A Complete Bibliography of Publications in *Numerische Mathematik* (2020–2029)

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Title word cross-reference

(H(div) [QZ24]. 1 [LW21]. 2 [BD21]. ^{k} [LLMP24]. B [DP20]. C^0 [BySTZ21, LZ20]. E [Kri20]. ℓ^1 [MH21]. h [LSW22, MCT20]. H(curl) [CW20]. H(div) [CW20]. H^1 [CW20, FS20]. H^2 [AP21]. J [AHP21]. L^2 [HKP20]. L^∞ [PR23]. $\mathbf{Q}$ [BNW20]. $\mathcal{H}$ [FMP22]. $\mathcal{H}^2$ [BBF22]. Ω [NP21b]. p [CFEV21, DFTW20, DHW23, Loi20, Zen23]. Q^2 [LZ20]. QR [BDG20]. s [CIV21]. T [Hal21].

-bases [DP20]. **-coercivity** [Hal21]. **-compatibility** [Hal21]. **-conforming** [QZ24]. **-FEM** [LSW22]. **-Laplace** [DHW23]. **-Laplacian** [Loi20]. **-matrix** [BBF22, FMP22]. **-method** [AHP21]. **-Poisson** [DFTW20]. **-quasi-norm** [Zen23]. **-regularization** [MH21]. **-robust** [CFEV21]. **-schemes** [Kri20]. **-stable** [NP21b]. **-tensor** [BNW20]. **-term** [CIV21]. **-version** [MCT20].

2D [DBR22, Ji23].

3D [Fun22, Ji23].

4 [Cia22].

accuracy [AHV24]. **acoustic** [CCWG+24, CWHMB21, ER20, Lei22]. **activation** [LLMP24]. **adapted** [GJT20]. **Adaptive** [CP24, CGT24, EMPS20, BC24, BBF22, BGIP23, CT22, CLX21, FPT20, HPSV21, LY22, MP21, PS22, Sei22]. **adaptivity** [MP23]. **adjoint** [BKR21]. **ADMM** [GSY20]. **advection** [CHHM22]. **Alfeld** [CGGH24]. **algebra** [HMSS24]. **algebraic** [BGJR23, HPSV21]. **algebraically** [JK22]. **algorithm** [BC24, Ber20, CLL+22, FP22, HLW20, KLL21, LO20, NSD20, Shi24, LO21]. **algorithms** [BAMR22, HJK21, HPSV21, HHMX21, LL21b, Loi20]. **Allen** [CP23]. **alternating** [HK22b]. **Ampère** [Ber20, BySTZ21, GT24]. **Analysis** [CP23, HMW23, Liu21, XY21, BB22, Ber21, BCD20, BMS23b, BDK+20, BDG22, CKP22, CNRS23, CJT21, CHL21a, Cia22, CZ21, CK20, EG23, EGK22, FRZ21, GQS23, GF22, HL20a, HK22b, HHMX21, JWL22, Lei22, MSSCT21, MP21, MP23, Nat20a, Nat20b, OS22, SS23a, SSVS21, SMS20, Sun22]. **analytical** [AA21]. **anisotropic** [BL24, HvR24, Kop20]. **ANOVA** [LPU23]. **anti** [dAFR20]. **anti-Gauss** [dAFR20]. **any** [BGM22a]. **application** [BCG20, DJC20, HL21a, HL21b, KKK+22a, Lei22, RLK20, XY21]. **applications** [JNPS23, LL21b, WZL22]. **applied** [Le 23]. **approach** [ALP23, CMNS24, CDE20, DES21, EF21, FLMM20, GSY20, JL20, JK20, MSSCT21]. **approaches** [CHHM22]. **approximating** [Tro22]. **Approximation** [MRT20, APR22, AB21, AK22, ABNP21, BCG20, BD21, BDK+20, CMR21, CFDI24, CIV21, Cia22, DJC20, FHS20, GN21, Hal21, HK22a, KKK+22a, KNV21, KW23, KS24, KN21, LL21a, LLMP24, MCT20, MNR22, MH21, NP21a, OS22, PS24, SMS20, SSW20, Sei22, Shi24, TNW21, Wan21, ZJN21]. **approximations** [AHV24, AN20, BBF22, CCZ20, CP23, FMP22, GT24, HKP20, JNPS23, MSSCT21, SS22]. **arbitrary** [LL21a, SMS20]. **artificial** [HL22]. **assimilation** [BGM22b]. **Asymptotic** [BMS23b, KLMNS22, CHY23, EG23, FRZ21, HK22a, LSV21]. **asymptotic-preserving** [CHY23, LSV21]. **asymptotics** [XL20]. **Audusse** [GJT20]. **augmented** [BCD20]. **augmented-wave** [BCD20]. **autonomous** [BOS22]. **auxiliary** [CMS20]. **averaged** [DHW23]. **aware** [HI23]. **axisymmetric** [BBMRB21].

back [JL20]. **back-and-forth** [JL20]. **backward** [BPR21]. **Bakushinkii** [HJP20]. **balanced** [FLNS21]. **Banach** [Rea24]. **barotropic** [BCG20]. **Barron** [LLMP24]. **barycentric** [FCH22a, FCH22b]. **based** [BGJR23, BHL22, CW20, CZ21, HJK21, Ji23, KKK+22a, KW23, MSSCT21, MP21, SSW20, Sei22]. **bases** [CIV21, DP20, HvR24]. **basis** [AK22, DS22, Pag21]. **BayesCG** [RICO23]. **Bayesian** [HK22a, SSW20]. **BDDC** [Huy22]. **behaviour** [CHHM22]. **Bellman** [BPR21, CCDS23].

Beltrami [Guo20]. **BEM** [FMP22]. **bending** [BR20, FHS20]. **bending-torsion** [BR20]. **Bernstein** [AK22]. **best** [CIV21, Wan21]. **Beyond** [HJP20]. **bidomain** [Huy22]. **bilinear** [BGW23]. **Bingham** [CS23a, GL22]. **Biot** [CLY22]. **block** [AK20, Tro22]. **blocks** [AK20]. **blow** [MT20]. **blow-up** [MT20]. **Boltzmann** [BGM22a]. **Boris** [HLW20, Shi24]. **bound** [BL22, LSW22]. **Boundary** [CWHMB21, Sei22, ADGS23, CCWG+24, CCDS23, CWS24, DLO20, EBL22, EOR22, GN21, GL20, GÖSS20, GSUT21, HK23, HvR24, HL21a, HL21b, HSS+20, JK20, KK20, KH20, KPP+21, KN21, Lei22, MCT20, Mat22, MP23, Nab21, SMS22, WM21, XY21]. **bounded** [CIV21, Li21]. **Bounds** [AK22, CEP21, CP24, CGT24, FS24, GLW21, HI23, KS24, LV22]. **Bounds-constrained** [AK22]. **bounds-satisfying** [KS24]. **Boussinesq** [XRV21]. **Brillouin** [CEG+20]. **Brinkman** [BBMRB21]. **Brockett** [BBFR21]. **Budget** [XN23]. **Budget-limited** [XN23]. **Bulk** [FMS21, CDE20]. **Bulk-surface** [FMS21]. **BV** [GJT20].

Caccioppoli [FMP22]. **Caccioppoli-type** [FMP22]. **Cahn** [ABNP21, BK22b, CP23, Nab21]. **calculations** [HMW23]. **Carlo** [LRS20, GV23, GKK+24, LRS19, LSV21, SSW20]. **cause** [DV24]. **cells** [Ber21