Xu06, YZ16]. Matrices
[AT03, BFM98, Bur03, CHS06, DDW20, 
DSST20, DPW15, GMO14, JILW16, JL16, 
JBAS10, KSH97, KT00, Lim11, MP10, NZ16, 
NYZ18, SWP15, SU15, Shi18, SH15, TY11, 
Flg95, JYZ94, Lew96, LS91, Van95]. Matrix
[AM12, BBN14, BQX15, Bec07, BTN02, 
BH15, BGO18, BHH19, CCS10, CHS06, 
CSPW11, CV17a, CY00, CQTO3, CX08, 
CYW11, CCF+20, CSW12, Chu18, CDZ17, 
CNW10, DZ07, FCFO7, FRW11, FGM17, 
GV15, GO12, HH96a, HR14a, HNE16, KN20, 
LdQ11, LZSV20, LWZ15, MSFL17, MN96, 
MOT04, MPR10, NTA04, PS97, Qi16, RO18, 
RFPN14, RSS00, STKI17, SI13, See97. 
Shi17, Stu00, SSQ04, tT17, ULC20, Van14, 
Vav10, XLZH19, YPC18, ZY14, FM1N00, 
Gur94, KK92, Li93a, LF92, Man91].
Matrix-Fractional [BGH18, BGH19].
Matrix-Free [CNW10, HR14a, RSS00].
Matters [RSKW19]. Max
[CGC15, CPS18, DGR17, GKFV01, KNP98, 
Lau01, PQS01, RP103, BMZ01, RN98].
Max-Cut [Lau01, BMZ01].
Max-Facet-Width [DGR17]. Max-Min
[GPV01, KNP98]. MaxCut [dCST19].
Maximal
[ABT00, Alv94, BGW07, BCD14, 
DF19, GY20, Pen00b, Sab11, MOT95, ZT92].
Maximality [CM10]. Maximally
[AL20, IPRT00]. Maximin [WX16].
Maximization [DZ07, HKMS20, XLZH19, 
DLHN92, FM94b, GMR91]. Maximizing 
[WX19]. Maximum
[Ans02, BCM03, CHLZ12, HL11, LUZ15, 
Lim11, MPB02, Ons99, Ple08, RKB9, SW07, 
WN16, YP20, ZG03, BL93].
Maximum-Entropy [SW07].
Maximum-Volume [Lim11].
Maximum-Weight [RK19]. Maxmin 
[HLTW14]. may [Wri95]. McCormick 
[BCT19, MCB09]. McCormick-Based 
[MCB09]. Mead 
[Ke199, LRWW98, LPW12, MeK98]. Mean 
[ABGJ14, ACL97, CG17, MS10, OR02, 
ZIS18, ZFL06]. Mean-Covariance [ZJS18].
Mean-Risk [OR02]. Means.
Methods

[Gui16, GOP19, GP19b, Har98, HM15, HK06, HSW14, HS15, HSK15, HM02, HGA15, IJOT19, IS04, ISU12, JKZ98, JR00, KP99, KN02, KN04, KFF09, KS16a, KS19, KR11, KL97, Kiw04, KSH97, LSS14, LR10, LT00, LL06, LP15b, LFP17, LH04, LLST19, LP06b, LLS10, LLRV19, LZ14, LJ16, LFN18, LRR98, LS02, LSL08, MM08, MPRW09, Ma15, MS11a, MÖ07a, MZ99, MSQ98, MB14, MOP20, MOT40, MS11c, MS14, NR19, NB01, NO09, NT98, NV99, Nes12, NT16, ND10, NW12, NWW19, OSS11, PT18, PRT02, PP18, Pot08, PS10b, Pot14, QW00, QW01, QQS03, Rao06, RHL14, RZ01, Ren16, RKG08, RW12, RR08, ST13, Sch08, Sch09, SW11, SU15, Sch16, SDGM99, ST14, SBT16, SAW99, Sta04, SH97, Sva02, THG17, Toh00, Tse97a, Tse92, Tü03, Ub01].

Methods

[Ub03, VGO18, WB05a, WB05b, Wn16, Wa08, WB16, WMGL17, WHY+19, Wri08, Wri01, XY+15, Xu17, Xu18, YWF19, YW02, YNS20, Yun14, ZA14, ZX99, ZCD00, ZU11, Zie14, dF09, dEH01, dKV16, dBH07, vAS14, vAF18, Ali95, BT00, BLN92, CLMS93, DHLN92, DT91, DMZ94, EW94, EM91, Gar93, GN92, Gt97, GW93, Gon91b, Gon91a, GHS95, Gro95, Hei96, Hus94, IKe96, Kan96, KS93, Kiw96, Kup96, LN93, LP93, MS94a, Mel96, RH93, RD95, Sar95, SC91, WZ95, Zha94b, Zha96, ZNB+93].

Metric

[AAI07, AZ19, BYZ19, BLPP16, CKLP07, CCPF05, DL13, Fus14, Gfr11, Gfr13, KK02, Ld97, LM12, LMH91, MRT15, MPR10, NT08, Och19, PLS08, Sal17, ZN04, ZN07b, ZN10, ZN14a, ZZ16, Dav91, Dixo, Sha94, ZN15].

Metrics [SSW16]. Mild [Sal17]. MILP [GACD14]. MIMO [LLZZ19]. Min [CGC15, GPKV01, KN98, MN09, PQS01, RPK03, RN98]. Min-Max [CGC15, PQ501, RPK03]. Minima [DY04, KKO0, Lev00, LMWY11, LMP+18, ZY07, Gk95a]. Minimal [CBF17, IT18, LB18, MM05, RO18]. Minimax [BR19b, JL18, KB08, Lás17, LL06, QZ08, SA04, ZT98, CL92, ZT96].

Minimization

[AAJN16, AGJ00, AFS14, At96, ARS07, APR14, Aus10, AST10, BCT08, BBTT12, Bec15, BGR20, BCN19, BDP14, Cab05, CTT11, CTG12, CWZ12, Che15, CP08, CGS96b, DD19, DK10, EG10, FRW11, FM97, FQ96, FLM03, GPR02, HYZ08, HKMS20, HK06, HR12, KKS03, KAl18, KF18b, KL10, Kiw97, LI11a, LT12, LT99, LT00, LT10a, LLX15, LBP20, Lu17, Mai15, MST11, Mut01, MW06, NC16, Nes05, PRR91, PQY97, QWY04, Ray97, RHL14, Ric11, Sch16, ST14, SV07, SFM19, Sol07, Sor97, SBFA17, TDKC14, TDFC18, Tse02, WCP17, XLZH19, YZ03, ZX99, ZCS10, ZL20, ZL12, dGJ18, dKL10, BT94a, CT93, CL96a, Dav91, FMS94, Gill92, LTY12, TK96, TYF96, Vav93, Zha96]. Minimize [CKL97]. Minimizer [For05, KPV18, WX20a]. Minimizers [AZ19, BGM19, CGTZ14, Pha20, PW16, YZZ17, ZN15, Mar94].

Minimizing

[BM20a, BCU00, CVW11, CCCR17, CL96b, DL16, FGG04, HFN09, GHR14, GN17, GN19, GN20, Hag01, HNP00, Ku08a, LRO05, LSS14, ND09, Phu10, QZ00, XY97, XY00, YZ13, An96a, SZ92]. Minimum [AY08, AHN16, BGV20, Dax09, HG16, JPT13, MBW09, PR98, XL99, Yil06, Yil08, ZNZ16, GJT96, R93, War92]. Minimum-Concave-Cost [AHNL16]. minimum-cost [VR93]. Minkowski [LZH14]. MINLPs [WA15]. Minmax [AC20]. MILPs [DW10]. MIQP [FL98]. Mirror [BBN14, BTMN01, DL15, DAJJ12, FMP18, NL14, ZMB+20]. Mirror-Descent
Multiple-Splitting [GM12b]. Multiplier
[AT00, BTZ97, DT98, GJ99, JLD03, KKS19, Luc02, WJ00, Ye04, ZL20, ZN07a, Dun03]. Multiplier [AT00, BTZ97, DT98, GJ99, JLD03, KKS19, Luc02, WJ00, Ye04, ZL20, ZN07a, Dun03]. Multiplier-Penalty [KKSW19]. Multipliers
[Bol14, FIS20, HLR16, JS20, MS13, MS19, Pen19, Spi09, ST14, STY15, Tre95]. Multiscale
[Far20, GST08, MB14]. Multisearch
[CMVV11]. Multispectral
[RSMB19]. Multistage
[AP18, GR12, Gru16, HRS06, Kuc08b, LZ03, MP16, MP19, P10, PP12, SÖ17, Sch98, SZ14, SD20b]. Multistart
[Har98]. Multitarget
[PR93]. Multiuser
[KNS11]. Multivalued
[AGH10]. Multivariable
[CH09]. Multivariate
[DW15b, HP07, LSZ04, LZ10, MN09, dKL15]. Mumford
[Wan95]. Nanoporous
[BGG+12]. Narrowing
[LYAS17]. Nash
[BHR19, CCM20, CK99, DJS13, DFKS11, Etc20, FK10, HM15, HSK15, HF14, KS12, KS16a, KKS19, RS11, Sag16]. Nature
[FPW16]. Navier
[HH06]. NCP
[CC99]. NCPs
[CL14]. nCUBE
[GR94]. Near
[GV15, PW17, ZB18]. Near-Optimal
[GB18]. Near-Separable
[GV15]. Nearest
[LdQ11]. Necessarily
[BM16a, BD17]. Necessary
[AZ09, Aus10, BT04, CLMP10b, CT02, DZ14, Gfr07, HN09, MM11, Sta92, WX20a, XY10, YZZ97, Ye00, YZ10, Zhu02, NT02, War92]. Neighborhood
[Gon99, LT10b, LP06b, Pot14]. Neighborhoods
[AZ05, HY96, Zha98b]. Nelder
[Kel99, LRWW98, LPW12, McK98]. Nested
[BH06, GRW20, PH10, VJM16, YWF19]. Nesterov
[AP16, ADR19, NARS14, TTT98]. Network
[ALSV18, AKT17, Bar96, BPT97, BRU97, CSY07, Cas00, DRT17, EB20, FG01b, GHK17, HPU19, Id12, KKW09, KW10, LM16, MPSU19, MBW09, NMU18, PW05, Pul97, Rag13, RCR18, RSE18, SCRS00, SK98, Tse07, WZYB08, XLD99, ZZ96, ZSY10, Sar95]. Networked
[Iid13, JRJ10]. Networks
[AH19, BPS06, CHP20, Etc20, FHMK06, LdF08, LXB19, Weng97, Bon97, GMS92, RV93]. Neumann
[PRS16]. Neural
[CHP20]. Newton
[Ger11, WST10, ACG15, AD10, And96a, AL20, BS15, BJKJ17, BFO19, Bel94, BBN19, BS94, BK10, BLN92, BHNS16, CD19, CGT10a, CNQ97, CNY14, CH15, CL96b, DIS04, DGT20, Dix91, DQQY02, EWH4, EM91, FJS98, FLF02, FO14, FS17, FHIS16, Flr91, FDS90, FM97, Ger08, GI97, GL01, GW93, GN17, GN19, GLN07, GOP19, HN05, HIK03, HH06, HGA15, IdW16, IK00, IS04, IS08, KN05, KFF09, KV17, Kau99, KXS08, LN93, Lau00, LSS14, LS93, LN07, LdQ11, LST18a, LST20, LM99, LST19, LMH19, LV08, LWZ15, Lu17, LRR98, MSQS98, MU14, MXC+19, MEB18, MP99, MS12, MN00, NN91a, NLTQ06, PMR19, PCA19, PW17, Q199, QZ00, QGD18, Ro06, Ro05, Sch08, SS00, Sta04, SH97, SK98, SW99, SSQ04, TWSN6, Ulb03, WN16, WMGL17, WHY+19, Wri95]. Newton
[XS99, YNS20, ZA14, ZZST20, ZST10, ZC10, ZNB+93, dPRT01]. Newton-Based
[PMR19]. Newton-CG
[WST10, ZST10]. Newton-like
[AL20, BJKJ17]. Newton-Type
[IS04, KN05, LS14, NLQ06, QGD18, SS00, HH06]. Newtonian
[FIS10, IK14]. Nice
[ROS14, RT19]. Nikaido
[HSK15]. NLP
[Fle12, LXXL11]. No
[CW18, EH20, MZ00, WQ01, ZT98]. No-Gap
[CW18]. Noisy
[AF01, BBN19, CCF+20, DKVW17, MS18, Nol98, TY11]. Non
[BC14, CL16, CTW19, GMM17, HKMS20, She14, TDZ20, ZC20, ZCT10, GKO9, NT02, War96, ZL03]. Non-Euclidean
[GMM17]. non-Gaussian
[GG99]. Non-Lipschitz
[CLP16, ZC20, NT02]. Non-Lipschitzian
[BC14, CTW19, ZCT10, War96]. Non-stationary
[TDZ20]. Non-Zenoness
Nonasymptotic [ST13]. Noncoercive [FB00]. Noncommuting [CKP12, PNA10]. Noncompact [GWZ15, VS10, ZT92]. Nonconvex [ABCFR20, ANP08, AFS14, ACB20, Aus15, BE06, BGMT19, BM14, BCN19, Bou16, BDDP14, BL09, BLO05, CD19, CGT10a, CGT11, CTG12, CTT20, CCF+20, CMV19, CHP20, CO12b, DG19, Don16, FI08, FK00, FB03, FBM13, FMB15, FG98, FGG04, GL14b, GNRP16, Har09, HS10, HL14, HLRL16, HAG18, Idl12, JL18, JI15, KM09, Kas10, KLW18, Kiw07a, Kiw10, KT00, KMM19, KRT07, LY19, LWM16, LFO1, LN02, LP15b, LSV20, LXB19, MXC19, uDR15, MN13, NE19, NT19, NR20, OP19, PS11, PT18, PDR19, RW18, SBT16, SLM05, TSP18, TP20, Tse03, WMGL17, Wan17, WCP17, WLZY07, XSLZ11, XY15, ZL20, ZC20, ZN10, Kiw96, Tha94, Tre95, CDHS18, KFF09, Kas10, KKT15, KK05, Kol05, LPT07, Las02, LM02, LSW06, LZ03, LS04, LY11, LL09, LLS10, LDLS20, Mal07, Mat05, MU20, MS11b, MG98, NA20, NWW09, OW06, OS17, Pat98, POLW20, PP18, Pyt98, Rag13, RKG08, RM08, SD00, SW11, SL14, SS00, SKB18, TWB+03, Uli01]. Nonlinear [Voi08, WB05a, WB05b, Wa00, WG10, Wri98, Wri01, Wri05, YY03, YT10, YH01, Yos07, ZA14, ZCD00, ZC10, vAH14, AW93, BKT99a, BS94, Bur92, CL96a, CL92, DVTY91, Dan93, DMZ94, Dun93, Hei93, Hsu94, Iof94, IK92, KSW94, LP93, MPW95, Sar95, YY95, YG91, ZC91]. Nonlinearly [LJ02, Sta99, GR94]. NonLipschitz [CNY14]. Nonmonotone [AFFG14, BMR00, GLR15, LN09, LZ19, TSP18, Ulb01, YPC18, ZH04]. nonmonotonic [EA95]. Nonnegative [CHLZ17, CST19, Erg19, GV15, Las05, Las06b, LSZ04, RV06, Vav10, ZCTW12]. Nonnegativity [Las11]. Nonpolyhedral [PR95]. Nonseparable [FB19]. Nonsingular [BM07]. Nonsingularity [BPC11, CS08b]. Nonsmooth [AV20, AFS14, ACL99, BRA+20, Bet19, BW02, BL07, BLP16, BCN19, BLO05, BK10, CD00, CNQ97, CQT03, CSMZ20, Chr20, CDM20, CV17b, CO12b, DL15, DSS09, DG19, DZ14, Dol20, EW09, FLLR14, FH14, FGG04, FKP10, FQR16, GAP08, Ger08, Ger11, Gfr92, GL18, Hab98, HSS20, HU17, HU99, HNP00, JLD03, JY04, JBK+18, JS11, Kan14, KN05, KT18, Kiw07a, Kiw10, Kiw09, LN09, LRL16, LRR19, LZ19, MX06, MZX+19, NARS14, Nes05, NT19, PQ93, PT18, PR96, PC03, RS11, RHL14, SS05, Sen07, Sol07, SH97, SS04, TDFC18, WJ00, WCP17, XYZ15, ZOB20, Yel91, Pan94, Q95, SZ92, Sta92, GJY16]. Nonsmoothness [Lew02]. Nonstationary [GS01, McK98]. Nonstrongly [FRMP18, YNS20]. Nonsymmetric [BPS99, DZ07, OL95, SW95]. Norm
[Dax09, DV14, DV16, Lin08, MMBS14, PTJY10, SM18, WDST14, ZL02, AB95, Dax92, Hei93, JLIW16]. Normal

[AH05, CH17, DD98, GJ17, LN14b, Lu14, MM04, QWY04, ZL01, ZW12a, ZN14b].


Optical [ZM06]. Optim [MZ00, QW01, ZT98]. Optima [EH20, MM11]. Optimal [ADEF +18, AO06, ADR19, BDM16, BM16b, BM18a, BBHK00, BP05, Bet19, BBV02, BPS06, Cal07, CT12, CD92, CLO14, Chr20, CF99, DK13, DK10, DFR18, Ete20, Fie00, Ger08, Ger11, GL12, GL14a, GCPT18, GK99, GKR14, HTT +15, HHP18, HP18, Her09, HM13, HV05, HS14, IK00, IT18, JZ98, JS20, KS00, KR02, LM18, Lau00, LPR00, Lim11, Mai07, MRT15, MCL10, MN14, OR16, PSP03, R597, RT06, RFB +11, RTBG20, Sch09, SW11, SU14, SKC12, SD00, Sta99, TM15, TW14, VQD17, Wac14, Zha20, ZB18, dGJ18, BTB93, Bon97, Dum93, Fle95, GHRT98, MS94b, Ra16, Wri91]. Optimality [AAS17, APX17, AMS10, AFSS19, AFSS19, AD19, Aus10, BT04, BT00a, BE14, BCS99, BH96, BHR19, CLMP10b, CT02, CuiRT08, CHW12, CN14, C15e, Ch16, CN20, DZ14, DMM18, DMM06, D2019, EW09, FS12, Gfr13, Gfr14, GD18b, GY14, GJN06, HSS20, H11, LLD3, LP06a, MY10, MOR15, N105, PY97, Pen17, RT06, SNP7, SM18, SKR16, VJFC18, WW20, XY10, YZZ97, YZ99, YZ00, YZ10, YZ16, ZN11, DI96, G197, JSC93, NT16, Ste92].

Optimistic [MOP20]. Optimization [ABT00, AK08, AN07, AF4 +13, AHS19, ASNP16, ABCFR20, AKSO0, AD10, AMRH15, AT03, And00, AF01, AMS10, AB80, ANP08, AKK14, AO18, ACB20, AFG11, AO06, AD06, ACD08, AS08, AT06, ACL99, AZ08, BER04, BQX15, BJK17, BRA +20, BB05, BO17, BT00a, BE06, BE14, BPS15, BGMT19, BTM01, BYZ00, BNL+18, BB19, BHK002, BHK +99, BFS16, BY11, BNT04, BP05, BC14, BG08, BM14, BM18b, BLC13, BGM +16, BM17, BM18c, BKT99b, BGG +12, BB19, BBN19, BM15, BMSS19, BLPP16, BP97, BS98, BS05, BKMM20, Bou97, BR08, BFM14, BM20b, BLO05,
BCW14, BCWW20, BCN08, BCN10, BCNN11, BHNS16, CKP12, CP18, CLPT06, CKLP07, CGC15, CDHS18, CCL09, CDT10a, CGT14, CT20, CT02, CM20, CM17, CS16, CM11, CHLZ12, CNY14, CLP16, CJ18, CTW19, CCF+20, CMSZ20].

Optimization
[CRY99, CCN+18, CSW12, Chr20, CDM20, Chn16, Chu20, CV17b, CGS96a, CVV99, CHP+09, CP60a, CH13, CPRZ20, Cru14, CD17, CHP20, CNW10, CO12b, CJRW14, CR18, CWZ18, CMV11, DL15, DHP16, DD08, DENR20, DZ14, DFK18, DEAM97, DR03, DR07, DHR07, DR14, DW15b, DGN12, DLV10, DGL10, DSD12, DNSD13, DMV17, DN20, DIL16, DLR17, DBW12, DR18, DFS17, EH20, Eic09, EA99, EL09, EAV10, EN14, FWS15, FLP02, FLY11, FI08, FLLR14, FRMP18, FV07, FS96, FIS10, FGO1, FLP19, FLS03, FH14, Fle14, FDS09, FV16, FB03, FBM13, FV99, Fre03, FS05, FMP14, FHKM06, Fk08, GCMxY18, GH16, GMSS17, GHKL17, Gfr07, GL12, GL14a, GRW20, GL01, GMS02, GL03, GKR20, GSG12, GLdS05, GM12b, GHZ99, GKR14, GHHL05, GJ99].

Optimization
[Gou99, GST05, GLR14, GH15, GST08, GE14, GW19, GKPV01, Gun14, GJN06, GHNS19, Hab98, HPU19, HZ06a, HP09, HRd02, HDP14, HS10, HK18, Har98, HSS17, HLNZ08, HP18, HR14a, HSS20, HK10, dM08, HU17, HU19, HMO2, HFD16, HLY16, HS17, HCH20, HY15, HNP00, HY02, HY06, HGA15, HAY19, I09, I0d12, I0d13, IH14, I0f09, I0S02a, I0S04, ISU12, JFX17, JAL15, JY04, JLL09, JLP16, JLM18, JS16, JL20, JL05, JRJ10, JS97, JM18, JBAS10, Kas10, Kau99, KLV18, K17, KQ19, KKW05, KKT20, KNP98, Kiw04, Kiw07a, Kiw08, Kiv10, KPV18, KsdM01, Kol05, KLT07, KNS11, KS16b, Kuc08a, KJ17, KS05b, LNP98, LZ16, LZ18, LY19, LMW16, Las01, Las06a, Las09, Las10, LP10, Las11, Las16, LM19, LP15a, LJ20, Lem98, LS13].

Optimization
[LRP16, Lev00, LT02, LF01, LN07, LNP08, LFLL09, LT10b, LP15b, LST16, LMP+18, LL20, LM99, LNS18, LNY10, LXB19, LU97, LY11, LMX17, LLS10, LLR16, LLR19, Lu09, LNF18, LScZ18, LV19, LRR8, LS02, Lu08a, LA08, LSW20, LSTZ07, LSL08, LZ10, MSFL17, MU18, MWDS18, MP19, Mai15, MPP+17, MC05, MS11a, Mar05, MRS16, Mar17, MP14a, MP14b, Men17, MSQ98, MM05, MU20, MU14, MXC+19, MMB14, MS20, mDR15, MS11c, MS14, MTZ03, MO07b, MR12, MRS14, MN14, MW09, MA00, MS06a, MARS10, MGGS09, MS02, NY11, NB01, NOS17, Nes12, NT16, NS17, ND10, NLZ10, NR09, NW12, Ne14, NE19, NS18, No98, NMU18, NR20, OP19, OF03, PS10a, PT18, Pap16, PY19, PMR19, PRT02, PTZ05, Pen19, PP18, PFA17, Pf10, PP12, PP16, PW17].

Optimization
[PMIL10, PNA10, PC03, QQ00, Qi16, QGD18, Rag13, RN09, RHL14, Ren16, RW12, Roo06, Roo15, RW18, RW17, Roy20, RR08, RSKW19, hRK14, SS17, SS05, SBD+11, STKI17, SI13, ST10, SSW16, SOT09, Sch05, Sch06, SFP11, SDGM99, SSSZ10, Sh09, SHP18, SY16, SM18, SLWY15, dCST19, SL14, SV12, SV14, SH15, SM14, SKL09a, SKL09b, SSQ04, SLM05, AV14, Sva02, TL17+18, TA98, THG17, TW14, TP20, TE19, TDC18, Tse03, Tuy00, TMHP06, VVM+09, Van14, VD06, Vog08, VS08, VS10, WKKM06, WG19, WST10, WML17, Wan17, WHY+19, WX20b, WG10, WTKR13, Win08, Wri12, Wu96, WZZ18, XA18a, XY15, XZ15, XA18b, YY03, YT10, YnzS15, YH01, YLQ03, YST14, YFS16, YWF19, Ye99, Ye00, Ye04, Yin99, YLZ02, YKL14, YNS20, YM14, Zas00, Zas05, Zas13, ZZ96, ZH04].

Optimization
[ZH06, ZZ16, ZC20, Zha20, ZY07, ZN11,
ZN14a, Zhe20, ZCTW12, Zhu02, ZU11, Zie14, Zol03, ZAC17, d’A08, dPRT01, dKL11, dKLS15, dKH17, vdBF11, Ali95, And96b, AM94, BNS95, BKT99a, BD03, BL94, BTZ92, CGST93, CDF+94, DEG+91, EA95, GN92, Gil97, GK95a, GR94, GW93, Hen95, Io94, JRW94, Kiw96, LS91, NS91, NT02, Onn94, Out94, Ove92, PZ94, PY93, RHW93, RS94, RD95, Sar95, Sch92, SC91, SM91, Ser95, SF95, Sta92, Wri92, Zha94a.

Optimization-Based [SVD14].

Optimize [BBG+20]. Optimized [KF18b, QCLP19].

Optimizing [HL06, MY09, PCA19].

Optimum [SZ98, PZ00]. Option [BCM03].

Oracle [CGT12, WK19, Out94]. Oracles [vAS14].

Orbits [CGT12]. Order [Abr05, AA06, ASS18, Aus10, AI11, AI12, BT04, BDS10, BBW17, BT12, BV18a, BF08, BGM19, BGM+16, BSTV18, BCS99, BCD18b, BA13, BCT19, CT06, CT12, CDT20, CT20, CT02, CD1R08, CT12, CM20, CR14, CVZZ19, CW18, CM19, CS15, CSV09, DSK20, DH07, DM09, DEF18, E106, FS12, FST12, FLT01, GLCx18, Gfr07, Gfr11, Gfr13, GM19, GVA11, GL14b, GL15, GNS08, GN20, HYF05, HW10, HS06, HM15, HMO10, Her09, HS11, HNKK17, HN04, JL18, KKF09, KT18, Lin08, LJ16, LF18, MP18, MS03, MS14, MO01, MR12, MOS14, MOR15, MOR06b, NR20, OOR17, OR11, PC08, PRT02, Pen17, PQS01, RT06, RW18, RR08, SS17, SLWY15, SKR16, SXMW13, TH17, TW14, TDZ20, Tse07, Wal08, WB16, WY03, Xu17, YZ16, YM14, ZY14].

order [BRB19, CLMS93, CJ18, Dun93, Mar17].

Ordered [BP07, BTR01]. ordering [AES09]. Orderings [CJ18]. Orders [BBW17].

Orthogonalization [AADD09, Chc01, MW06]. Orthogonalities [GLCx18, MP97]. OrthoMADS [AADD09]. Orthonormal [CP08]. Other [BPD09, DGR17, TZ98, ZT96]. Out-Forest [Rot09]. Outcomes [QCLP19]. Outer [CNQ97, GHKL17, GL10, HP94, LW08].

Outer-facial [HP94]. Outlier [RSKW19].

Output [RS97]. Over-Relaxations [AD15].

Overcomplete [AAJ16]. Overlapping [INT15]. Overton [KSS09, LM05].

Pack [AKT17]. Packing [BDDM19, DFO20, EL08, EL10, EL14, IPS11, Jan06, MC05, MS02]. Page [dK12].


Parallel [ACP11a, ADL08, BH14a, E196, FR15, FM91, FM94a, FH14, Fuk98, GPR02, Gar93, GMR91, HM02, JY94, JS91, KT04, Ko10, NC16, Sol98, SAW99, YN17, AM94, BM49a, DT91, Dix91, L094, MMZ95, NS91, Pan94, Rat96, ZC91].

Parallel-Sum [BH14a]. Parallelism [WA15]. parallelization [NN91b].

Parameter [BBT12, BH03, BCW20, HCH12, OS17, QZ08, RTBG20, SNT16, ZZ18, EA95, IK92]. Parameterization [DR01]. Parameterized [BS98, Lev00, QZ08, LCPS20]. Parameters [AO06]. PCL5, MCL10, SFP11, HSS93].

Parametric [DSD12, GM17, GM19, GLY12, GLY14, HHP18, HP18, JS97, KJ17, L091, MS11b, MN16, QW20, YM14, JRW94, LP93, MS94b].


Partially [BL93, CTW19, NTA04, SAV14, EM91, GW93, Tse91, YG91].


Partition-Based [SL15]. Partitioned [WR12]. Partitioning [GSZ14, PR07b].

Partitions [BH96, SC06]. Partly [MS03].

Passive [ALS18]. Path
Path-Following [DNSD13, Fay96, HK09, HSK15, HY96, KJ17, LT10b, Lin08, LMO06, LMO12, Mon97, MBW09, Pot14, Sim11, TDKC14, Tse97b, Zha99b, ZL02, AB95, Ans96, Gon91b, Gon91a, NN91b, SG94, Zha96, dRV92].

Pathological [DD20].

Paths [DW11, LM04, QLSZ18, Ber91].

Pattern [Abr05, ANRV04, AD00, AD03, AD04, CV07, DLT03, KT04, Kol05, LT99, LT00, LT02, PW06, Tor97].

Payo [ABGJ14].

Payos [DG20].

Payos-Beliefs [DG20].

PDE [Bet19, CM20, CV17b, HCH12, HK10, KS16b, SSW16, ZU11, Zie14].

PDE-Constrained [CV17b, HK10, KS16b, ZU11, Zie14].

PDEs [Voi08].

Penalization [AC11b, HY02, RPK03, RGG99, SXMW13, YZ97, BL95].

Penalties [CLK97, KK02, SBFA17].

Penalty [AC11a, Ans99, Ans15, AI11, BC09, BH18, BTZ97, BCWW15, BCWW20, Cha02, CLP16, CC02, FK10, FS12, GMS17, GKR20, GYZ14, HNO3, KS10, KKS19, KMM19, LLY11, LL09, LLS10, LZ14, MY10, MMBS14, SS05, YY03, Zas05, Zas13, ZA14, EA95, L96, Luc92, PZ94].

Penalty-Barrier [GKR20].

Penalty-Gradient [BC09].

Penalty/Barrier [BTZ97].

Pennisi [BCT19].

Penrose [HH96a].

Perceptron [SP12].

Performance [DGT20, DMM06, LYS17, RTBG20, THG17, ANS91, Dix91].

Periodical [SD20b].

Permutation [JLW16].

Perspective [ABD*18, CHP*09, Har09, LXB19].

Perturbation [CX08, LN02, NT08, ZN05, ZW12b].

Perturbations [BGM12, CKLP07, CSW12, Don16, Hoo04, Pen00a, Pha10, SDR20, ZZN18, GHT09, SW95].

Perturbed [DNSD13, LN18, MPP*17, OOR17, OR11, TSW19].

Pessimistic [LL19, WTKR13].

Phase [Bou16, LYS17, RSM20, ZB18, dSTV18, Fre95, JSC96].

Piecewise [A1G11, BGP09, Fus14, GW19, KLW18, LM16, Lov11, She14, WGI9, ZN14a, Li96].


Pipe [XLD99, ZZ96].

Pitchfork [RM08].

Pivot [Pan05].

Pivoting [MPB02].

Planar [MW06].

Plane [Ans98, D1P10, DG09, GLY96, GV00, Kiw97, Luc97, Mit00, MG99, NV99, GOG03, SXMW13, TSS02, AEGS96, KN03].

Planes [AWW09, BM14, BLST19, FMW96, FGG04, Por20, Boy93, Boy95].

Planning [FLS03, RAD20].

Planted [CC18].

Plasticity [HM13].

Player [HM15].

Poincaré [SSW16].

Poincaré-Type [SSW16].

Point [AH098, Alvo04, AB08, AGJJ00, AD19, BBN14, BER03, BER04, BLN*18, BHHK00, Bia16, BP97, BLT17, BH98, BD10, BHN99, Cab05, CDD00, Cas00, CKS15, CM11, CL04, CMY15, Cnt09, CL14, CP15, CC02, CY14, CO12a, DPR20, EAV10, FF100, FM03, FS08, FKS02, FT02, FT07, GP04, GLS05, GS98, GG03, GG04, Guo14, LGLT98, GLH21, GOST01, GOM04, GK96, Gu00, GR10c, CY20, Gu14, HY20, HM15, HM16, IY09, fdl13, IPS03, IS10, JZ98, JRS09, KSH97, KSS99, KRZ17, KMM19, Kor00, KV15, LM02, LR10, LT16b, LM12, LMH19, LS04, LM05, LY07, Mc99, Ms96, ML05, MO07a, MO09, Mia96, Mit00, MOP20, MT03, MOT04, NS98, Nem04, NT98, NT16, PLS08, PRT02, PS07, PS98, Pot08, PS10b, Pot14, RB05, RB18, RO18, Ran06].

Point [Roo06, Roo15, SOT09, SP97, SSK98, Sim11, SS97, SZ98, TWB*03, Toh00, Tse02, WST10, WLY16, Wri99, Wri01, YF00, YY03, YT10, YTY17].
YST14, YT02, YW02, Yos07, Zas10, Zha98a, ZOB20, ZZST20, Zha98b, ZL01, dKV16, vdLTY07, Ali95, BF96, CLMS93, DvTY91, Gro95, Gul92, HRVW96, HZ06b, JS95, JY94, KKM93, LMS92, McS94, Meh92, Mit94, MTT94, MTK95, MW96, MS11c, NN91b, Pot96, SM91, SG94, TZSW96, Tod92, Wri92, ZTD92, ZTP93, ZT93, Zha94b, Zhu96, ZL03.

Pointed [BD02]. Points [AA06, AY08, ANRV04, AAZ15, Aus10, BWW12, BH20, BGR20, CSV09, EZ10, GLM98, GTdS06, GHHL05, HLB20, HW07, JBK+18, JR10, KL97, KT08, LBP20, OOR17, OR11, PMR19, Spa14, SLM05, TY04, Win08, Xu19, YZ13, vdLTY06, BF96, Pan94, Sch92].

Pointwise [AMS16, CdlRT08, GMM17, HLZ08, HK10, KS93, RT06, SR16, Tr605, GJT96]. Polar [FMP19]. Policies [Ber17, BPS06]. Polyadic [SVD14]. Polyak [HY06]. Polyhedra [ABP18, BM02, DGR17, Boy93, GMS92]. Polyhedral [BR19a, BY11, CP01b, CST19, DR96, ER05, FGMI2, GR12, HL08a, HMQ10, dMM10, Man99, MB14, Nga15, RUT17, Sch12, LT93]. Polyhedrality [BRS15, DGR17, LMT18]. Polyhedron [DLW99, HZ16, DvTY91]. Polymatroids [HKP18]. Polynomial [AdKH19, BK12, Bie16, BM18b, BR08, CP12, CP18, CHLZ12, Chu16, Chu18, DHP16, GVA11, GPT10, GE14, HYY16, HOR99, IPR100, JRT97, JT13, JLP16, JL05, JM18, KKW05, KKK01, KPV18, LMT09, Las04, Las06a, Las09, Las10, Las11, Lz10, MHL15, Mon98, MTT99, NT16, NR09, NW12, Nic14, NYW17, PAP17, PR07a, PNA10, PS10b, Ran06, STK17, SOT09, SP97, WKKM06, YZ13, ZCTW12, dKL10, dKL11, dKLS15, dKHL17, Bar93, BNT94, BH95, DL91, LL94, PY93, ZT93]. Polynomial-Time [Chu16, NT16, SOT09, DL91]. Polynomials [BS15, Erg19, GM12a, GN11, IdW16, KN20, KS15, Las01, Las05, Las06b, Li10, Mar05, Nga15, ND09, QWY04, RV06, Sch05, Sch06, VS08, VS10, Vui14, Yan09]. Polytopes [BM02, DK18, JK00, PW98, RT05, SD20a, Ris94]. Polytopes [BS15, Dah99, DRT17, IdW16, KTT14]. Pooling [LDS20]. Population [CV07]. Porous [RZ01]. Portfolio [MCL10]. Portfolios [Cal07]. Posed [FI08, JZ20, MS06a, Zhe20]. Posedness [CLPT99, DHP16, HY06, Rev97, Ver96]. Positive [AKK14, ACOB20, Buh03, Chu03, Don14, GN11, JRT97, JBA10, KS95, LT05, Lim11, LW08, Mat05, NZ16, QW00, QW01, Shi17, SH15, iT17, TP16, VS10, ZVP06, BF96, Fe95, MP95]. Positivity [LP10]. Positivstellensatz [KN20]. Possibly [FB19, MS94b]. Postman [SM93]. Potential [BTN94, MP99, RD05, Tüit03, Fre95, JY94, MKT95, Ye92, Gou91b]. Potential-Reduction [Tüit03, MKT95]. Potentially [AFFG14, CGT14]. Powell [GL18]. Power [BV10, CT19, LYS17, PMDL10, Sau20, Bon97]. Practical [Ans98, BKT99b, BHR19, GR10b, LS97a, MGGS09, NS98, XB99, JS95]. Preassigned [BBF04]. Precision [CP01b, DFS03, Gu00, PW06, Wri01]. Precomposition [BGW07]. Preconditioned [MOT04]. Preconditioner [CK99]. Preconditioners [ABCRT20, BDdSM15, CN17, EF02, FG04b, GST11]. Preconditioning [GV15, MS16, MN00, SU14]. Preconditionings [Ort91]. Predicting [ABT00]. Predictor [DIPR20, DSD12, Gon99, JPS99, KT14, KSS99, KJ17, LM09, LP06b, LM05, MS94a, Mia96, MT04, PTZ05, SPTO, Sim11, CLMS93, DL91, LMS92, Pot96, TZSW96]. Predictor-Corrector [DSD12, Gon99, JPS99, KT14, KSS99, LM09, LM05, Mia96, MT04, PTZ05, SPTO, Sim11, MS94a, CLMS93, DL91, LMS92, Pot96, TZSW96].
Preference [HS17]. Preliminaries [LS97a].
Prepackaged [KS00]. Preprocessing [KH05, Kea11]. Presence [BT04, FIS20, Zas10].
Prices [BCM03]. Pricing [BPS06, MRS16]. Primal [AZ05, AH098, And00, BER03, BER04, BF08, BH14a, BCH14, CERS18, CLO14, Chu09, CV17b, CMV19, CP01b, CH16, Dav15a, FB19, FIS10, FG98, Fre03, GKR20, GG03, GLTP98, GOST01, Gre00, Gu00, HSS17, HIK03, HSW14, JR08, JS00, KR02, LS04, LMO06, LJ16, LSZ98, MP18, ML05, MS00, MS03, MT99, MSS15, NO09, NT98, NS14, PRT02, PS98, Pot08, TWB'03, Toh00, TDFC18, TDZ20, Tiu03, Val20, WST10, Wri00, Xu17, Xu20, YY03, YT10, ZR93, dPRT01, GT92, Isu91, Meh92, MTT94, MKT95, Mon98, Wri95, ZTD92, ZT93, Zha95, Mon97, Zha98a].

Primal-Dual [AH098, BER03, BER04, BF08, BH14a, BCH14, CERS18, CLO14, Chu09, CV17b, CMV19, CP01b, CH16, Dav15a, FB19, FG98, Fre03, GKR20, GG03, GLTP98, GOST01, Gre00, Gu00, HSS17, HIK03, HSW14, JR08, JS00, KR02, LS04, LMO06, LJ16, LSZ98, MP18, ML05, MS00, MS03, MT99, MSS15, NO09, NT98, NS14, PRT02, PS98, Pot08, TWB'03, Toh00, TDFC18, TDZ20, Tiu03, Val20, Wri00, Xu17, YY03, YT10, dPRT01, GT92, Isu91, Meh92, MTT94, MKT95, Mon98, ZTD92, ZT93, Zha95].


Probability-One [BW02, Wat00, WBME14]. Problem [ABT00, AINT17, AY08, AFS01, Anus00, AKT17, BBT06, BTC08, BNL'18, BV10, Bie16, BHT16, BT19, BRU97, BV18b, BBV02, BB98, CCFP05, CKP00, Cap02, CCLW14, CBFJ97, CQ06, CM11, CMY15, CDL14, CDF'94, EB20, FBV07, FdOF07, Feo01, GHHK17, GLRS15, GHGL06, GW18, HLTW14, INT17, IY09, Ied12, IT18, Jan06, JRS10, KSH97, KSS99, LSS19, Lsu01, LdQ11, Li20, Lim11, LLST19, LM05, LDM06, MB02, MB09, MN96, MP14c, MBW09, Pano16, PRR97, Pr07a, Feo08, Q16, Q20, Ray97, RK19, RT05, RT06, Rot09, RN98, SBD'11, SCRS00, SY16, Sim11, SS00, Sta04, IT17, TBZ16, TMHP06, Wag14, WX16, WX17, WLZY07, XZ14a, Y00, Y08, YMAS17, ZG5, ZY14, AEGS93, Bn97, DvTY91, Gar93, HP94, Hen95, HHO96b, JSC95, JSV91]. problem [Li93a, LT92, Man91, McS94, MPW95, NN91b, SM93, Wan95, Zha94b, dKPS09a, dKPS09b]. Problems [AAS17, ASPN16, AKS00, ANRV04, AMHL05, AM00, AGJ00, Att06, ACP11b, AT00, AST10, AUs15, AVS19, AZ08, BBN14, BD17, BT00a, BTET12, BP12, BPS15, BTZ97, BTR02, BDM16, BM18a, BNL'16, BKK002, BHK'09, BHHK00, Ber97, BPT97, BM18b, Bil02, BW02, BG09, BKT99b, BGG +12, BSTV18, Bon15, BMSS19, BS98, BKM20, BLT17, BNC19, BSR17, BHR19, BD10, BH15, BK10, BCGH08, CP12, CP18, CCL09, CGT10a, CGT14, CT02, CdlR08, CHW12, CT12, CN17, CH97, CX09, CQT03, CX08, CLO14, Che15, CLP16, C18, Chr20, CDM02, CY10, Chu16, Cht02, CMV19, CPRZ20, Cru14, CDZ17, CPS18, CNW10, CW18, DHP16, DIPR20, DIS04, D98, DG19, DP00, DENR20, DGJ09, DSKM18, DHR07, DLS17, DGL10, DMV17, Dol20,
Problems [FLY11, Fio08, FRMP18, FK00, FMW96, FFG99, FB00, FG04b, FLT01, GLCxy18, GP19a, Ger08, Ger11, Gfr07, Gsg12, GLY96, Ghl05, Gs07, GLn07, GY20, Gacd14, GSz14, Gjno6, Gknrp17, Hpu19, Hhi+20, HYF05, HW10, HM15, HM16, Her09, HS19, HL14, HK06, HK11, Hsk15, HL17, dM08, Hlr16, Hzo06b, Hac18, HR15, Hr09, Hpr00, Irlr01, Ik00, Ik16, Is02c, Is04, Isu12, Jrt97, Jlpl16, Jl18, Jqfs08, Js16, JzZ20, Jrs10, Js20, Kal18, Kl14, Kp99, KS16a, Kksw19, Kv17, KS90, Ktt14, Kkw05, Kkt20, Knp98, Kp98, Ksx08, Kor00, Kj17, Kr02, Kr03, Lau00, Lm02, Lr10, Lev02, LF01, Lno9, Lfll09, Lst18b, Lst18a, Lmp+18, Lt96, Lm16, Lm99, Lp06b, Lbp20, Lls06, Lfj+11, Luc02, Lp05, Lv19, Ls98b, Lb00, Mn09, Mspsu19, Ma107]. Problems [MC05, Ms11b, Mm10, Mop20, Mg98, Ms11c, Ms12, MW97, Ms06a, Mars10, Mgs09, Mars14, Nem04, Nv99, Nes12, NS14, NT16, NS17, NT19, Ps10a, Pz98, Pz00, Pz03, Pt18, Polw20, Pen19, Pfa17, Pna10, Pqs01, Pot08, Pot12, PW19, Pyt98, Qj99, Qw20, Rcg18, Rss14, Rg00, Rfnp14, Rqmg12, Rsm19, Rm08, Rpk03, Rro08, Rs18, S17, Sag16, Snt16, stk17, Sch09, Sw11, Su14, Sdgm99, SSSZ10, Sha97, Sm18, sbt16, Ss97, Sl14, So07, Skr16, Sh97, Sz98, Sw99, Ssq04, Tf96, Tw14, Tzsz2, Tro05, Tse97b, Tuy00, Ulb01, Vjm16, Vil05, Vog08, Voi08, Wkkm06, Wj00, Wst10, Wcp17, Wri00, Wrig02, Xs16, Xa18a, Xyz15, XlzH19, Yh01, Yfhs16, Ypc18, Yzsz7, Ye09, Ye00, Ye04, Yos07, Zha94a, Zcd00, Zha00, Zc09, Zzst20, Zha98b]. Problems [Zha20, ZY07, Zhe20, Zts98, Zc10, Zct10, Zhu02, dkl11, Dstvb18, vas14, vdlt07, Am94, Bkt93, Bkt99a, Bd93, Bh95, Bur92, Cl92, Dax92, DhlN92, Dl91, Dfks11, Dun93, Fms94, Gmr91, Gjt96, Gow92, Hei93, Hus94, IK92, Ik96, Kan96, Ksw94, Kkm93, Kn93, Li93b, MSZ95, Ms94a, Mel96, Mt91, Out94, Pr95, Pr93, Py93, Ral96, Rot92, Sar95, Sta92, Tyf96, TM05, YY95, Zen91, Zc91, Ztp93, Zt96, drt92, Hl20]. Procedure [IPr00, Lm01, VzqD17, Me19]. Procedures [Che05, Gl14a, MW94]. Process [SFP11]. Processes [Gs01, Hn07, Hg16]. Processing [Cjk98, Kl08]. Processor [Gr94]. Procrustes [DL17]. Product [Ans17, Ars19, Bcw15, Lwz15, Hus94]. Production-transportation [Hh96b]. Products [Sab11, Tse92]. Profiles [Dmm06]. Program [Ft02, Ft07, Gm00, Lsr02, Pf19, Skc12, Wkk06, Xslz11, Fre95, War96]. Programming [Aas17, Asnp16, Ah098, Ab12, Ani00, Ani02, Ani05b, An98, Ans99, Akk14, Ad00, Ad04, Ad09, An15, Ah05, BC09, Bec07, Bec15, Bsdm15, Btq97, Btq97, Btknz99, Bgm19, Bto06, Ber17, Bnt04, Bh03, Bz04, Bcw08, Beet12, Bcd+18a, Bhp18, Blst19, Bps99, Bmw10, Bhs15, Bd1+16, Buc03, Bl09, Bcd20, Bhn99, Bgnw05, Bct19, Cto06, Clpt99, Clmp10a, Clmp10b, Cgt11, Cbo0, Cha02, Cs80b, Cks15, Cfo1, Cbe01, Cwh06, Chn18, Chn06, Chy10, Cks17, Cco2, Chp+09, Cr04, Co12b, Dgt20, Dhl15, Del19, Dmz12, Dy04, Den14, Dsz17, Dsd12, Dol20, Dt98, Dos97, Dfs03, Dm20, Er05, Ekl18, Fln10, Fay96, Fgl+02, Fle12, Fbm15, Fs08, Fg08, Flt03, Fus14, Gm15, Gl14b, Gm12a, Gv15, Gcpt18, Gl15, Gs98, Gou14, Gtv97, Gkv03]. Programming [Gost01, Gu00, Gad20, Gvjs10, Gnl11, Gu20, Gjr08, Gnr10, Gl08a, Hw10, Hty12, Hlwy14, Hyh15, Hr00, Hs19, Hlo8b, Hy96, LdW16, Ik16, Jan04, Jal15, Jl10, Jl16, Jl18, Jps99,
JL16, JKW15, JBK+18, JS11, KPZ19, Kiw07b, Kor00, LMT09, Los04, LT01, LCC+20, LM02, LDD+02, LSW06, LZH14, LST20, LM20a, LFW98, LNQY10, LY11, LP15c, LS20, LCP2520, LIO9, LMO06, LY07, LJF+11, LZ19, Luc02, LW08, LPS05, LSZ98, MN96, MNP98, MR10, MM08, MPRW09, Man04, MÖ07a, MÖ10, MP14a, Mia96, MS11b, MP10, MG98, Mon97, MT98, MT99, MT03, MN14, MOR15, MW06, NA20, NJLS09, NLQT06, OW06, OSS11, Pan05, PC08, Pan16, Pap17, PY19, PVZ07a, PW07, PS98, PR07b, Pyt98, QLSZ18, RB18, RTW97, RKG08, RV06, STKI17, SD00, SZ14, Sha17, ST09, SKL09b.

Programming

[STY15, STY16, TF96, TWB+03, TTT98, Toh00, Tse97a, Tse03, Tse07, VR05, Voi08, WB05a, WB05b, WJO00, WZYB08, WX17, Wat00, Wir09, Wir09, Wir00, Wir01, WT04, Wir05, WSLZ17, Xu06, Xu17, Xu18, YZZ97, YW02, ZA14, ZZ96, Zha98a, ZH06, ZWL10, ZST10, ZCTW12, ZMB+20, dE14, dP02, dKPS09a, dKPS09b, dKL10, dKLI1, dKP12, dKV16, dSTV18, All95, AB95, Am96, Bar93, BT94a, BD93, BL95, BL93, Bos93, Boy95, Bur92, CH93a, Den00, Eck94, FKKM00, GV94, GLW91, Gou91b, Gou91a, GT92, GHS95, Hi96, HRV96, Ins91, JS95, JYJ94, Jey91, KK92, KN93, Lag93, LS93, LP93, LMS02, MZM95, McS04, Me96, Mil94, MKT95, Mon98, MT91, MP95, Naz91, Pot96, Pow95, Ren95, SG94, Tod92, TM95, Wir91, ZTD92, ZTH96, ZR93, Zha95, dRV92].

Programs

[ASS18, AHSS19, Ani05a, Ani05b, AP18, BK12, BHM18a, BHM18b, BPM12, BYZ00, BZ08, BDDM19, Bol14, BJS07, BR19b, BD09, BKS16, BMZ01, BV06, BK10, Cai10, CG08, CL+14, CB14, CSW15, CC14, Chun18, CP17, CO12a, CPS18, DO06, DFNS05, DR00, EOL98, Ent96, EI06, ESKL18, FJS98, FJ99, FLRS06, FT08, FKS02, FSF12, FP98, Gfr13, GY17, GVA11, Gha17, GJLVP14, GNS08, GK96, GR12, Gui16, GKS18, GLY12, GYX14, GLYZ14, GXZ17, HNO15, HN19, HAN11, HRS06, HLL98, HK09, HS11, dMM10, HMP+08, Ios01, IPS11, IS08, JR08, JLD03, JR00, KDB09, KN02, KN04, KN05, KFF09, KS10, KS14, KK05, KM19, KMM19, Kök88, LS02, LP17, LCLN06, LSG7b, LP06a, LZO3, LS04, LXL11, LX14, LPR98, MP16, MP19].

Programs

[Mat05, MÖ09, MX06, MZ99, MP07, MLLB08, MDV12, MN13, MOS14, NST18, NS07, NY17, OHF12, OR11, Pat17, Pat98, Pu97, Pu98, RB05, Rev97, RW07, RP12, SÖ17, SFM14, Sch94, ST03, Sch98, SdM00, SA04, SD20b, SW14, SW15, SKB18, SU10, SK98, SXM13, TAW06, TKB02, TKB03, VZQD17, WY15, WMBE14, Xu06, XY10, XHL14, XYZ15, XU20, YK18, YZ10, YZ16, YT02, YN17, ZK14, ZJS18, ZL02, AW94, BM94, BQ95, CH93b, DUN93, G94, Ios94, L96, MS94b, RS96, Ver96, OOR17].

Progressive

[AD09, BCD+18a, XZ14b, ZSX19].

Projects

[BBW18].

Projecting

[BWM00, CWW18, GP91a, He96, Mal15, NLQT06, SU15, SY13, SZ09, Gar93, Gur94, ZR93].

Project-Based

[KCS97].

Pojective

[AM12, Alv94, BLY14, CWS08a, Dai06, HZ16, IT18, KL97, Kiw07b, KCS97, LH04, Man99, NRP19, Tse97a, Tse98, WB16, LT93, Tse91].

Properties

[ASS18, ABF14, BBM16, BG19, CN11, CS15, CGT96a, CGT96b, CT10b].
CPRZ20, DHL+99, Dai02, DL01, FFK98b, GO16, KS14, LRWW98, LP17, LW15, LPR98, MU18, PP16, PR96, Sch01, TSP18, TWB+03, YFHS16, BT94b, GN92, Kan96, Pow95.

**Property**
AGH10, BP15, BR19a, DY99, DK13, DLW99, HP07, NYF11, OOR17, OR11, Zas13.

**Proportioning**
Dos97.

**Proto**
AB18.

**Proto-dierentiability**
AB18.

**Provided**
LL00, MGR18.

**Providing**
GW19.

**Prox**
ANT16, ACP11b, BBN14, CWP20, Luk08, Nem04.

**Prox-Bounded**
CWP20.

**Prox-Method**
Nem04.

**Prox-Penalization**
ACP11b.

**Prox-Regular**
Luk08.

**Prox-Regularity**
ANT16.

**Proximal**
AA20, Alv04, AD19, AFFG14, ARS07, ACR19, AL20, AT06, BGLW08, BH18, BFO19, BN1+16, BN1+18, Bia16, BIS05, BCN19, BI98, BD10, Cab05, CMY15, CWP20, CMSZ20, CL14, CP08, CC02, CY14, DN20, DT98, FK00, FR15, GY92, GP19b, Har09, HS10, HLY16, IPS03, JST12, KT03, KV17, KRR99, Kiw06, Kiw07b, KMM19, LSS14, LM12, LST16, LLX15, LMH19, Lu17, LZ19, MOT95, MM08, MIM20, MS10, MS12, MS14, MSS15, NT19, PC08, PLS08, RMSB19, ST14, TY12, Teb97, TDKC14, Tse97a, Val20, VGO18, WST10, WLLY16, WCP17, XZ14a, XZ14b, Xu17, Xu18, YF00, YST14, Zas10, ZL20, ZZST20, ZN14b, dEH01, BT94a, CT93, Giil92, Kiw96, Zhu96.

**Proximal-Gradient**
AA20, XZ14a.

**Proximal-Like**
PC08, Teb97, CT93.

**Proximal-Projection**
Kiwo7b.

**Proximal-Type**
KT03.

**Proximally**
DG19.

**Proximities**
PRT02.

**Proximity**
AB18, FG04, MST11, PTZ05. Psd
Shi18.

**Pseudo-Normality**
BYZ19.

**Pseudospectra**
LP08.

**Pseudospectral**
GO12.

**Public**
BPS06.

**Pump**
BEET12, DLR14, DIMS18.

**Pumps**
GMSS17.

**Pure**
BDM16, RSE18, ZK14, Wri95.

**Pure-supply**
RSE18.

**purpose**
NS91.

**Pursuit**
SMG14.

**PVM**
CF01.

**QP**
BCWW20, CWH06, QQ00.

**QP-Free**
CWH06, QQ00.

**Quadratic**
Ani00, Ani02, Ans00, AKK14, BT00a, BE06, Bec07, BDDSM15, BTNR02, BC14, BM17, Bol14, BSTV18, Bom15, BLST19, BR08, BDP14, BHS15, BDL+16, BMZ01, BL09, BCW14, BCWW20, BGNW05, CX99, Che15, CL96b, CDZ17, CO12b, CJRW14, DZ07, Del19, Don16, Dos7, DFS03, DK10, DL13, DF18, Fay96, Fay06, FRMP18, FLT03, GVA11, GL15, Gon14, GT97b, Gad20, Giin14, Hag01, HLNZ08, HR15, JLL09, JLL16, JK15, KN05, KKT20, KL10, KMM19, Kuc08a, KR03, LT01, LT12, LR16, LS97b, LSW06, LI11, LS20, LCPS20, Loc15, LMO06, LJF+11, LPR98, LS98b, LS04, LST07, LZ10, LB00, MNP98, MP10, uDR15, MT98, NTS18, Pan16, Pap16, PRR17, PY97, PW17, RMQ12, SD20a, SKC12, SBT16, SVO7, Sor97, SK98, SZ98, TF96, TY12, Tse03, VZQD17.

**Quadratically**
CWP20, CWH06, QQ00.

**Quadratic**
BCWW20, CWH06, QQ00.

**Quadrature**
AMR16, AFSS19, BHP18, CH16, Dol20, GM15, GVJS10, IS02b, JLD03, L197, L020, LN03, LN05a, SN07, VR05.

**Qualification**
AMR16, AFSS19, BHP18, CH16, Dol20, GM15, GVJS10, IS02b, JLD03, L197, L020, LN03, LN05a, SN07, VR05.

**Quantification**
HTT+15.
Quantum [BBW05, BFS16, LP15a].
Quartic [LZ10, QWY04]. Quasi [AFSS19, AH05, BYZ19, BFO19, BBN19, BCW08, BHNS16, Ceg15, CRZ18, CP15, CG17, FB00, GL01, HR12, HR14b, HGA15, KS19, KV17, Kau99, LHZ14, LMH19, LV08, MSQ98, MER18, MN00, MO07b, PCA19, SY13, SH97, WN16, WMGL17, YNS20, ZNW99]. Quasi-monotone [AVS19]. Quasi-Newton [BFO19, BBN19, BHNS16, GL01, HGA15, KV17, Kau99, LMH19, LV08, MSQ98, MER18, MN00, PCA19, SH97, WN16, WMGL17, YNS20, BLN92, EM91, Fle91, Gi97, LN93, TK96, ZNB+93]. Quasi-Nonexpansive [Ceg15, CRZ18, CG17, SY13]. Quasi-normality [AFSS19]. Quasi-Relative [BCW08]. Quasi-Slater [LZH14]. Quasi-subsmooth [ZW12b]. Quasi-variational [AVS19, KS19, HR12, HR14b, MO07b]. Quasiconvex [BGJ12, DHML01, LP06a]. Quasidifferential [Van95]. Quasidifferentials [Do10]. Quasimonotone [AG14]. Quasimonotonicity [CH94]. Quickest [Fle01]. Quotient [WX19].

Rachford [BM16a, BD17, BM20a, BH14a, CM16, DP19, Dav15b, HLHY14, LM20c, TP20]. Radial [FB03, Gri88, KM09, WS11]. Radiation [RAK05]. Radio [BBF+04]. Radiosurgery [FLS03]. Radius [GO12, WD05]. Random [ALR03, BKL19, Cal10, CCH05, CC14, CP15, Har98, LZ18, NST18, NC16, QCLP19, Sch98, SMG14, WB16, CJ18]. Randomization [DIM18]. Randomized [AH16, BBN14, BH20, CG08, DSP10, DBW12, GHHL05, JRJ10, LLX15, Lu17, LM20b, NRP19, RK20, SFM14]. Rank [BDdSM15, BDDM19, BV18b, BMZ01, BKS96, CT14, CSPW11, CV17a, CNW10, DG09, DV14, DV16, FGM17, GG18b, HLB20, HU19, JBSA10, LSVZ20, IZW15, LBP20, MS11b, MMBS14, SU15, Shi18, SVD14, TY11, Van14, WW20, YFS16, BT94b, Bos93, FRW11, KBS93, LDQ11, MSFL17]. Rank- [SVD14]. Rank-1 [YFHS16]. Rank-Deficient [CGT14, CNW10]. Rank-One [BKS96, DV14, Bos93, KBS93]. Rank-Sparsity [CSPW11]. Rank-Two [BMZ01, BT94b]. Raphson [HN05]. Rapid [BLMH06, BCW14, WRi05]. Rate [AP16, BLY14, BLT17, CY14, Dav15b, Dav15a, GY20, GOP17, GOP19, Kuc08a, LY98, LYS17, MER18, MGR18, MOP20, NO09, Nem04, SDM00, ST14, TY12, VGO18, VJFC18, YNS20, YN17, Ius91, Tse91]. Rates [AHO98, AC18, ADR91, CR97, GW19, Gri99, GP19b, HN07, dM08, HLY16, JE19, LSYA20, NRP19, PGGH18, Sch96, SDR20, TDZ20, Yn99, dKHL17]. Ratio [LFX17]. Rational [EZ10]. Rayleigh [WX19]. Raymond [CHPA16]. Rays [GDW00]. Real [GE14, JM18, Las05, MS20, Nie14, SVD12, Ve15]. Realization [DKV17, Gi97]. Realizations [GHR14]. Recessional [BBW16]. Reconstruction [JS00, Nol98]. Recourse [GNS08, LCP80, RVV15, RSVdV16, Sch96, ST03, SL15, CJ18, RS96].

Reduction
[AILT14, Bar93]. Reduction
[BR08, DKVW17, FdOF07, Is01, IJOT17, JH14, JS11, LMT18, MP99, PRRL97, PFA17, RK19, TAW06, Tütt03, XSLZ11, XZL14, YMI14, BTJ94, Fre95, Gou91b, MKT95, Ye92, dRV92]. Reduction-Based
[BR08, DKVW17, FdOF07, Ios01, IJOT17, JH14, JS11, LMT18, MP99, PRRL97, PFA17, RK19, TAW06, Tütt03, XSLZ11, XZL14, YMI14, BTJ94, Fre95, Gou91b, MKT95, Ye92, dRV92]. Reductions
[BR08, DKVW17, FdOF07, Ios01, IJOT17, JH14, JS11, LMT18, MP99, PRRL97, PFA17, RK19, TAW06, Tütt03, XSLZ11, XZL14, YMI14, BTJ94, Fre95, Gou91b, MKT95, Ye92, dRV92].

Reference
[BT20]. Reference-Based
[PRRL97]. Reference-Based
[BT20].

Reﬁned
[BT20]. Reﬁnements
[vdLTY06].

Reﬂected
[Mal15]. Reﬂective
[CL96b].

Reﬂective
[CL96b]. Reﬂexive
[Den97, KRS11, MM11, Sab11].

Reformulation
[AM00, BKS16, DZ14, FFK98b]. Reformulations
[AM00, BKS16, DZ14, FFK98b].

Regime
[AI91]. Regimes
[AI91].

Region
[AI91]. Region
[AI91].

Regions
[AI91].

Regression
[BLG13, GP04, HPD14, HL17, HL20, RR15, SFP11, XD20, YZ13, LS93].

Regret
[AGZ17]. Regular
[AGZ17].

Relaxation
[BDL18]. Relaxation-Based
[MB14]. Regularizations
[MB14]. Regularized
[MB14].

Relaxing
[DO19a].

Relative
[BCW08, CS16, DFO20, GTdS06, Luk08, Ric11, SPM18, Di91]. Relatively
[BCW08, CS16, DFO20, GTdS06, Luk08, Ric11, SPM18, Di91].

Relatives
[dCST15].

Relaxation-Based
[MLLB08].

Relaxations
[BCW08, CS16, DFO20, GTdS06, Luk08, Ric11, SPM18, Di91]. Relatively
[BCW08, CS16, DFO20, GTdS06, Luk08, Ric11, SPM18, Di91].

Remarks
[Li93a]. Remediation
[Ke99].

Renormings
[LPT07]. Reoptimization
[BRL+16, GG03]. Representability
[HN09]. Representable
[PS10].

Representation
[BF08, HW07, LS93].

Representations
Representer [BCD+19]. Rescaling [dEH01]. Residual

[CV17a, GWZ15, KW10, RV06, VS10, Den00]. Robust [ASNP16, ALSV18, AZ08, AFGO20, BHM18a, BTN97, BTNR02, BLO05, Cal07, CM17, CDL14, CCN+18, Chu18, Chu20, DSZ17, DMVV17, DKVW17, DM20, EOL98, EL14, GV15, GJLP14, GXZ17, HMN10, HF14, HS17, Ios01, JL10, KPV18, LM19, LLD+02, LZSV20, LS04, LX14, LMX17, MP14a, MU20, MP14c, NJLS09, Sha17, She14, VVM+09, WX20b, XS16, XA18a, ZZ16, Bur92, CJ18, EA95].

Resolvent [AFS01, FMS94]. Resolvents [BWW12, Sab11]. Resolving [Fle14].

Resource [AIH19, BBG+20, CJK98, Ete20, GKPV01, LDf08, VJM16]. Respect [OR16, QZ08, YP20, ZZ16, ZZN18].


Resource [AIH19, BBG+20, CJK98, Ete20, GKPV01, LDf08, VJM16]. Respect [OR16, QZ08, YP20, ZZ16, ZZN18].

Response [CCM20]. Restart [Rd20].

Restoration [BFMS14, BM20b]. Restricted [HL08a, Kwi96, LPW12, Sch16]. Result [AG14, Zas00, Fle91].

Results [AHO98, ACB20, BW05, BR19b, CT12, Cel07, DMVV17, Ent96, EL10, FIS10, GLR15, GS07, GI02, HL08a, KNO2, KNO04, KS10, KLT07, Kmu16, Las17, LS20, MS03, SU15, TP20, Tso03, YZ03, YWAS17, AW94, Luc92, SZA2]. Retraction [HAG18, SKM19].


Reweighted [Bec15, BDM09, BCW15, FRW11, ZL12]. Ridge [XD20]. Riemannian [BV18b, FLP19, HU17, HHY18, HGA15, HAG18, LMW11, MS16, RW12, SI13, SKM19, Van14, WLW15].

Right [GST11, Gre00, HCH12, KRT07]. Right-Hand [GST11, HCH12, KRT07]. Right-Hand-Side [Gre00]. Rigid [GAP08, TP02].

Rigidity [ZSY10].

Rigorous [Jan04], Rim [GHR798]. Risk [BCD20, Cal07, CGC15, CKS17, CR05, FWKS15, GZ17, GR12, Gui16, GKS18, HG16, KS16b, LLS05, LLX15, LMX17, MP19, OR02, Pic13, RS15, RR15, ST03, WX20b, WZZ18].

Risk-Adjusted [LLS05]. Risk-Averse [BCD20, FWKS15, Gui16, KS16b, MP19, GKS18]. Ritz [KS05b].

Robust [ASNP16, ALSV18, AZ08, AFGO20, BHM18a, BTN97, BTNR02, BLO05, Cal07, CM17, CDL14, CCN+18, Chu18, Chu20, DSZ17, DMVV17, DKVW17, DM20, EOL98, EL14, GV15, GJLP14, GXZ17, HMN10, HF14, HS17, Ios01, JL10, KPV18, LM19, LLD+02, LZSV20, LS04, LX14, LMX17, MP14a, MU20, MP14c, NJLS09, Sha17, She14, VVM+09, WX20b, XS16, XA18a, ZZ16, Bur92, CJ18, EA95].

Rockafellar [CHLC19]. Rockafellar-Type [CHLC19]. Role [ZM96]. Rotation [GH15, SPW15].

Rounding [IPRT00]. Routing [LL00, RT05]. Row [HAN11, ZC91]. row-action [ZC91]. Rows [AWW09]. Rule [BM98a, GJ99, Luc02, Tse98, WJ00, YK18, ZN07a].

Saint [CHPA16]. Salesman [BM02, GW18, dKPS09a, dKPS09b, HP94, JSV91]. salesmen [BCQW95]. Same [Pat17].

Sample [CWZ12, CSS19, EN14, GP04, HCH20, KsdM01, Liu20, LA08, MX06, POLW20]. Sample-Based [POLW20]. Sampling [BBN18, BLO05, CERS18, CP17, CV07, GR12, Gui16, dM08, HU17, HU19, KLW18, Kiw07a, Kiw10, LMW16, MWD18, PGG18, RK20, SHP18]. Sampling-Based [GR12, Gui16]. Satisfy [Aus10].

Scale [CSY07, SÖ17, XD20, ZA14]. Scalar [HN19]. Scalarization [BKR17, Eic09, Kas10, Qiu08]. Scalarizing [LPV05]. Scale [ABC18, AT03, BBN14, BY00, BH03, BKT99b, BHN99, BHS16, CB14, DGN12, DFO20, DNS13, FJS98,
Scaled [HL02, Lev02, NT98, ZCD00, dPRT01].
Scaling [ACR19, BBR16, CB00, GLHZ11, IS02a, JRT97, MT98, Pot08, Qi16, TP16, KK92, Lag93, LN93, Mas97, MW96, RV93, Rot92, TM95]. Scenario [ACB20, CGC15, Ram18]. Scenarios [MP14b]. Schedule [CF99]. Scheduling [CKL97, CJK98, Rot09, AEGS93]. Scheme [BTT96, CB39F97, Dai15b, JLZ20, KDB09, LZ10, MU20, PB17, Sch01, SU10, VI05, Wu96, DFNS05, EA95]. Schemes [ACP11a, BTC08, Bec15, CC02, Dav15a, EL14, GAP08, HLL98, ZM96, GK94].
Schrijver [Che05, Lau01]. Schur [CC18]. SDLCP [SSK98]. SDP [CP18, JST12, KKW09, Las06a, LM19, LM04, NW12, SSK98, dCST19]. SDP-Relaxations [Las06a]. SDPs [BPC11]. Search [Abr05, AA06, ANRV04, AF01, ALR03, AD00, AD04, AD06, ACD08, ADL08, AILT14, ALT19, AH16, BGP09, BLPP16, BPS99, BK10, CV07, DK13, DIPR20, DLT03, GV14, GRVZ15, HZ05, Har98, HHY18, IJOT19, KN02, KN04, KSS99, KT04, Ko05, KLT07, LT99, LT00, LT02, LM05, Pap16, PS20, PW06, RW18, SU15, SK06, SSK98, Toh00, Tor97, Tse99, WB05a, WB05b, WG10, ZH04, dPRT01, dBdH07, And96b, DEG+91, DT91, MW94, Tor91]. Searches [AD03]. Searching [CF99].
Secant [HL98, YMT04, DEG+91, Hbs94, WZ95].
Second [Abr05, AA06, ASS18, Aus10, Aus15, BT04, BM18b, BDS10, BF08, BGM19, BCS99, BCD18b, BA13, BCT19, CT06, CT02, Cd1R08, CT12, CM20, CYZZ19, CW18, CSV09, DSK20, Dun03, EI06, FS12, FSF12, FLT01, Gfr07, Gfr11, Gfr13, GM19, GVA11, GL15, GR10a, GR10b, HYF05, HW10, HS06, HMM10, Her09, HNKK17, HN04, JL18, KFF09, MS03, MS14, MO01, MR12, MOS14, MOR15, NR20, OOR17, OR11, PC08, PRT02, PQS01, RT06, RW18, RR08, See92, SKR16, SXMW13, TW14, Tse07, HY03, YZ16, ZY14, SC91]. Second-Order [Abr05, AA06, Aus15, BT04, BDS10, BF08, BGM19, BCD18b, BCT19, CT02, Cd1R08, CYZZ19, CW18, CSV09, DSK20, EI06, FS12, FSF12, Gfr07, Gfr13, GM19, GVA11, GL15, HYF05, HW10, HS06, HMM10, Her09, HNKK17, HN04, JL18, KFF09, MS03, MS14, MO01, MR12, MOS14, MOR15, NR20, OOR17, OR11, PC08, PRT02, PQS01, RT06, RW18, SKR16, Tse07, HY03, YZ16, ZY14, Dun03]. Second-Order-Cone [BA13, FLT01].
SECQ [LNP07]. Seidel [Xu18]. Selecting [MR10]. Selection [DDW20, Lu09, MS11a, RTBG20, dEH01]. Selective [DLR17]. Self [CM11, Fay02, Gül97, HL02, KU15, Ls17, MSS15, NT98, PRT02, PTZ05, PFA17, ST10, Wan11].
Self-Concordance [Gül97, CM11].
Self-Concordant [Fay02, KU15, Lu17, MSS15].
Self-Correcting [ST10]. Self-Dual [PFA17, Wan11]. Self-Regular [PRT02, PTZ05]. Self-Scaled [HL02, NT98]. Semi [BHT16, BK10, CLPT99, CKLP07, CLMP10a, CLMP10b, CKL+14, CHY10, FS08, GAP08, GJLVP14, GVJS10, GJR08, Gür10, HW10, HG16, JS97, JS11, Kan14, LP10, LNS00, LZ14, LFW08, LW08, LSdZ18, MP14a, MLLB08, MN13, NKT10, NLQT06, OHH12, Pap17, Pha20, PQA0, RP03, ST09, VR05, WY15, ZWL10, ZY07, ZW12b, GHS95, JRW94, KN93].
Semi-Algebraic [LP10, Pha20]. Semi-differentiability [LSdZ18].
Semi-Implicit [GAP08]. Semi-Infinite [BHT16, BK10, CLPT99, CKLP07, CLMP10a, CLMP10b, FS08, GJLPV14, GVJS10, Gür10, HW10, JS97, JS11, Kan14, LNS00, LFW98, LW08, MP14a, MLLB08, OHF12, Paps17, PQS01, ST09, WY15, ZWL10, CKL\(^+\)14, CHY10, GJR08, LZH14, MN13, NKT10, NLQ10, RPQ10, VR05, ZY07, ZWL12, GHS95, JRW94, KN93].

Semi-Markov [HG16]. Semialgebraic [BHP18, BLY14, DIL16, EZ10, JAL15, JPT13, KS18, Las09, LFW98, LW08, MP14a, MLLB08, OHF12, Pap17, PQS01, ST09, WY15, ZWL10, CKL\(^+\)14, CHY10, GJR08, LZH14, MN13, NKT10, NLQ10, RPQ10, VR05, ZY07, ZWL12, GHS95, JRW94, KN93].

Semi-Continuity [DIV10, LW08, GLT97]. Semi-Coercive [KP98].

Semi-Continuity [CH13, NZ01, PZ98, WSLZ17]. Semi-Convex [HPD14]. Semi-Diagonal [AHO98, Ans00, AW00, Aus15, BTN97, BTKNZ99, BYZ00, BNT04, BK99, Bur03, CS08b, CV17a, CKS15, CQLT97, DLV10, LW08, GLT97].

Semi-Convex [CH13, NZ01, PZ98, WSLZ17]. Semi-Continuous [CH13, NZ01, PZ98, WSLZ17]. Semi-Diagonal [AHO98, Ans00, AW00, Aus15, BTN97, BTKNZ99, BYZ00, BNT04, BK99, Bur03, CS08b, CV17a, CKS15, CQLT97, DLV10, LW08, GLT97].
Several [LH04, LBP20]. Shadow [GHW08]. Shadows [DPW15, SS15]. Shah [Wan95]. Shannon [BH95]. Shape [BHKO02, BHK + 09, CHP + 09, DQQY02, Hab98, Lau00, Luc09, LSW20, RW12, SSW16]. Shape-Preserving [DQQY02]. Shaped [HOR99]. Shapley [BT20]. Sharing [AH19, GKPV01]. Sharp [CGT20, DY04, Dol20, FIS10, JL03, LMWY11, LMP + 18, MZ98, WJ00, WyW04, ZY07, Zua03, MZ00]. Sharpness [Rd20]. Sheet [FGM12]. Shifted [GKR20, Mit94]. Shifting [YMT04]. Short [Bar08, GV94]. Shortest [DP00, Wen97, Ber91]. Shrinkage [KF18a]. Shrinkage/Thresholding [KF18a]. Shrinking [GL14a]. SIAM [MZ00, QW01, ZT08]. Side [Gre00, PS11]. Sided [RW16, DFNS05]. Sides [GST11, HCH12, KRT07]. Signal [KB08, GK99]. Signed [INT15]. Signomial [CS16]. Simple [BV18a, BCU00, DFS03, HL08a, HL11, HR15, KT14, KR03, LT02, Pyt98, YN17, CH93b, L196]. Simplex [ABGJ14, AWW09, AM00, CV07, HJB20, IdW16, LRWW98, Loc15, MCK8, RSE18, dKLS15]. Simplicial [Tse99, DTY91]. Simplified [GT97b, Rool5, Sch08, St04]. Simulated [CF99, Fie00, Nau02, Fox95]. Simulation [Din98, PGHH18, SFP11, GK95b]. Simulation-Based [PGHH18]. Simultaneous [DRT17, Gre00, Hol04, JLI6]. Single [ASZ08, AGH10, AG14, BTC08, CKL97, CJK98, EI06, GRW20, SCRS00, dSTVB18]. Single-Conc [EI06]. Single-Directional [AGH10]. Single-Objective [ASZ08]. Single-Sink [SCRS00]. Single-Valuedness [AG14]. Singly [CPRZ20]. Singular [CCS10, CNQ97, IK00, IS02c, Lov11, SI13]. Singularities [CTW19]. Singularity [IT17, LP93]. Sink [SCRS00, XL199]. Size [BHG07, FV07, FB19, Kz16, RSKW19, SM99, AH16, Bar93]. Sized [YMT04]. Sized-Broyden [YMT04]. Sizes [BHT16, BT19, PM15]. Sizing [Sta99, YMT04]. Sketch [PW17]. Skew [BAC11]. Skipping [KON98]. Slater [DLW99, LZH14, MRS16]. Sliding [LZ16, LV07]. Slim [DO07]. Slope [BHKM14]. Slowly [Cab05]. Small [EL10, ND09]. Smooth [AST10, AFGO20, BH19, BGR20, BGP09, BM98a, BM98b, BFMS14, CC19, CQT12, CNQ97, CH97, DN20, Fu14, GW19, IS02c, JR00, KLW18, KF18b, LL20, Lu09, LFN18, NS03, MOP20, Nm04, POLW20, RS11, RW18, SP12, TZ10, TDCH18, WG19, Wn97, ZN14b, Zhu02, dA08, dGJ18, dR092]. Smoothed [AI11, MWS18, VVM + 09]. smoother [Bel94]. Smoothing [BT12, BC14, BH14b, CX99, CC99, CY00, CWZ12, CB14, CNY14, CL14, CH15, DGN12, DBW12, FLT01, HYF05, JR10, KP99, KN02, KO4, KSX08, LL09, MPR10, NARS14, Q09, QZ00, SSQ04, XYZ15, XLS19, ZC09, ZC20, dE14, LS93, MN93, PZ94]. Smoothing-Type [KN02, KN04]. Smoothness [CGT19, L123]. SNOPT [GMS02]. Sobolev [Tha93]. Sofer [CK99]. Solution [BBT06, BP12, BZ08, Chr20, DLR14, FK10, FGG07, GT97a, GLTP98, Gre00, HKK11, HMP + 08, HY16, IPRT00, JY04, JS16, K16a, KQ19, LW11a, Lin08, LNS18, LFJ + 11, LPV05, MZ920, QZ08, RS11, Rob07, Rot09, RPK03, TM15, Tuy00, ZG03, ZSX19, ZL02, ZS18].
BCT93, DFKS11, GMR91, GLT97, Gow92, HSS93, MT91, MS94b, MP95. **Solutions**

ADE+18, Att96, BTNR02, BS98, CG08, CLM10a, CDL16, CY99, Ded00, EOL98, GSG12, GJLVP14, GHGHL06, GL10, GJN06, GH519, IS10, KP98, KK05, KRT07, LPR00, LN14a, Liu20, LJ16, MSFL17, MZ98, Mat05, MOS14, NO09, PT18, RW07, Sag16, SFM14, SdM00, SW15, Vog08, WyW04, XS16, XLZH19, ZL12, ZK15, Dan93, MZ00, SM93, Tha93, Ver96, Wan95.

**Solvability**

Bie16, CLPT06, GS07, RW16, Zhe20.

**Solvability/Unsolvability**

CLPT06.

**Solve**

ABGJ14, LYSA20.

**Solver**

BCWW20, CF01, LMO06, uDR15, Toh03.

**Solver-Based**

LMO06.

**Solvers**

FFG99, Hen15, LM19, MS11a. Solves [CH16].

**Solving**

AINT17, ACN15, ACS14, AMS16, AGJJ00, BBN14, BD17, BTC08, BBTT12, BV18a, BYZ00, BLST19, BH14a, BAD18, BV06, BK10, CT06, CHS06, CPRZ20, CP01b, CWZ18, DLR20, FMW96, FS17, Fil99, GLRT99, GACD14, HM15, HNKK17, HL17, HL20, IS02c, JFQS98, KV17, KRS11, KMM19, Kor00, Lev04, LS97b, LST18b, LST18a, LT06, Lie20, LFJ11, McB98, MZ99, POLW20, PFA17, PW19, QQS03, SS17, SBD11, SNT16, SSN04, SDGM09, SK12, SBT16, SL15, TAK98, TK02, Toh03, Vi05, WST10, XYZ15, YL11, ZZST20, ZM96, vdLTY07, DM94, Fre95, Gar93, PY93, Q95. Some [AKS00, AHFH16, CK99, EW09, FIS10, FP98, Fus14, GS07, GO12, JL18, KH05, Kea11, LPT07, Loc15, LPR98, NY05, PR07a, Pow95, PW19, SZ98, Toh00, TK02, Zha98a, dKL10, CL96b, DHLN92, GKM11, Kan96, Mel06, ZC91, Zhu96]. SOS [AP14, ND09]. SOS-Convexity [AP14].

**Source**

BTC08, BLMH06. Sources [XLD99]. Space [Alv04, ADL08, B98, Bur03, CCR17, DLW99, HV05, HK06, HK09, KT03, LN05a, Luk08, RZ01, RW12, Sch08, TZ10, ZN11, KS91, Kup96]. Spaces [AZ19, Bac14, BD17, BP07, BDMS09, BKM15, BCGH08, CCFP05, CT03, Den97, DFR07, DS12, FL11, FI08, GP19a, GYZ14, GNRPT16, HS06, HHP18, HSK15, Hu07, J15, KKSW19, KRS11, KK02, KT08, KNT10, LPT07, LN02, LJ02, LN03, LN05b, LNP07, LLFL09, LN14b, LN18, LMP+18, MM11, NZ01, NT08, RW16, Rut17, Sab11, Ulb03, WyW04, Zas10, ZN04, ZN05, ZN07a, ZN07b, ZN08, ZN09, ZN10, ZN14b, Zhu02, HK92, Iof94, IOK6, NT02, Sha94, Tha93]. Spanning [RO18]. Sparse [BYZ00, BH03, B097, BSR17, CP18, DDW20, ET19, KKW05, LW11a, LLST19, Lu09, LZ14, MSFL17, ND09, TY11, XZ14a, XD20, ZL12, Zha20, vdBF11, Fle95, YG91]. Sparsely [AAJN16]. Sparest [ZK15]. Sparsification [Eg19, ZSY10]. Sparsity [APX17, BE14, BH18, CSPW11, HZ16, KKW09, Las06a, SSZ10, SM18, VZQD17, WKKM06, FNM10]. SpaseLoc [CJSY07]. Special [DKM18, DR07, LM02, Wu96]. Specialized [Cas00]. Specific [PT03]. Specified [Fil99, Fre95]. Spectrahedra [BR15, BKL19, GN11, KTT14, KTT15, dCST15]. Spectrahedral [KUM16, SS15]. Spectral [ANP08, BMRR00, CWW18, CPRZ20, CDZ17, DSST20, Erg19, GHG14, HR00, LT20, VVM+09, WX20]. Spectrally [See97]. Spectrum [DK10, WX20b]. Sphere [BQX15, BBW18, GH15, Hag01, SZY16, WX19]. Spheres [LNQY10, ZCTW12, Mar94]. Spherical [Sor97]. Spline [DQY02]. Split [DGR17, HAN11]. Splitting [AC11a, ACP11b, BFO19, BCH14, BAC11, CR07, DP19, Dav15b, Dav15a, GMI12b, HLWY14, JE19, LP15b, MT20, MS11c, Pan19, RFNP14, RTBG20, Sal17, TP20, Val20, ZY14, Li09a, LT92, Man91]. Spurious [EH20]. SQAP [JK00]. SQAP-Polytope [JK00]. SQP [BTC92, BCN08, BCN10, DJV06, FLT02,
SQP-Filter [FGL + 02]. SQP-Methods [Zie14, IK96]. SQP-Semismooth [HH06]. SQP-Type [DJV06]. Square [MC05]. Squared [SSQ04]. Squares [BBT06, Bec15, Ber96, Ber97, BDMS09, BCWW15, CGT14, CP17, DLR16, EZ10, FSP15, FRW11, GLT04, GLN07, GSW97, KV17, KKW05, KS15, Las05, Las06b, Mas20, PA14, PY19, RV06, RM08, Sch06, STY16, VS08, WKKM06, XZ14a, ZCD00, ZCS10, ZC10, vdBFI11, Heit93, Hus94, KSW94, YY95].

Stability [AHO98, AW94, AAZ15, AH16, AD15, BCL07, BS98, CPS07, CLPT99, CLMP10a, CM17, CHJ18, CHN18, CS15, DR00, DHR07, DR14, DGL10, DL13, GM15, GM17, GLT97, GLSD05, GTDS06, GLY12, Har09, HRS06, HJ14, JRS10, KK05, KNT10, Kück08b, LTY12, LPR00, Lev02, LZ13, LXL11, LRX14, Mal07, Mat05, MO07b, MR12, MRS14, MN14, MO514, MOR15, MN16, NT08, NKT10, PVZ07a, PR98, RV07, Roy20, VVM+09, ZZX16, ZN15, dP02, AW93, JWW94, RSG96].

Stabilization [LRR98]. Stabilized [GR14]. Stable [BM19, Dah99, FYL11, GLRS15, GR03, GJR08, IK16, JR10, KR09, LI11, SKC12, YZZ17, ZN15, ZNZ18]. Stage [BHM18a, BHM18b, BJ07, CSS19, DR00, FWKS15, LXL11, LS20, LCPS20, MÖ07a, MÖ09, Mö09, OSS11, RSvdVH16, SL15, XY10, YM14, ZSD19, CM11].

Stagnation [Ke99]. Staircase [Ent96]. Standard [KNP98, LSS19]. Start [YW02, Fre95]. starting [BF96]. Starts [JKW15]. State [BCL07, BDM16, BM16b, BLMH06, CdIR09, Ger08, Ger11, Her09, HK10, HSW14, KU15, Ma07, PZ03, RT06, Sch09, SW11, Trö05]. State-Constrained [BCL07]. States [HN19]. Static [HMW13].

Stationarity [APX17, Bet19, HMW13, HK09, KLT07, NR20, Wac14]. Stationary [AA06, ALSV18, BH20, BT02, FT07, Gün14, HPU19, JBK+18, JR10, KK05, LBP20, Mat05, PT18, vDLY06, DvTY91, HSS93, Sch92, TDZ20]. Statistical [CCF+20, CPS18, HS19, LV08]. Statistics [SM99]. Steady [BLM06]. Steady-State [BLM06]. Steepest [CT13, CGT10a, CC02, Fle98, Mur03, Zhu95]. Steepest-Edge [Fle98]. Steiner [BM02, CBJF97, FdOF07]. Steklov [SSW16]. Step [AFFG14, AH16, BHG07, BRZ20, CD19, CVV99, DIMS18, EGG09, EG10, FB19, GLR14, MT03, PS97, Roo06, Roo15, ZS98, An09, Gon91b, Gon91a, GT92, Kiw96, KKM93, TM95, Wri95, dRV92, dRT92].

Step-size [AH16]. Stepping [CW14, GAP08, TP02]. Steps [PRS16, GV94]. Stepsize [Tse98, dEH01, Mas97]. Sterilization [KS00]. Stiefel [CMSZ20]. Stochastic [AFH+13, AP18, AD19, BHM18b, BPL12, BGR20, Bia16, BZ08, BHT16, BT19, BCD+18a, BBN18, BCD20, BCNN11, BHNS16, CCL09, CERS18, Che01, CM11, CWZ12, CSW15, CSS19, CDL14, CS15, CKS17, CP15, CHP+09, DL15, DG19, DD19, Den14, DR00, DR03, DHR07, DR14, DW15b, Din98, DBW12, DR18, DM20, ER05, EN14, EB20, FWKS15, FCF07, GH16, GP19a, GL12, GL14a, GL14b, GRW20, GSG12, GNS08, GHZ99, Grl19, GR12, Gui16, GKS18, Gui20, HO15, HS19, HSS17, HKMS20, HP18, HRS06, HS19, dM08, dMM10, HCH20, IJOT17, IJOT19, JS16, JZZ20, JS20, KPZ19, KsdM01, Kür08b, LY98, LZ18, LY19, LCC+20, L20, LZ03, LXL11, LRX14, LW15, LS20, LCPS20, Lu14, LW08, Lue08, MP16, MP19, MPP+17, MÖ07a, MÖ09, MÖ10, MX06, MXC+19].

Stochastic [MP07, MS06b, NL14, NJLS09, OR02, OSS11,
PS20, Pat16, Pfl10, PP12, PP16, RCGR18, RNV09, RS11, RW07, Rot09, RW17, RR08, S017, SKM19, Sch96, ST03, Sch98, SZ14, SB18, SdM00, SA04, Sha17, SD20b, SHP18, SY18, SL15, SXMW13, WB16, WMGL17, WZZ18, XZ14b, Xu06, XY10, XY15, Xu20, YWF19, YK18, Yin99, YLZ02, YKl04, YNS20, ZC09, ZK14, ZMB12, dE14, And96b, AW94, BMR94, BQ95, CJ18, DJ93, Den00, JYZ94, RS94, RS96. Stochastically [CSW12]. Stochastic [YLZ02]. Stokes [HH06]. Stop [Pat16]. Stopping [BPL12, Har98]. Storage [Kau99]. Strategies [BBN18, CC19, GHHL05, MCL10, NW09, PMDL10, YW02, LN93]. Strategy [BHHK00, HIK03, KR02, Pan16, Sag16]. Stratifiable [BDLS07, FMP18]. Strength [AW99]. Strict [CM10, KN05, KKF09, dCST19, ST09]. Strictly [Gre00, HLWY14, HR15, LS97b, SK08]. Strips [ET07]. Strong [AAS17, AZ09, BE06, Bet19, BL94, CS08b, DY99, DLW99, DR96, DL13, ET07, FBM13, GH16, HMW13, HK99, JL10, KT03, KS14, KK05, KR217, Lj02, LN03, LN05b, LNP07, LDLS20, MP97, Mat05, MDV12, NT06, PW16, RTW97, RK19, Rev97, SW14, TWB+03, Wac14]. Strong- [MP97]. Stronger [MSG20]. Strongly [AFGO20, FS17, GL12, GL14a, HHI+20, IPRT00, JR10, LB00, PW16, Sch16]. Structural [AK08, CSW15, LM16]. Structure [DSS09, DF19, DJS13, GSG12, GNL11, MS00, NT19, SW15, SL14, SAV14, CL92, Hen95, HSS93, Hus94, RRH93]. Structure-Adapted [NT19]. structure-exploiting [CL92]. Structured [BBN14, BCN19, CV17a, Com14, CGST96b, CVV99, GKPV01, KSW94, LZ19, MS03, NS17, PCA19, WWKM06, ZC10, JYZ94]. Structures [ABT00, CM16]. Studies [FGM12]. Study [BER04, CCLW14, FWKS15, Pul97, Bon97, KBS93, NN91a]. Subadditive [KM19]. Subanalytic [BDL07]. Subcubic [HL11]. Subdeterminants [De19]. subdifferentiable [MLRR93]. Subdifferential [BQ95, CD00, CHL16, CHL19, DHML01, DF19, DL13, EL09, HL08, HJ02, LN11a, MR12, PA19, TZ10, WG19]. Subdifferentials [CT13, CHY10, KM09, LT20, MO01, MN13, ZN15, BD02]. Subgradient [Bac15, BWWX15, BDL07, BBR16, BCGH08, CHN18, Cru14, DD20, DG19, Gri18, Gri19, JR10, Kiw04, Kiw06, Kiw08, KNX16, NB01, NO09, NL14, NS14, RNV09, SY13, WLWY15, YP20, dF09, Ren16]. Subgradient-Based [YP20]. Subgradients [BDLS07, ND10, QW20]. Subgraphs [CC18]. Subject [BM20a, BCU00, BMW10, CC19, CL96b, CPRZ20, DK10, HH06, HK10, Mal07, Sha97, Sor97, CL96a]. Subjects [BDS10]. Sublevel [AH05]. Sublinear [CC19]. Submatrices [DV14]. Submodular [HKMS20]. Suboptimal [GSG12, TP16]. Subproblem [AIT17, AZ09, Aus17, BV18a, CJSY07, CY99, CH16, For05, GLRT09, HNKK17, JL19, RSS00, SY19, TA98, WX20a, YB16, MP95]. Subproblems [BA13, BCW15, IS10, JL20, LST18b, N05, SW95]. Subregularity [BYZ19, Gfr11, Gfr13, LM12, ZN07b, ZN10, ZN14a, ZZ16]. Subset [BZ04, CKP00, DD20]. Subsets [BTM00]. Subsmooth [ZN08, ZN90, ZW12b]. Subspace [ABC120, EG10, FH14, ML05, RFN14]. Subspace-Based [ML05]. Subspaces [BM16a]. Substitution [HTY12]. Subsystem [Pfe08, VP20]. Successive [ACS14, BZ08, BGNW05, KTO0, MGGS09, RHL14, TF96]. Sufficiency [BCT19]. Sufficient [AZ09, BYZ19, CT02, CdlRTO8, CM20, EO09, FS12, HS06, HO09, Ke99, LP06b, MM11, NYF11, PS10b, Pot14, RT06,
WX20a, WY01, Zas05, War92]. **Sum**
[BH14a, CKPK00, CP17, CHL16, DP19, EZ10, FSP15, LY19, Las05, Las06b, Mas20, PA14, PY19, QZ00, RV06, TSP18, WX19, XY97, XY00, And96a]. **Sum-of-Squares**
[FSP15, PA14, PY19, RV06]. **Summations**
[ND09]. **Sums**
[BCH14, KKW05, KS15, LV19, Sch06, VS08, WKKM06]. **SUMT**
[Ans96]. **Superlinear**
[CC99, CK00, DJV06, FIS10, GOST01, LSZ98, McS96, MER18, NT16, Sim11, YF00, EM91, KS91, MW96, ZTD92, ZTP93]. **Superlinearly**
[Ani02, CH15, FQ96, IS02c, LST20, McS94, PS98, PS10b, QQ00, ZL03, ZCT10, CH93b, ZT93]. **supply**
[RSE18]. **Support**
[ADE+18, BRB19, BH15, FM03, GLHZ11, MO10, Men17]. **Supporting**
[Pan16]. **Supremum**
[CHL16, CHLC19, HLZ08, LN11a, MN13, PA19]. **Supremum-Sum**
[CHL16]. **Surface**
[DD98, dMM10, MP14a]. **Surpassing**
[MGR18]. **Surrogate**
[KL97, RR15]. **Survey**
[Luc09]. **Sweeping**
[CP15]. **Switching**
[YK104]. **Symmetric**
[BH18, BK596, CQT03, CHLZ17, CY10, Don14, EH20, GS07, GVJS10, HL02, JH14, JS11, KSH97, KSX08, Lim11, LWZ15, LY07, Lu14, LSZ98, Ran06, RFNP14, SW14, Van95, Yos07, KB593, Li93a, Man91]. **Symmetric-Matrix-Valued**
[CQT03]. **Symmetries**
[BDPX09, DL17]. **Synchronization**
[Bou16, LXB19, LY517, ZB18]. **System**
[Bet19, BPC11, BRU97, CT06, HH06, HY16, LN05a, LN05b, LN07, Pen00a, vAPA19, KSW94]. **Systems**
[AGH10, AC02, BDD15, BDL07, BCD18b, CPS07, CLMP10a, CCH05, CCP08, Com14, CP01b, Ded00, Den97, DEAW99, EF02, Fay02, FG04a, FP97, FGG07, FG04b, GM17, GM19, GJ17, GST11, HMM10, Iid13, JY04, JLL09, JRJ10, Kan14, KRS11, KNT10, LW11a, LNS00, LN02, LPN08, LN14a, LN14b, LN18, MN16, MS19, NY02, NKT10, Nga15, PR20, QQS03, She14, Son06, Toh03, TP02, YM14, ZL12, ZK15, ZN05, ZW12b, Zua03, ZM06, AW93, DMZ94, GLT97, LL94, YG91]. **Tableau**
[AWW09]. **Tail**
[CCH05]. **Taking**
[TP16]. **Tame**
[FKP10, Io09]. **Tangencies**
[PHA20]. **Tangency**
[VS08]. **Tangent**
[BCS99, CYZZ91, Pen17]. **Tangential**
[CTG10b]. **Tangents**
[BJ99, YWAS17]. **Target**
[LL+02]. **Task**
[PTJY10]. **Taylor**
[Luc95]. **Team**
[GSG12]. **Technique**
[BRK17, CB14, DSS09, DGN12, DO19b, GG08, HR12, MC05, NARS14, Nes05, WHY19, ZH04]. **Techniques**
[BBR16, FdOF07, FV16, KS12, LRR98, LS20, MP14b, RK19, Kiw96]. **Temperature**
[CF99, Fie00]. **Temporal**
[XA18b]. **Tensor**
[Bou97, BV18b, Don14, FS96, FP97, GN20, JLZ20, SC91, SVD14, ULC20, YFS16]. **Tensor-GMRES**
[FP97]. **Tensors**
[CHLZ17, NYZ18]. **Tentacles**
[Sch06]. **Term**
[CAF05, NYF11, Tse98]. **Terminal**
[BM18a]. **terminates**
[O’L95]. **Terminating**
[AKS00]. **Termination**
[WLLY16]. **Terms**
[Dol20, LST16, MSG20, SVD14]. **Testing**
[GS18, WG19]. **th**
[CJ18]. **Their**
[BS15, BHR19, CRZ18, CM16, GTS06, IK14, Kal18, Kan14, MO01, MN13, RW12, dCST15, ZSX19, ACS14, JSC95, TM15, XS16]. **Them**
[FFG99]. **Theorem**
[AHFF16, BHKM14, DGLM14, Don12, FS17, GKS18, GL18, Kas10, KKT13, KQ19, KB08, MP97, MST11, NT06, ZN11]. **Theorems**
[AAZ15, BCD19, Dax09, Fay06, FB00, FP10, JLL09, Och19, SN07, Zol03]. **Theoretical**
[LS97a, KBS93]. **Theories**
[DR13]. **Theory**
[BGLW08, BP05, BCT19, CD00, CT02, CT12, DV97, DEAM97, DO19b, EA99, GLRS15, HSK15, IS02b, JRS09, KS19, MA00, RW17, Wat00, YmZS15, ACC93, BS94, GLT97, Kup96, MS00, Ren95].
Therapy [RADK05]. Theta [GPT10, dCST15]. Threading [GLM98]. Three [BHK+09, BGR20, NYF11]. Three-Dimensional [BHK+09]. Three-Term [NYF11]. Thresholding [CCS10, CP08, KF18a, Zha20]. Tight [BHM18b, GY20, RTBG20, TP20]. Tighter [Lau01]. Tightness [LLZZ19]. Tikhonov [BBT06]. Tilt [BGM19, CHN18, DL13, GM15, LZ13, MR12, PR98, ZN15, ZZN18]. Tilt-Stable [BGM19]. Time [ACR19, AH19, BBLZ17, BRB19, CW14, Chu16, Den14, GAP08, HG16, HORT09, IT18, J120, KSO5a, NOS17, NT16, Pan19, PW17, PS10b, Pul97, SOT09, TP02, WX19, BTN94, DL91, RA96]. Time-Consistent [Den14]. Time-Delays [Pul97]. Time-Stepping [CW14, GAP08, TP02]. Time-Varying [AH19, NOS17, Pan19]. Times [CJK98, KSO5a]. Timescale [GRW20]. TOA [RM08]. Todd [GT97a, GT97b, KT14, TTT98]. Tolerance [Pen19]. Tolera [CF01, MIM20]. Tomography [BTMN01, JS00]. Tool [SBD+11]. Topology [AK08, BTN97, HHI†+20, BTB93, BTN94]. Torricelli [NARS14]. Torus [GH15]. Total [BBT06, FLY11, LFFL09]. Totally [RvdVH15]. Trace [MMS14, PTJY10]. Tracking [LLD†02, RR15, IKR+91, PR93]. Tractable [BTN02]. Trading [RS15, SSSZ10]. Traffic [FHKM06]. Training [CHP20]. Trajectories [Cha02, GS98, Tütt03, Yos07]. Trajectory [NF01]. Transfer [GHGH16, ZT92]. transformate [See92]. Transformation [Fuk98, MPSU19, RT05, Wu06, RD95]. Transformations [BM07, ULC20]. Transforms [RV06]. Transit [KSO5a]. Transitive [MS02]. Transport [BBLZ17, HPU19, MRT15, SKM19]. Transportation [BPS06, D006, HH96b, Zen91, ZC91]. Transposition [SN07]. Transshipment [Fle01]. Traveling [BM02, GW18, HP94, JSV91, kKPS09a, kKPS09b]. travelling [BCQW95]. Treatment [FLS03, RADK05]. Tree [CBJF97, FdOF07, MP07, PP16, RO15]. Treespace [SPM18]. Triangle [HAN11]. Triangular [DMZ94]. triangulation [Dan93]. tridiagonal [DEG†+91]. Triple [Id12]. Triple-Hierarchical [Id12]. Truly [SS00]. Truncated [FLP02, IS10, LRR98, NLQT06, STK17, VS08, XSN99, D15, N191, ZNB†+93]. Truncated-Newton [XSN99, N191a]. Truss [BTN97, JKZ08, BTB93, BTN04]. Trust [AINT17, Ans17, ANP08, BSV14, BV18a, BP97, BV18b, BA13, BKS96, CNY14, CDM20, CGST96b, CS209, CRS18, DO19a, DV97, DEAM97, DEAW99, EA99, EGG09, EG10, FGL†+02, For05, GJ16, GLRT99, GST05, GST08, HV01, HR14a, HKKK17, HM02, JFQS98, J1L9, J1L20, Kau99, KSO99, KVPZ19, LMT09, LMO2, LLRTV9, LV07, MWDS18, N05, NR20, Qi95, QQS03, RSS00, hRK14, S18P, SY19, TA98, TE19, Ts102, U0201, WD05, W108, WX20a, WS11, WT04, YB16, ZA14, ZSL17, Bur92, CL96a, CGST93, EA95, Sar95, SW95]. Trust-Region [AINT17, BSV14, BA13, CDM20, CS209, DO19a, DEAW99, EA99, EG10, FGL†+02, For05, GJ16, GLRT99, GST08, HV01, HR14a, HKKK17, HM02, LMT09, LLRTV9, LV07, MWDS18, N05, RSS00, hRK14, S18P, SY19, TA98, TE19, Tse102, U0201, WD05, W108, WT04, ZA14, ZSL17, EGG09, EA95]. Trust-Region-Based [DV97, DEAM97]. Tseng [MS11c]. TSP [Che05]. Tubularity [Cha02]. Tucker [ACS14, HSS93, KT18, Pan94, QQS03, VR05]. tuning [Ser95]. Turing [dKV16]. Twice [AB18, MS20]. Two [AHLN16, AHSS12, Ans17, BHM18a, BHM18b, BGV20, BM16a, BE06, BFS07, BMZ01, CM11, CSS19, CVV99, DP19, DMZ12, D0006, FWKS15, HAN11, HM15,
Kum16, LPW12, LH02, LXL11, LS20, LCPS20, Mar05, MÖ07a, MÖ09, MO10, Mia96, MSG20, OSS11, PY97, RsvdVH16, SNTI16, SDGM99, SL15, TSP18, XY10, YB16, YK18, YI08, ZK14, ZSX19, dSTVB18, BT94b, DFNS05, Gur94, HSS93).

Two-Dimensional [AHNL16, BGV20, MSG20].

Two-Level [DMZ12].

Two-Phase [dSTVB18].

Two-piece [Gur94].

Two-Player [HM15].

Two-Row [HAN11].

Two-sided [DFNS05].

Two-Stage [BHMI8a, BMH18b, BJ07, CSS19, DR00, FKWS15, LXL11, LS20, LCPS20, MÖ07a, MÖ09, MÖ10, OSS11, RsvdVH16, SL15, XY10, YK18, ZK14, ZSX19, CM11].

Two-Step [CVV99].

Two-Trust-Region [Ans17, YB16].

Two-Variable [YB16].

Type [AMS16, BT14, BW05, BH14a, BK16, DJV06, DVMV17, DNS17, HAN11, HM16, HR14b, IS02a, IS04, KT03, KN02, KN04, KN05, KT08, MSQ98, RLQ06, Pen00b, QGD18, SPT08, SS16, SS00, STY15, ULC20, dKHL17, HHO6, LFPL17, PW07, CHLC19, ZOB20].

Understanding [CCF+20, Peñ00a].

Unification [BBW17].

Unified [Aus99, BT12, DO19b, DMV17, GLR14, GJN06, JZ20, LR10, ND10, Pat08, PFA17, RHL14, SBFA17, N11, BT96, TYF96].

Uniform [DL13, MOT04, RsvdVH15, RsvdVH16].

Uniformly [Tha93].

Unifying [BY11, HLZ08, MS02, OcH19].

Unilaterally [SV07].

Unimodular [RsvdVH15].

Uniqueness [Cel07, GS07, HF14, INT17, Sh07, SSK98].

Unit [LN04, Lo15, MC05, WX19, ZCT12].

Unitary [ULC20].

Univariate [LS13].

Universal [CGT19, FG04a, GIL97, GIN14, Vog08, ZSY10].

Unknowns [CHS06].

Unscaled [BGM+16].

Unsolvability [CLPT06].

Update [BER03, KON98, NWW09, WD05, XB09, Xu18, YMT04, Dun93, Fie95, GW93, Gur94, KB93].

Updates [AZ05, BCWW20, YMT04, BT94b, DEG+91, WZ95].

Updating [BDDSM15, MN00, YPC18, ZNW99, Bos93].

Upper [CPR20, Jan04, NMU18, dKHL17, vAS14, vAF18, GLT97].

Use [BM17, BK10, BCNN11, IY09, Hua94].

User [ANRV04].

User-Provided [ANRV04].

user-specified [Fre95].

Uses [HY96, Lu097].

Using [AC18, AN05b, ALSV18, AO06, Bar96, BV18a, BH03, BLG13, BGM+16, BPR20, BDPP14, CKS15, CNQ07, CST96b, CV07, GJ16, GM12a, GACD14, HPU19, Ke09, KS09, KS16b, LRO05, LP15a, LS20, MDWS18, MP14b, MSG20, MW06, RADK05, Sch06, Sim11, VS08, ZFL06, dEH01, CC18, CT93, CGT93, DEG+91, GLRT09, GNY11, KW10, MSFL17, Mit94, MP95, Pap17, SC91, SFP11, vAF18].

Utility [CH09, DR13].

Uzawa [HZ06b].

Validated [KH05, Kea11].

Value [ABF14, ACL99, CCS10, CG17, DG20,
DMZ12, GCPT18, GYJ06, GLYZ14, HG16, KS16b, OF03, SI13, YZ10, MS94b.

Value-At-Risk [KS16b, HG16]. Valued [ACN15, BP07, CQT03, GJ99, LN11b, MS20, PZ98, PZ00, PZ03, PW05, GTdS06].

Value[AG14]. values [MTT94].

Vanishing [Cab05, Wan17]. Variable [AD00, BLPP16, Dav91, Fuk98, KKS03, LMH19, LPS05, Och19, Sol98, YB16, Dixo1, FM94a]. Variable-Basis [KK03]. Variables [AB08, ALT19, CKP12, CL96b, FFK00, JM18, LMZ15, PNA10, Pyt98, SVD12, dSTV18].

Variable-Basis [KKS03].

Variables [AB08, ALT19, CKP12, CL96b, FFK00, JM18, LMZ15, PNA10, Pyt98, SVD12, dSTV18].

Variance [IJOT17, IJOT19, PRRL97, SKM19, XZ14b]. Variance-Based [IJOT19].


Warm [YW02, Fre95]. Warm-Start [YW02]. Warmstarts [GG08]. Warmstart [EAV10]. Wasserstein [BGV20].

Watermelon [WX17]. waters [CD92]. Way [DO06]. Weak [Alv04, AHSS12, CH17, CKS17, DY04, DLW99, KM09, KRZ17, LMWY11, LMP+18, MZ98, MZ00, WyW04, ZY07]. weaker [Di96]. Weakest [GM15]. Weakly [DD19, DR18, Fus14, IK00, LPV05, MZH20, Win08].

Weierstrass [AHFH16, KQ19]. Weight [MPB02, RK19]. Weighted [BLG13, Chu06, GSW97, HLTW14, HL08c, LT96, LM04, Lu07, MÖ10, NL14, Pot12, WX16].

Weights [PM15]. Well [CT13, CLPT99, DHP16, FI08, HY06, LI10, MS06a, Rev97, Zhe20]. Well-Conditioning
REFERENCES

[CT13]. Well-Posed [MS06a, Zhe20].
Well-Posedness
[CLPT99, DHP16, HY06, Rev97]. Where
[CU99]. Which [BGJ12]. whose [CHS06].
Wide [AZ05, HY96, LP06b, Pot14]. Width
[BPL12, DGR17, GHR14]. Wiersma
[BY10]. Wireless [CJSY07]. within
[BCWW20, LRO05, YMT04]. Without
[GJV16, HAG18, KN05, KFF09, LT10a,
LY11, MT20, AD04, EA99, Gri19, IPS03,
IS04, JLD03, Lau94, PY19, SS05, Sau20,
ST09]. Wolfe [BCD+18a, BRB19, BR220,
DK13, Fle14, FGM17, Gil97, PRS16].
Wolkowicz [HL98]. Working [LS13].
Worst [BC14, Cap02, CGT20, DGT20,
GJV16, THG17]. Worst-Case
[BC14, Cap02, CGT20, DGT20, THG17].

X [GdW00]. X-Rays [GdW00].
Ye [GT97a, GT97b, KT14, MT03].
Yielding [IPRT00]. Yosida [BHHK00,
HSW14, LS97a, MZGS08, WDST14].
Yosida-Based [BHHK00, HSW14].

Zarantonello [BBW17]. Zenoness [She14].
Zero [BR08, FFK00,
TY04, vdLTY07, Tha94]. Zero-One [BR08].
Zeros [BCH14]. Zerot [GL14b]. Zerother
[GL14b]. Zhang [Mon98]. Zolotarev
[PvZ07b]. Zuckerberg [Mas20].

References

[AA06] Mark A. Abramson and Charles
Audet. Convergence of mesh
adaptive direct search to second-
order stationary points. SIAM
Journal on Optimization, 17(2):
606–619, January 2006. CO-
DEN SJOPE8. ISSN 1052-6234
(print), 1095-7189 (electronic).

[AA20] Samir Adly and Hedy At-
touch. Finite convergence of
proximal-gradient inertial algo-
rithms combining dry friction
with Hessian-driven damping.
SIAM Journal on Optimization,
CODEN SJOPE8. ISSN 1052-
6234 (print), 1095-7189 (electronic).

[AADD09] Mark A. Abramson, Charles
Audet, J. E. Dennis, Jr., and Sébastien
Le Digabel. OrthoMADS: a determi-
nistic MADS instance with ortho-
gonal directions. SIAM Journal
on Optimization, 20(2):948–966,
????. 2009. CODEN SJOPE8.
ISSN 1052-6234 (print), 1095-
7189 (electronic).

[AAI07] Aram V. Arutyunov,
Evgeniy R.
Avakov, and Alexey F.
Izmailov.
Directional regularity and met-
ric regularity. SIAM Journal
on Optimization, 18(3):810–833,
ISSN 1052-6234 (print), 1095-
7189 (electronic).

[AAJN16] Alekh Agarwal, Animashree
Anandkumar, Prateek Jain, and
Praneeth Netrapalli. Learning
sparsely used overcomplete dic-
tionaries via alternating mini-
imization. SIAM Journal on
Optimization, 26(4):2775–2799,


A. Y. Aravkin, J. V. Burke, D. Drusvyatskiy, M. P. Friedlander, and K. J. MacPhee. Foun-

**Aravkin:2014:VPV**


**Allamigeon:2014:CSA**


**Andreani:2008:ALM**


**Averkov:2018:ACP**


**Abramson:2005:SOB**


**Absil:2005:CID**


**Achtziger:2000:OPP**


**Aze:2002:SAH**

D. Azé and J.-N. Corvellec. On the sensitivity analysis of Hoff-


REFERENCES


Audet:2000:PSA

Audet:2003:AGP

Audet:2004:PSF

Audet:2006:MAD
ISSN 1052-6234 (print), 1095-7189 (electronic). See erratum [ACD08].


REFERENCES

Ascheuer:1993:CPA


Anderson:2001:DSA


Astorino:2014:NPB


Astorino:2011:PQA


Aybat:2020:RAG


Agarwal:2013:SCO


Andreani:2001:RGN

Artina:2014:LCN

Andreani:2019:SOC

Aussel:2014:EKS

Aussel:2010:SDP

Armand:2000:FBI

Aussel:2005:ASS

Aliev:2010:FIK

Auger:2016:LCC

Aybat:2019:DAL


Amini-Harandi:2016:SGW


Ahmed:2016:CCM


Alizadeh:1998:PDI


Andreani:2012:TNW


Andreani:2019:NSO


Aybat:2011:FOS

REFERENCES


Aliev:2014:ICG

Attouch:2020:NLI

Alizadeh:1995:IPM

Appel:2003:ARS

Assmann:2018:DRF

Audet:2019:MAD

Alvarez:2004:WCR
REFERENCES

Averick:1994:ELS


Andreati:2000:RVI


Absil:2012:PLR


Alvarez-Mené:2005:CAO


Andreati:2016:CCC


Andreati:2010:NSO


Alves:2016:RHT

Andersen:1996:ENB


Andradottir:1996:GSM


Anitescu:2000:DNP


Anitescu:2000:PDI


Anitescu:2002:SCS


Anitescu:2005:GCE


Anitescu:2005:UEM

Apkarian:2008:TRS


Anstreicher:1991:PKA


Ans96


Anstreicher:2000:EBV

Anstreicher:2002:ICM


Anstreicher:2017:KPC


Adly:2016:PPR


Audet:2006:FOA


Arreckx:2018:RFF


Ahmadi:2014:CCG


Attouch:2016:RCN


Asamov:2018:RDH

REFERENCES


REFERENCES


[AZ08] Igor Averbakh and Yun-Bin Zhao. Explicit reformulations for

Ai:2009:SDC


Arutyunov:2019:VPA


Bacak:2014:CMM


Bach:2015:DBS


Briceno-Arias:2018:FBH


Briceno-Arias:2011:MSS


Barahona:1993:RMP

[Bar93] Francisco Barahona. Reducing matching to polynomial size linear programming. *SIAM Jour-
REFERENCES


Michel Baes, Michael Bürgisser, and Arkadi Nemirovski. A randomized mirror-prox method for solving structured large-scale matrix saddle-point problems.
REFERENCES


Bollapragada:2018:ASS


Berahas:2019:DFO


Bonettini:2016:STS


Beck:2006:STR


Beck:2012:SAP


Bucur:2002:POC


Baritompa:2005:GQA


Bauschke:2007:FFC


Bartz:2017:ROU


Bauschke:2018:PIC


Bauschke:2003:IBR


Barone:2005:FAA


Baillon:2009:AEP


Bian:2014:WCC


Boland:2018:CPH

Boulmezaoud:2018:GFS


Boyer:2019:RTC


Burtscheidt:2020:RAM


Butnariu:2008:BSP


Bot:2014:PDS


Baier:2007:SCE


Borwein:2003:PDA


Byrd:2008:ISM


Best:2000:MSC


Bo:2008:RCQ


Burke:2014:SQO


Burke:2015:IRL


Burke:2020:ISQ


Bomze:1993:GOA


Benoist:2002:IFS

REFERENCES

Bundfuss:2009:ALA

Burachik:2010:IPP

Bauschke:2017:FCD

Bodur:2019:LBL

Bellavia:2015:UCP

Bolte:2007:LIN

Buchheim:2016:FAS

Bauschke:2018:RBM

**Bolte:2007:CSS**


**Benita:2016:BOCa**


**Bissantz:2009:CAG**


**Buchheim:2014:EAN**


**Boyd:2009:FMM**


**Barbet:2010:GHF**


**Beck:2006:SDN**


**Beck:2014:SCN**

Beck, Amir Beck and Yonina C. Eldar. Sparsity constrained nonlinear

**Beck:2007:QMP**


**Beck:2015:CAM**


**Boland:2012:NAF**


**Bell:1994:IKS**


**Bertsekas:1991:AAS**


**Bertsekas:1996:ILS**


**Bertsekas:1997:NCI**


**Bai:2003:NEL**

REFERENCES


<table>
<thead>
<tr>
<th>Reference</th>
<th>Title</th>
<th>Authors</th>
<th>Journal and Volume</th>
<th>Year</th>
<th>Pages</th>
<th>Digital Object Identifier</th>
<th>Electronic ISSN</th>
</tr>
</thead>
</table>
REFERENCES


REFERENCES

Bo:2007:MMP

[BGW07]

[BH95]

[BH96]

[BH03]

[BH14a]

[BH14b]

[BH15]

[BH18]
REFERENCES

DEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).


REFERENCES


**Bansal:2018:DAT**


**Bansal:2018:TSS**


**Byrd:1999:IPA**


**Byrd:2016:SQN**


**Bolte:2018:QCS**


**Bueno:2019:OCC**


**Buchheim:2015:EBC**

REFERENCES

Blado:2016:SIR


Burachik:1998:GPP


Bianchi:2016:ECS


Bienstock:2016:NPS


Billups:2002:HBA


Bonnell:2005:PMV


Bajovic:2017:NLM


Bosch:2007:TSS

REFERENCES

ISSN 1052-6234 (print), 1095-7189 (electronic).

**Butikofer:2010:NNM**

**Bampou:2012:PAC**

**Breiding:2019:RS**

**Borgens:2020:NCQ**

**Burachik:2017:NST**

**Byrd:1996:ASR**

**Burdakov:2016:MPC**

**Boggs:1999:GCA**
Paul T. Boggs, Anthony J. Kearsley, and Jon W. Tolle.


Burke:1994:EC

Borwein:1998:CRE

Borwein:1998:NSE

Baiou:2002:STS

Bose:2007:DCA

Bienstock:2014:CPO

Bauschke:2016:DRA

Benita:2016:BOC
REFERENCES


[BMR00] Ernesto G. Birgin, José Mario Martínez, and Marcos Raydan. Nonmonotone spectral projected gradient methods on convex sets. *SIAM Journal*
REFERENCES

Bomze:2019:HBA

Bucheim:2010:IPS

Burer:2001:RTR

Berto:2016:GPD

Berto:2018:PPM

Biegler:1995:RHM

Bertsimas:2004:PCO

CODEN SJOPES. ISSN 1052-6234 (print), 1095-7189 (electronic).


CODEN SJOPES. ISSN 1052-6234 (print), 1095-7189 (electronic).


CODEN SJOPES. ISSN 1052-6234 (print), 1095-7189 (electronic).


CODEN SJOPES. ISSN 1052-6234 (print), 1095-7189 (electronic).


CODEN SJOPES. ISSN 1052-6234 (print), 1095-7189 (electronic).


CODEN SJOPES. ISSN 1052-6234 (print), 1095-7189 (electronic).


CODEN SJOPES. ISSN 1052-6234 (print), 1095-7189 (electronic).


CODEN SJOPES. ISSN 1052-6234 (print), 1095-7189 (electronic).

REFERENCES

DEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).


REFERENCES

Bayraksan:2012:FWS


Bonettini:2020:CIF


Brixius:1999:NSD


Bertsekas:1997:RMS


Birge:1995:SCS


Blanchini:1997:NDP


Bomze:2020:ASC


Brown:1994:CTN


Bonnans:1998:NQS


Bajbar:2015:CPT


Basu:2019:CCG


Boyd:2017:ADC


Bolte:2018:FOM

REFERENCES

???: 2018. CODEN SJOPES. ISSN 1052-6234 (print), 1095-7189 (electronic).


REFERENCES


Ben-Tal:1994:PRP


Ben-Tal:1997:RTT


Ben-Tal:2002:TAU


Ben-Tal:2002:RSU


Ben-Tal:1996:CDS


Byrd:1992:SAL


Ben-Tal:1997:PBM

<table>
<thead>
<tr>
<th>REFERENCES</th>
<th></th>
</tr>
</thead>
</table>
REFERENCES


Bienstock:2004:SAL  

Birge:2008:SLA  

Cabot:2005:PPA  

Calafiore:2010:RCP  

Caprara:2002:ABW  

Castro:2000:SIP  

Calafiore:2007:ARM  

Castillo:2000:CBA  
[CB00] Ileana Castillo and Earl R. Barnes. Chaotic behavior of the affine scaling algorithm for linear programming. *SIAM Journal
REFERENCES


REFERENCES

ISSN 1052-6234 (print), 1095-7189 (electronic).

Chen:2020:NMC


Cantone:2005:EAA


Cheung:2005:TDM


Carpen:2009:ASO


Caprara:2014:SCC


Caruso:2020:IAB


Cheng:2018:DRO

REFERENCES

Cheung:2008:CNM


Chen:2017:RSA


Cai:2010:SVT


Chalifour:1992:ODL


Campa:2000:SCN


Carmon:2019:GDF


Cramer:1994:PFM


Carmon:2018:AMN

Yair Carmon, John C. Duchi, Oliver Hinder, and Aaron Sidford. Accelerated methods for NonConvex optimization. *SIAM
REFERENCES


Cheng:2014:DRS


Cui:2017:QGC


Carja:2016:GSS


Casas:2008:SSO


Cegielski:2015:AQN


Cellina:2007:UCR


Chambolle:2018:SPD


Chambolle:2018:SPD

[CERS18] Antonin Chambolle, Matthias J. Ehrhardt, Peter Richtárik, and Carola-Bibiane Schönlieb.

Cohn:1999:SAS


Chen:2001:FFT


Campi:2008:EFR


Combettes:2017:QNI


Care:2015:SMM


Conn:1993:GCC


Conn:1996:CPA

A. R. Conn, N. Gould, A. Sartenaer, and Ph. L. Toint. Convergence properties of an augmented Lagrangian algorithm for optimization with a combination of general equality


REFERENCES


REFERENCES

297, May/August 2002. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).


REFERENCES

Cheung:2005:LSL


Chen:2015:OCM


Correa:2016:TSS


Correa:2019:MRT


Chen:2012:MBI


Chen:2017:NCN


Chieu:2018:CTS


Conti:2009:SOU

[CHP+09] Sergio Conti, Harald Held, Martin Pach, Martin Rumpf, and Rüdiger Schultz. Shape optimization under uncertainty —


Censor:2016:NDR


Chan:2017:SCR


Casas:2020:CCS


Chen:2020:PGM


Clason:2019:AGC


Custo
dio:2011:DMM


Chen:2015:GIP


Castro:2017:GPP

REFERENCES


REFERENCES


Chen:2003:ANS


Chen:1997:CRF


Correa:2004:GAN


Curtis:2018:CAT


Cruz:2014:SMV


Cheng:1999:NOQ


Cegielski:2018:RSQ

REFERENCES

CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Cegielski:2008:RAP


Chan:2008:CNS


Claus:2015:LPS


Chandrasekaran:2011:RSI


Chandrasekaran:2011:RSI


Cui:2019:CBA

[CSV09] Andrew R. Conn, Katya Scheinberg, and Luís N. Vicente. Global convergence of general derivative-free trust-region algorithms to first- and second-order
REFERENCES


**Cheung:2012:LMI**


**Chen:2015:RMP**


**Combari:2003:ECC**


**Cai:2006:SSO**


**Cai:2006:SSO**


**Casas:2012:SOA**

REFERENCES


Chen:2019:CPS


Cox:1999:WBH


Custodio:2007:USS


Chao:2017:SRG


Clason:2017:PDE


Conn:1999:TSA


REFERENCES

Chen:1999:GLL

Chen:2008:PBM

Chen:2000:SMM

Chua:2010:CMN

Corman:2014:GPP

Chen:2019:EFS
Chen:2019:DMF


dAspremont:2008:SOA


Dahl:1999:SSP


Dai:2002:CPB


Dai:2006:FAP


Duchi:2012:EMD


Dang:1993:TCD


Davidon:1991:VMM


Davis:2015:CRAb

REFERENCES


[Davis:2019:SMB] Damek Davis and Dmitriy Drusvyatskiy. Stochastic model-

**Daniilidis:2020:PSD**


**DelPia:2020:SSS**


**dAspremont:2014:SSA**


**Dennis:1997:GCT**


**Dedieu:2000:ASA**


**Dennis:1991:CSU**

REFERENCES

ISSN 1052-6234 (print), 1095-7189 (electronic).


[DF19] Aris Daniilidis and Gonzalo Flores. Linear structure of functions with maximal Clarke sub-
REFERENCES

Donchev:2007:DAF

Drusvyatskiy:2018:OFO

Dostal:2003:ALA

Dash:2009:MIR

Dreves:2011:SKC

DeMiguel:2005:TSR

Diakonikolas:2020:FPC


REFERENCES


REFERENCES

881, November 1993. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).


[deKlerk:2011:LHS] Etienne de Klerk and Monique Laurent. On the Lasserre hier-


**Ding:1991:PTP**


**DiPillo:2001:ALF**


**Drusvyatskiy:2013:TSU**


**Dang:2015:SBM**


**Dym:2017:ERS**


**DeSantis:2014:NCF**


**DeSantis:2016:FAS**

REFERENCES


[DMM06] Elizabeth D. Dolan, Jorge J. Moré, and Todd S. Munson. Optimality measures for performance profiles. *SIAM Jour-
REFERENCES

H homem-de-Mello:2010:CSM

Dinh:2017:UAR

Dennis:1994:TDM

Dempe:2012:SAT

Dinh:2013:IPP

DeLoera:2006:ALI
REFERENCES


<table>
<thead>
<tr>
<th>Reference</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reference</td>
<td>Authors</td>
</tr>
<tr>
<td>-----------</td>
<td>---------</td>
</tr>
<tr>
<td>[DSST20]</td>
<td>Chao Ding, Defeng Sun, Jie Sun, and Kim-Chuan Toh</td>
</tr>
</tbody>
</table>
REFERENCES


diSerafino:2018:TPG


Ding:2017:CRI


Dennis:1991:DSM


Doljansky:1998:IPA


Dunn:1993:SOM


Dennis:1997:CTT

Doan:2016:FLL


Dai:1991:SAN


Dey:2010:CIG


DiSumma:2011:MSL


Dandurand:2015:DCP


Dentcheva:2015:OMS


Dai:1999:NCG


Deng:2004:WSM

REFERENCES


REFERENCES

Erway:2010:SMM

Eftekhari:2020:PCA

Erdougan:2006:ASM

Eichfelder:2009:ASM

Epstein:2008:PC

ElMaghri:2009:PSC

Epstein:2010:ARC
REFERENCES

ISSN 1052-6234 (print), 1095-7189 (electronic).

Epstein:2014:RAS


Engels:1991:LSC


Ermoliev:2014:SAA


Entringen:1996:PDR


ElGhaoui:1998:RSU


Eichhorn:2005:PRM


Ergur:2019:ANP


Esfahani:2018:IFP

REFERENCES


EW94

Eisenstat:1994:GCI


REFERENCES


REFERENCES

Ferreira:2007:NRT

Fliege:2009:NMM

Ferris:1999:ECP

Faccchinei:1998:AIA

Faccchinei:1998:RPS

Faccchinei:2000:IZV

Forsgren:1998:PDI
Anders Forsgren and Philip E. Gill. Primal-dual interior methods for nonconvex nonlinear

**Faybusovich:2004:CUB**


**Frangioni:2004:NPK**


**Fuduli:2004:MNN**


**Forsgren:2007:ISA**


**Fletcher:2002:GCT**


**Ferreira:2012:MMP**


**Freund:2017:EFW**


REFERENCES

Filipowski:1999:CSF


Fernandez:2010:SPS


Fischer:2020:ADI


Facchinei:2019:ASN


Feltenmark:2000:DAP


Fukuda:2000:ESS

REFERENCES


[Fle01] Lisa K. Fleischer. Faster algorithms for the quickest trans-
REFERENCES


**Fletcher:2012:SLC**


**Fletcher:2014:WMR**


**Fasano:2014:LBD**


**Fang:2010:CQE**


**Facchinei:2002:TNA**


**Ferreira:2019:GMO**


**Fletcher:2006:LCS**

REFERENCES

[Ferris:2003:OAR]

[Fukushima:2001:SFS]

[Fletcher:2002:GCF]

[Fukushima:2003:SQC]

[Fang:2011:STF]

[Ferris:1991:PCD]

[Ferris:1994:PVD]
REFERENCES

Friedlander:1994:MCQ


Forsgren:1997:NML


Ferris:2003:IPM


Friedlander:2014:GOD


Fadili:2018:SAM


Friedlander:2019:PC


Friedlander:1994:RLC


Ferreira:1996:SMK

REFERENCES


REFERENCES


REFERENCES

Fernandez:2012:LCE


Ferreira:2017:KTN


Fukuda:2012:DEP


Fawzi:2015:ESL


Fukushima:2002:IAS


Fukushima:2007:IAS


Friedlander:2008:ERC

REFERENCES


**Gavrea:2008:CCS**


**GarciaPalomares:1993:PPA**


**Gisbert:2018:COV**


**Gritzmann:2000:ABI**


**Greuet:2014:PAP**


**Gerds:2008:GCN**


**Gerds:2011:EGC**

REFERENCES

[102x681] REFERENCES

sjope8/v21/i2/p615_s1. See [Ger08].


[GG18a] Wenbo Gao and Donald Goldfarb. Block BFGS methods. SIAM Journal on Optimization,
Grussler:2018:LRI


Graf:2015:FGO


Garber:2016:LCV


Ghate:2017:DCI


Gonzalez-Hernandez:2006:SMT


Gonzalez-Hernandez:2005:EPS


Gairing:2017:CAC


Geletu:2017:IOA

Abebe Geletu, Armin Hoffmann, Michael Klöppel, and Pu Li. An

**Gutierrez:2019:LBA**


**Goring:2014:MSW**


**Greenberg:1998:DSR**


**Gramlich:1995:LCS**


**Goring:2008:ESS**


**Gong:1999:SCA**


**Glover:1996:CCG**


Clóvis C. Gonzaga, Elizabeth W. Karas, and Diane R. Rossetto. An optimal algorithm for constrained differentiable

Gill:2020:SPD


Gill:2018:CLT

Gill:2003:LMR


Guigues:2018:CLT

Guigues:2008:CSP

Gill:2003:LMR

Gill:2001:RHQ


Gvozdenovic:2008:CSP


Gvozdenovic:2008:OCN

REFERENCES


REFERENCES


REFERENCES


[GLY12] Lei Guo, Gui-Hua Lin, and Jane J. Ye. Stability anal-

**Guo:2014:SAV**


**Ghasemi:2012:LBP**


**Goldfarb:2012:FMS**


**Gfrerer:2015:CCT**


**Gfrerer:2017:RSP**


**Gfrerer:2019:SO**


**Goncalves:2017:IPI**

REFERENCES

Greif:2014:BEM


Glick:1991:PSL


Grotschel:1992:FPA


Gill:2002:SSA


Geissler:2017:PAD


Gilbert:1992:GCP


Gouveia:2011:PPP


Grapiglia:2017:RNM

REFERENCES


Grapiglia:2019:ARN


Grapiglia:2020:TMM


Guerra:2011:CSD


Gutierrez:2016:NSF


Gollmer:2008:SPF


Gurbuzbalaban:2012:SRR


Gfrerer:2016:LPI

REFERENCES


Gruber:2003:CES


Gould:2010:SDSa


Gould:2010:SDSb


Gu:2010:CCI


Guigues:2012:SBD


Gill:2014:GCS


Greenberg:2000:SPD


Grimmer:2018:RSM


REFERENCES


[Gün14] Harald Günzel. Stationary point sets: Convex quadratic opti-

**Gurwitz:1994:LCT**


**Gurtuna:2010:DEA**


**Goffin:1994:SSK**


**Goffin:2000:MCA**


**Gunzel:2006:CVF**


**Gratton:2014:MFA**


**Gillis:2015:SPB**


**Ghaddar:2011:SOC**

Guerra-Vázquez:2010:GSI


Goldfarb:1993:PUN


Gutekunst:2018:UIG


Griewank:2019:RKQ


Guo:2015:SRN


Guo:2017:CAM


Gfrerer:2017:NCQ


[Har98] William E. Hart. Sequential stopping rules for random optimization methods with ap-

Hare:2009:PA


Hare:2014:NAD


Haber:2012:EMP


Hu:2020:SCS


Halicka:2002:CCP


Heinkenschloss:1993:MIN


Heinkenschloss:1996:PSQ


Hendrickson:1995:MPE

REFERENCES


REFERENCES


REFERENCES


Harks:2018:SAC


Han:1998:GAD


Hauser:2002:SSB


Hochbaum:2006:OCC


Hartvigsen:2008:PRR


Heyde:2008:GDM


Ho:2008:IAA

REFERENCES


[Hong:2016:CAA] Mingyi Hong, Zhi-Quan Luo, and Meisam Razaviyayn. Convergence analysis of alternating direction method of multi-


References

Henrion:2010:SOA

Hu:2008:GSL

Herzog:2013:SSO

Huyer:2003:NEP

Huang:2004:FSO

Hauser:2005:CNR

Hauser:2007:RBC
<table>
<thead>
<tr>
<th>Reference</th>
<th>Authors</th>
<th>Title</th>
<th>Journal</th>
<th>Volume</th>
<th>Pages</th>
<th>Year</th>
<th>Digital Object Identifier</th>
</tr>
</thead>
</table>

**Halman:2015:CEF**

<table>
<thead>
<tr>
<th>Reference</th>
<th>Authors</th>
<th>Title</th>
<th>Journal</th>
<th>Volume</th>
<th>Pages</th>
<th>Year</th>
<th>Digital Object Identifier</th>
</tr>
</thead>
</table>

**Huang:2000:MCS**

<table>
<thead>
<tr>
<th>Reference</th>
<th>Authors</th>
<th>Title</th>
<th>Journal</th>
<th>Volume</th>
<th>Pages</th>
<th>Year</th>
<th>Digital Object Identifier</th>
</tr>
</thead>
</table>

**Holder:2004:SDP**

<table>
<thead>
<tr>
<th>Reference</th>
<th>Authors</th>
<th>Title</th>
<th>Journal</th>
<th>Volume</th>
<th>Pages</th>
<th>Year</th>
<th>Digital Object Identifier</th>
</tr>
</thead>
</table>

**Hwang:1999:PTA**

<table>
<thead>
<tr>
<th>Reference</th>
<th>Authors</th>
<th>Title</th>
<th>Journal</th>
<th>Volume</th>
<th>Pages</th>
<th>Year</th>
<th>Digital Object Identifier</th>
</tr>
</thead>
</table>
Hartvigsen:1994:OFG


Hou:2007:MPB


Hager:2009:EBB


He:2018:OLS


Hannah:2014:SRM


Habeck:2019:GOM


Helmbberg:2000:SBM


Hintermuller:2012:SMT


**Heinkenschloss:2014:MFT**


**Hintermüller:2014:PQV**


**Hungerlander:2015:FAS**


**Ryu:2014:DFT**


**Heitsch:2006:SMS**


**Helmberg:1996:IPM**


**He:2006:SOS**


**Hare:2010:RPB**

REFERENCES


REFERENCES


REFERENCES


**Hintermuller:2005:SMO**


**Hemmecke:2007:RSL**


**Hayashi:2010:EEA**


**Hung:1996:AIP**


**Huang:2002:NLM**


**Huang:2006:GLP**


**Hua:2015:ICB**

REFERENCES


REFERENCES

CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).


REFERENCES


Ito:1996:ALS


Ito:2000:NMC


Izmailov:2014:ANF


Iwata:2015:CSD


Igbida:2017:UNA

Noureddine Igbida, Van Thanh Nguyen, and Julián Toledo. On


Iwata:2002:CSA


Izmailov:2002:CCQ


Izmailov:2002:SCA


Izmailov:2004:NTM


Izmailov:2008:ASN


Izmailov:2010:TSM


Izmailov:2012:GCA

A. F. Izmailov, M. V. Solodov, and E. I. Uskov. Global convergence of augmented Lagrangian methods applied to optimization problems with degenerate constraints, including problems with complementarity...


M. Journée, F. Bach, P.-A. Absil, and R. Sepulchre. Low-rank

**Joki:2018:DBM**


**Johnstone:2019:CRP**


**Jeyakumar:1991:CNP**


**Jeyakumar:2003:CSC**

V. Jeyakumar. Characterizing set containments involving infinite convex constraints and reverse-convex constraints.

**Jiang:1998:TRM**


**Jarre:2014:SRN**


**Jofre:2015:CFD**

Alejandro Jofré and Abderrahim Jourani. Characterizations of the free disposal condition for


**Jalali:2017:VGF**


**Jofre:2015:CFD**

Alejandro Jofré and Abderrahim Jourani. Characterizations of the free disposal condition for

**Junger:2000:SP**


**Johnson:2015:ASM**


**Jarre:1998:OTD**


**Jeyakumar:2003:SVC**


**Jibetean:2005:SAG**


**Jeyakumar:2010:SDR**


**Jiang:2016:SDM**

Rujun Jiang and Duan Li. Simultaneous diagonalization of matrices and its applications in quadratically constrained...

**Jeyakumar:2018:ESO**


**Jeyakumar:2009:ATQ**


**Jeyakumar:2016:CSP**


**Jiang:2019:NRE**


**Jiang:2020:LTA**


**Jiang:2016:NRA**


**Jiang:2020:UA**


Josz:2018:LHL


Jach:2008:CEC


Ji:1999:LCP


Jeronimo:2013:MPF


Jiang:2000:SSM


Jarre:2008:APD


Jongen:2010:ILS

Johansson:2010:RIS


Jongen:2009:MCP


Jongen:2010:SFS


Jansen:1997:FPA


Jarre:1995:PIP


Jongen:1997:GOP


Johnson:2000:PDM

REFERENCES

Jongen:2011:GSI

Jiang:2016:SSO

Jourani:2020:ELM

Jiang:1995:GOC

Jiang:2012:IAP

Jog:1991:PGA

Jofre:2014:VCB
Ji:1994:CAI


Jeyakumar:2004:SSN


Jessup:1994:PFS


Jin:2020:CSG


Kaltenbacher:2018:MBF


Kanzow:1996:GCP


Kanzi:2014:CQS


Kasimbeyli:2010:NCS

REFERENCES

Kaufman:1999:RSQ


Kim:2008:MTA


Khalfan:1993:TES


Kotzer:1997:PBA


Kadrani:2009:NRS


Kearfott:2011:EVL


Kelley:1999:DRS


[Kiw06] Krzysztof C. Kiwiel. A proximal bundle method with ap-

**Kiwiel:2007:CGS**


**Kiwiel:2007:PPB**


**Kiwiel:2008:MCA**


**Kiwiel:2010:NVG**


**Kungurtsev:2017:PCP**


**Khachiyan:1992:DMS**


**Klatte:2002:CML**


**Klatte:2005:SLS**

Diethard Klatte and Bernd Kummer. Strong Lipschitz sta-
bility of stationary solutions for nonlinear programs and vari-

**Kojima:1993:LSI**


**Kainen:2003:MEF**


**Kanzow:2019:MPM**


**Khanh:2015:ITN**


**Kim:2020:GAC**


**Kim:2005:GLD**


**Kim:2009:ESS**

REFERENCES


REFERENCES

Kortanek:1993:CCP


Kanzow:2002:SPN


Kanzow:2004:CSP


Klep:2020:MPL


Kirjner-Neto:1998:COP


Koshal:2011:MOD


[KPV18] Igor Klep, Janez Povh, and Jurij Volcic. Minimizer extraction.


**Kolobo:2017:WSL**


**Kelley:1991:NPS**


**Kelley:1993:PBM**


**Kelley:1999:TRM**


**Kleis:2000:OCS**


**Kohler:2005:FTL**


**Kurkova:2005:EEA**

Kanzow:2010:MPE


Kanzow:2016:ALM


Kannan:2012:DCE


Kanzow:2014:NRM


Kurdyka:2015:CPP


Kouri:2016:RAP


Kriel:2018:ELR


Kanzow:2019:QVI

Kleywegt:2001:SAA


Kojima:1997:IPM


Kojima:1999:PCI


Kojima:2000:CMS


Kamimura:2003:SCP

[KT03] Shoji Kamimura and Wataru Takahashi. Strong convergence


[Kucera:2008:CRO] Radek Kučera. Convergence rate of an optimization algo-
REFERENCES

Kucz:2008:SMS

Kummer:2016:TRS

Kupfer:1996:IDC

Karimi:2017:IPQ

Krislock:2010:ESN

Luedtke:2008:SAA

Lagarias:1993:CSI

Lasserre:2001:GOP
REFERENCES

Lasserre:2002:EEP


Lasserre:2004:PPL


Lasserre:2005:SSA


Lasserre:2006:CSR


Lasserre:2006:SSA


Lasserre:2009:CSG


Lasserre:2010:JMA


Lasserre:2011:NLN

REFERENCES

siam.org/siopt/resource/1/sjope8/v21/i3/p864_s1.

Lasserre:2014:LRV


Lasserre:2016:COP


Laszlo:2017:MRD


Laursen:1994:CPB


Laumen:2000:NMC


Laurent:2001:TLS


Luthi:2000:AQC


Lebair:2018:AMF

Liu:2020:SCS


Leclere:2020:ECB


Liu:2020:TSS


Li:2011:SSN


Lemaire:1998:DRC


Levy:2000:CMP

A. B. Levy. Calm minima in parameterized finite-dimensional

**Levy:2002:SSV**


**Levy:2004:GAS**


**Lewis:1996:CAH**


**Lewis:2002:ASN**


**Li:2001:GCB**


**Lu:2011:KSC**


**Li:2009:STF**

REFERENCES

ISSN 1052-6234 (print), 1095-7189 (electronic).

Lu:2018:RSC


Liang:2017:AIL


Lin:1998:UCP


[LFN18]

Lu:2018:RSC


Lin:2004:CMP


Li:1993:RCM


[Li96]

Li:1997:ACQ


Li:2010:AWB


Lieder:2020:SLS


Lim:2011:MVS


Lin:2008:HOP


Liu:2020:FSA


Li:2002:NCB


Lu:2016:CAA

Jie Lu and Mikael Johansson. Convergence analysis of approx-


[Liuzzi:2016:DFA] G. Liuzzi, S. Lucidi, and F. Rinaldi. A derivative-free ap-


REFERENCES

DEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).


Dedicated to John E. Dennis, Jr., on his 60th birthday.


Lasserre:2019:SRI


Li:2020:CAA


Lu:2020:RGB


Luk:2020:CAR


Lin:2019:IVM


Lu:2006:ISB


Li:2018:WSM


Lustig:1992:IMP

REFERENCES

Lan:2009:PPC

LMT09

Liu:2017:DRR

Lourenco:2018:FRP

LMT18

Larson:2016:MSN

LMW16

Lin:2011:GLC

LMZ15

Lalee:1993:ACS

LN93

Li:2002:BAN
Chong Li and K. F. Ng. On best approximation by nonconvex sets and perturbation of nonconvex inequality systems in

LSM2011

lope.


REFERENCES

siam.org/siopt/resource/1/sjope8/v21/i1/p41_s1.

Li:2014:ASA


Li:2014:DNC


Li:2018:QAP


Lalee:1998:IAL


Ling:2010:BOU


Li:2000:CQS


REFERENCES


[LRWW98] Jeffrey C. Lagarias, James A. Reeds, Margaret H. Wright, and...

Liu:2014:QSA


Lovasz:1991:CMS


Li:1997:NAS


Li:1998:LEH


Luo:1998:ACB

REFERENCES


REFERENCES

Lampariello:2019:SPB


Li:2016:MAI


Li:2018:HES


Li:2018:ESS


Li:2020:ASC


Luo:2007:ABQ


Li:2006:CLC


Luft:2020:ETS

REFERENCES

Luo:1998:SCS

Luo:2004:MNQ

Luo:1993:EBR

Liao:1996:SLP

Lewis:1999:PSA

Lewis:2000:PSM
References


LT10b Yang Li and Tamás Terlaky. A new class of large neighborhood path-following interior point algorithms for semidefinite optimization with $O(\sqrt{n} \log \frac{1}{\epsilon} \text{tr}(A^* S))$ iteration complexity. *SIAM Journal on Optimization*, 20(6):2853–2875, 2010. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).


REFERENCES

248

DEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Lu:2009:SOA


Lu:2014:SCR


Lu:2017:RBP


Lucidi:1992:NRC


Luc:1995:TFF


Luc:2002:MRM


Lucet:2009:WSY


Luedtke:2008:NFO


Luk:2008:FBA


Liu:2015:ASC


Liu:2015:EGN


Liu:2014:EAM


Ling:2019:LSN


Liu:2011:SAT


LEcuyer:1998:BDC


Lu:2007:IPT

REFERENCES


REFERENCES


REFERENCES

ISSN 1052-6234 (print), 1095-7189 (electronic).

Malitsky:2015:PRG

Mangasarian:1991:CII

Mangasarian:1999:PBP

Mangasarian:2004:KBL

Martinez:1994:LMQ

Marshall:2005:EEO

Martinez:2017:HOM

Mosk-Aoyama:2010:FDA


Alexander Mitsos, Benoît Chachuat, and Paul I. Barton. McCormick-

**McKinnon:1998:CNM**


**McKinnon:1998:CNM**


**Moazeni:2010:OPE**


**McShane:1996:SCI**


**MoranR:2012:SDC**


**Mehrotra:1992:IPD**


**Melman:1996:LPB**


**Mengi:2017:SFB**

Emre Mengi. A support function based algorithm for optimiza-
REFERENCES

Mokhtari:2018:IQ


Mokhtarian:1998:NAC


Mueller-Gritschneder:2009:SAC


Mokhtari:2018:SGD


Magron:2015:SAP


Miao:1996:TII


Mishchenko:2020:DFD

REFERENCES

2020. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Mitchell:1994:IPC


Mitchell:2000:CEI


Mizuno:1995:IIP


Mehrotra:2005:CCK


Mitsos:2008:RBB


Martinez-Legaz:1993:LSF


Miglierina:2005:CMS


Maihge:2008:CNI

Paul-Emile Maingé and Abdel Latif Moudafi. Convergence of new inertial proximal methods

**Marinacci:2011:NSC**


**Mishra:2014:LRO**


**McKenna:1995:DPQ**


**Madsen:1993:FSA**


**Mohan:1996:AGL**


**Morales:2000:APL**


**Madi-Nagy:2009:MDM**

REFERENCES


REFERENCES


[Radoslava Mirkov and Georg Ch. Pflug. Tree approximations of dynamic stochastic programs. *SIAM Journal on Optimization*,]
REFERENCES

Mittelmann:2010:EBQ

Mittelmann:2014:EBQ

Mehrotra:2014:CSA

Mehrotra:2014:GMM

Mehrotra:2018:FOP

Maggioni:2019:GBG

Massaro:2002:CPA
Alessio Massaro, Marcello Pelillo, and Immanuel M. Bomze. A

**Mania:2017:PIA**


**Monteiro:1995:PAN**


**Mahajan:2010:CSD**


**Mordukhovich:2012:SOS**

B. S. Mordukhovich and R. T. Rockafellar. Second-order subdifferential calculus with applications to tilt stability in

Mordukhovich:2014:CFS


Martin:2016:SCD


Mazon:2015:OMT


Mehrotra:1994:PCM


Moussaoui:1994:SAO


Mifflin:2000:EFP


Muller:2002:TPU

REFERENCES

Mifflin:2003:PDG


Morgan:2006:DWP


Muller:2006:SOR


Monteiro:2010:CHP


Markot:2011:CAS


Minchenko:2011:PNP


Monteiro:2011:CVT

REFERENCES

266

Monteiro:2012:ICN


Monteiro:2013:ICB


Monteiro:2014:AHP


Mishra:2016:RP


Mertikopoulos:2018:CGL


Mordukhovich:2019:CLM


Mohammadi:2020:TED


Madani:2017:FLR

REFERENCES


**Muller:2020:UTD**


**Mifflin:1998:QNB**


**Monteiro:1998:GCA**


**Monteiro:1999:PCN**

Renato D. C. Monteiro and Takashi Tsuchiya. Polynomial convergence of a new

Monteiro:2003:VVY


Monteiro:2004:NIC


Malitsky:2020:FBS


Mizuno:1994:MPD


Mordukhovich:2003:EEP


Milzarek:2014:SNM


Mafusalo:2018:BPE

[MU18] Alexander Mafusalo and Stan Uryasev. Buffered probability of

Milz:2020:ASD


Murota:2003:SDA


Mutzel:2001:AMC


Murray:1994:LSP


Monteiro:1996:SII


More:1997:GCD


Mutzel:2006:BMP


More:2009:BDF

REFERENCES


Maggiar:2018:DFT


Meng:2006:RSA


Meng:2010:OCE


Marcotte:1998:WSS


Meyer:1999:MMS

Marcotte:2000:EWS


Meng:2008:LDF


Ma:2020:NNC


Naumann:2002:CJS


Nazareth:1991:HPA


Nedic:2001:ISM

REFERENCES


Nunez:2001:CMB

Ngai:2015:GEB

Ni:2005:OCT

Nie:2014:POR

Nemirovski:2009:RSA

Norkin:2010:CKL

Ngai:2010:SEB

Nedic:2014:SSM


REFERENCES

???, 2017. CODEN SJÖPE8, ISSN 1052-6234 (print), 1095-7189 (electronic).

Netzer:2010:EFS


Nie:2009:ADP


Nouiehed:2020:TRM


Necoara:2019:RPM


Nash:1991:GPP


Nash:1998:CPI


Nemirovski:2007:CAC


Nesterov:2014:PDS

Nesterov:2017:EAC


Nohadani:2018:OUD


Natarajan:2018:BRB


Nesterov:1998:PDI


Nesterov:2016:LSC

Yu. Nesterov and L. Tunçel. Local superlinear convergence of polynomial-time interior-point

Ngai:2002:FNO


Nadezhkina:2006:SCT


Ngai:2008:EBM


REFERENCES

Ng:2005:EBS


Nie:2018:CSA


Nie:2016:PMS


Ordonez:2003:CEE


Ng:2001:EBL


[OOP17] Opazo:2017:EAP


[ORG02] Ogryczak:2002:DSD


[OW06] Christina Oberlin and Stephen J. Wright. Active set identification.
REFERENCES


REFERENCES


[Peña00a] Javier Peña. Understanding the geometry of infeasible perturbations of a conic linear system. SIAM Journal on Optimization, 10(2):534–550, De-

Price:2003:FGU


Pan:2008:CIP


Petra:2019:SQN


Pena:2000:UGI
Pennanen:2000:DGE

Pfetsch:2008:BCM

Penot:2017:HOO

Penot:2019:EBM

Pfug:2010:VIN

Pasupathy:2018:SRS

Prasad:2018:ICR
DEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

**Pham:2020:LMS**


**Pang:1991:MLL**


**Phu:2010:MCF**


**Pichler:2013:ERM**


**Parente:2008:CIV**


**Puleo:2015:CCC**


**Pinar:2010:OSV**


**Paternain:2019:NBM**

REFERENCES


REFERENCES

Pflug:2016:EOT


Perez:2018:NCG


Pang:1993:NEM


Polak:2001:SOA


Poljak:1995:NRG


Poliquin:1996:GHP

Poliquin:1998:TSL


Pesenti:2007:ICP


Povh:2007:CPA


Penya:2016:NFW


Peng:2002:PDI


Potra:1997:LSI

REFERENCES


Potra:1998:SCP


Padakandla:2010:SCO


Potra:2010:CSC


Pang:2010:NGS


Paquette:2020:SLS


Pang:2018:DMC


Pong:2010:TNR


**Peng:2007:AMT**


**Planiden:2016:SCF**


**Pilanci:2017:NSN**


**Prusa:2019:SLR**


**Potra:1993:QCP**


**Peng:1997:OCM**


**Papp:2019:SSO**

Pytlak:1998:EAL


Pinar:1994:SEP


Pales:1998:OPC


Pales:2000:OPM


Qi:2019:EID


Quirynen:2018:INT


Qi:1995:TRA

Qi:1999:RSN


Qi:2016:CMO


Qiu:2008:DCS


Qian:2018:CGC


Qi:2000:NQF


Qi:2003:SKK


Qian:2000:CPL

Qi:2001:CCP


See [QW00].

Qui:2020:SMF


Quincampoix:2008:PMP


Qi:2000:SNM


Qi:2014:CLG

Nguyen Thanh Qui and Nguyen Dong Yen. A class of linear general-


Qui:2004:GMN


Romeijn:2005:CGA

Raghunathan:2013:GON


Ralph:1996:PMU


Ramponi:2018:CSA


Rangarajan:2006:PCI


Raydan:1997:BBG


Raghunathan:2005:IPM


Raghunathan:2018:DIP


Rahmaniani:2018:ABD

Rogers:1995:PTM


Roulet:2020:SRA


Renegar:1995:ICM


Renegar:1996:CNB


Renegar:2016:ESM


Revalski:1997:HSW


Rostalski:2011:NA


Robinson:2014:SAM

[RFNP14] Daniel P. Robinson, Liming Feng, Jorge M. Nocedal, and Jong-Shi Pang. Subspace accelerated matrix splitting algorithms for asymmetric and symmetric linear complementarity

**Ravindran:2000:RFB**


**Rubinov:1999:DFA**


**Razaviyayn:2014:UCA**


**Rakowska:1993:MOC**


**Richtarik:2011:IAC**


**Rispoli:1994:MDP**


**Rehfeldt:2019:CNH**

REFERENCES


[ Roo15 ] C. Roos. An improved and simplified full-Newton step $O(n)
REFERENCES


**Roshchina:2014:FEC**


**Rothblum:1992:LIS**


**Rothblum:2009:ESS**


**Royset:2020:SEA**


**Ryzhov:2012:ICL**


**Royset:2003:AAE**


**Rodrigues:2012:QKP**


**Rudolf:2008:OPS**

REFERENCES


**Rockafellar:2015:MRR**


**Ritter:1994:SMC**


**Romisch:1996:LSS**


**Rautert:1997:CDO**


**Ravat:2011:CSS**


**Ralph:2015:RTE**


**Ryan:2018:SMU**


[RT19] Vera Roshchina and Levent Tunçel. Facially dual complete

**Ryu:2020:OSP**


**Ramana:1997:SDS**


**Rutkowski:2017:CFE**


**Resende:1993:IDA**


**Roh:2006:DTS**


**Romeijnders:2015:CAT**


**Romisch:2007:SAS**

REFERENCES

2007. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).


ISSN 1052-6234 (print), 1095-7189 (electronic).


[Sag16] Simone Sagratella. Computing all solutions of Nash equi-
REFERENCES


REFERENCES

Soubies:2017:UVE

Stern:2016:CMS

Schnabel:1991:TMU

Schaffler:1992:CCS

Schultz:1996:RCS

Schweitzer:1998:IRV

Scholtes:2001:CPR

Schweighofer:2005:OPC


Asteroide Santana and Santanu S. Dey. The convex hull of a quadratic constraint over a polytope. *SIAM Journal on Optimization*, 30(4):2983–2997,
REFERENCES

Shapiro:2020:PMS


Sergeyev:1999:TMS


Shapiro:2000:RCO


Sebbouh:2020:CRD


Schnabel:1999:RMC


Seeger:1992:SDC


Seeger:1997:CAS

REFERENCES

(Sprint), 1095-7189 (electronic).


Sra:2015:CGO

Shapiro:1994:EDM

Shapiro:1997:ULM

Shapiro:2017:DRS

Shen:2014:RNZ

Shitov:2017:CPS

Shitov:2018:MBP

Shashaani:2018:ADC
Sato:2013:ROA


Sim:2011:SCI


Sun:1998:ANM


Sergeyev:2006:GSB


Stechlinski:2018:GSA


Shahzad:2012:SEM


Stingl:2009:FMO


Stingl:2009:SCS

[SKL09b] M. Stingl, M. Kočvara, and G. Leugering. A sequential con-

**Sato:2019:RSV**


**Son:2016:SOO**


**Sojoudi:2014:ESR**


**Song:2015:APB**


**Sun:2005:SPA**


**Shi:2015:EEF**


**Schultz:1991:IPM**

REFERENCES


Solodov:2007:BMC


Song:2006:CEB


Sorensen:1997:MLS


Schurr:2009:PTI


Sheng:1997:QCI


Soheili:2012:SPA


Spaenhauer:2014:CCC


Skwerer:2018:ROC

Salahi:2008:MTP


Saunderson:2015:SDC


Simantiraki:1997:IIP


Solodov:2000:TGC


Sagastizabal:2005:IBM


Sinn:2015:GSS


Sabach:2017:FOM


Shida:1998:EUS

REFERENCES

314


REFERENCES

3512–3532, 2010. CO-
DEN SJOPES. ISSN 1052-
6234 (print), 1095-7189 (elec-
siam.org/sioppt/resource/1/
sjope8/v20/i6/p3512_s1.

On the nonasymptotic conver-
gence of cyclic coordinate de-
scent methods. SIAM Journal
on Optimization, 23(1):576–601,
2013. CODEN SJOPES. ISSN 1052-6234 (print), 1095-
7189 (electronic).

[She04] Ron Shefi and Marc Teboulle.
Rate of convergence analysis of
decomposition methods based
on the proximal method of mul-
tipliers for convex minimization.
SIAM Journal on Optimization,
24(1):269–297, 2014. CO-
DEN SJOPES. ISSN 1052-6234 (print), 1095-7189 (electronic).

[Sta92] Tilo Staib.
Necessary optimality conditions for nonsmooth multicitertial optimization prob-
lems. SIAM Journal on Opti-
mization, 2(1):153–171, February
1992. CODEN SJOPES. ISSN 1052-6234 (print), 1095-
7189 (electronic).

[Sak17] Shinsaku Sakaue, Akiko Takeda,
Sunyoung Kim, and Naoki Ito.
Exact semidefinite programming relaxations with truncated mo-
ment matrix for binary poly-
nomial optimization problems.
SIAM Journal on Optimization,
27(1):565-582, 2017. CO-
DEN SJOPES. ISSN 1052-6234 (print), 1095-7189 (electronic).

[Stu00] Jos F. Sturm.
Error bounds for linear matrix inequalities. SIAM
Journal on Optimization, 10(4):
1228–1248, June/July 2000. CO-
DEN SJOPES. ISSN 1052-6234 (print), 1095-7189 (electronic).

[Sun15] Defeng Sun, Kim-Chuan Toh,
and Liuqin Yang.
A conver-


Hailin Sun, Huifu Xu, Rudabeh Meskarian, and Yong Wang. Exact penalization, level


Suvrajeet Sen and Zhihong Zhou. Multistage stochastic decomposition: a bridge between reference
REFERENCES


Shen:2016:FAS


Tao:1998:DCO


Tits:2006:CRL


Tao:2016:LLC


Tran-Dinh:2018:SPD


Tran-Dinh:2014:IPP


Tran-Dinh:2020:NSF

<table>
<thead>
<tr>
<th>Reference</th>
<th>Title</th>
</tr>
</thead>
</table>


REFERENCES


REFERENCES


Themelis:2018:FBE
[102x624][TSP18] Andreas Themelis, Lorenzo Stella, and Panagiotis Patri- 
[161x600]nos. Forward-backward enve-
[161x576]lope for the sum of two noncon-
[161x564]vex functions: Further proper-
[161x552]ties and nonmonotone linesearch 
[221x552]algorithms. *SIAM Journal on 
[217x540]Optimization*, 28(3):2274–2303, 
[161x528]???? 2018. CODEN SJOP8. 
ISSN 1052-6234 (print), 1095-
[370x634]7189 (electronic).

Todd:1998:NTD
[Todd] Todd direction in semidefinite 
[161x428]programming. *SIAM Jour-
[161x416]nal on Optimization*, 8(3):769– 
ISSN 1052-6234 (print), 1095-7189 
sam-bin/dbq/article/30060.

Tutuncu:2003:ABC
[102x336][Tut03] Reha H. Tutuncu. Asymptotic 
[161x304]behavior of continuous trajec-
[161x280]tories for primal-dual potential-
[161x280]reduction methods. *SIAM Jour-
[161x268]nal on Optimization*, 14(2): 
402–414, January 2003. CO-
DEN SJOP8. ISSN 1052-6234 
(print), 1095-7189 (electronic).

Talman:2004:CZP
[102x239][TY04] A. J. J. Talman and Y. Ya-
[485x204]mamoto. Continuum of zero 
[370x192]points of a mapping on a 
[370x192]compact, convex set. *SIAM 
Journal on Optimization*, 14(4): 
1128–1139, ???. 2004. CODEN 
SJOP8. ISSN 1052-6234 (print), 1095-
sam-bin/dbq/article/41546.

Terlaky:2014:IOP
[102x449][TW14] Tamás Terlaky and Zhouhong 
[Wang] Wang. On the identifica-
[161x440]tion of the optimal partition 
of second order cone optimization 
problems. *SIAM Journal on Opti-
[161x416]mization*, 24(1):385–414, 
???? 2014. CODEN SJOP8. 
ISSN 1052-6234 (print), 1095-
7189 (electronic).

Tits:2003:PDI
[102x427][TWB+03] André L. Tits, Andreas Wächter, 
Sasan Bakhtiai, Thomas J. Ur-
[370x415]ban, and Craig T. Lawrence. 
A primal-dual interior-point 
method for nonlinear program-
[370x307]ming with strong global and 
local convergence properties. 
DEN SJOP8. ISSN 1052-6234 
(print), 1095-7189 (electronic).
URL http://epubs.siam.org/ 
sam-bin/dbq/article/39212.

Talman:2004:CZP
[102x239][TY04] A. J. J. Talman and Y. Ya-
[485x204]mamoto. Continuum of zero 
[370x192]points of a mapping on a 
[370x192]compact, convex set. *SIAM 
Journal on Optimization*, 14(4): 
1128–1139, ???. 2004. CODEN 
SJOP8. ISSN 1052-6234 (print), 1095-
sam-bin/dbq/article/41546.


Michael Ulbrich. Nonmonotone trust-region methods for bound-constrained semismooth

**Ulbrich:2003:SNM**


**Ulevich:2020:AMT**


**vanAckooij:2014:GFN**


**Valkonen:2020:ICP**


**Vanderbei:1995:SQM**


**Vandereycken:2014:LRM**


**vanAckooij:2018:IBM**


**vanAckooij:2019:GDP**

Wim van Ackooij and Pedro Pérez-Aros. Generalized differentiation of probability functions acting on an infinite system


REFERENCES


Vui:2008:GOP


Vui:2010:RPP


Villa:2014:AIF


Vui:2014:GHE


[Vanbiervliet:2009:SSA]


Verschueren:2017:SPC


Wei:2015:GBD


Wachsmuth:2014:SSO

[Gerd Wachsmuth] Gerd Wachsmuth. Strong stationarity for optimal control of


REFERENCES


Wachter:2005:LSFb

Wang:2016:SFO

Watson:2014:GCP

Wen:2017:LCP

Walmag:2005:NTR

Wu:2014:MYR

Weng:1997:SNS
REFERENCES

Wen:2010:LSM

Walther:2019:CTS

Wang:2019:ENM

Winkler:2008:CEW

Wang:2019:PPS

Waki:2006:SSS

Wang:2016:PPA
Jinhua Wang, Chong Li, Genaro Lopez, and Jen-Chih Yao.

Wang:2015:LCS


Wang:2017:SQN


Wright:1991:PDP


Wright:1992:IPA


Wright:1995:WPP


Wright:1998:ICC


REFERENCES


[Wang:2010:SLD]


[Wright:2004:FTR]


[Wiesemann:2013:PBO]


[Waldspurger:2020:ROB]


[Wang:2017:WAB]

[Lizhi Wang and Pan Xu. The watermelon algorithm for the


**[Wang:2015:FMS]**

**[Wang:2020:RSR]**

**[Wu:2004:WSS]**

**[Wolkowicz:1995:AIE]** Henry Wolkowicz and Qing Zhao. An all-inclusive effi-


REFERENCES


Xu:2006:IPA


Xu:2017:AFO


Xu:2018:HJG


Xu:2019:SPO


Xu:2020:PDS


Xue:1997:EAM


Xue:2000:EAM


Xu:2010:NOC

REFERENCES

ISSN 1052-6234 (print), 1095-7189 (electronic).

Xu:2015:BSG


Yan:2009:EBC


Xu:2015:SSM


Ye:1992:PRA


Ye:1999:OCO

Ye:2000:CQN


Ye:2004:NMR


Yamashita:2000:PPA


Yang:1991:EIM


Yang:2001:NLA


Yildirim:2006:MVC


Yildirim:2008:TAM

E. Alper Yildirim. Two algorithms for the minimum en-


Yin:2002:RAS


Yue:2014:AOP


Yabe:2004:SSB


Yan:2015:CQH


Yu:2017:SPA


Yousefian:2020:SDQ


Yoshise:2007:IPT

Ye:2020:SBA


Yang:2018:NAU


Yang:2014:PPA


Yildirim:2002:WSS


Yuan:2017:NRN

Yang:2019:MSG


Yabe:1995:CFB


Yamashita:2003:IPM


Ye:2010:NNO


Ye:2013:MCN


Ye:2016:FOO


Yue:2019:QCC

Man-Chung Yue, Zirui Zhou, and Anthony Man-Chung So. On the quadratic convergence of the cubic regularization method under a local error bound condi-
REFERENCES

Ye:1997:EPN


[Ye:1997:EPN]

Yao:2017:SMR


[Zas05]

Zavala:2014:SNP


[Zas10]

Zufiria:2017:GLM


[Zas10]

Zaslavski:2005:SCE


[Zas05]

Zaslavski:2010:CPP


[Zas00]
REFERENCES

Zaslavski:2013:EPP


Zhong:2018:NOB


Zenios:1991:MPR


Zhang:2009:SPG


Zhang:2010:GCN


Zhang:2020:SAS


Zhang:2000:FSF


Zhang:2010:DFA

REFERENCES

siam.org/siopt/resource/1/sjope8/v20/i6/p3555_s1.


REFERENCES


Zhang:1994:CCI


Zha94b

Zhao:1996:RBC


Zha96

Zhang:1998:ESP


Zha98a

Zhao:1998:IPA


Zha98b

Zhao:2000:GEB


Zha00

Zheng:2020:WPS


Zhe20

Zh:1995:PDS

Cl You Zhu. On the primal-dual steepest descent algorithm for extended linear-quadratic

Zhu95
REFERENCES


Zhao:2002:LLN


Zhao:2003:GLS


Zhao:2012:RMS


Zhang:2020:PAD


Zheng:2004:MR

Xi Yin Zheng and Kung Fu Ng. Metric regularity and con-


REFERENCES


Zh:1993:PDP


ZSL17


Zhao:2010:NCA


Zhang:2019:TSQ


Z:2010:URE


Zh:2019:TSQ


Zh:1992:TMC


Zhou:1993:SCP

Yin Zhang and André L. Tits. An SQP algorithm for finely discretized continuous minimax
Zhou:1998:ESA


Zhang:1992:SQC


Zhang:1993:SCI


Ziems:2011:AMI


Zualinescu:2003:SEH


Zuluaga:2006:LAC


Zheng:2012:CAS

Xi Yin Zheng and Zhou Wei. Convergence of the associated sequence of normal cones of a Mosco convergent sequence of

Zheng:2012:PAE


Zhang:2018:GAA


Zhang:2010:NEM


Zhang:1999:CID


Zhang:2014:EMS


Zhang:2007:WSM


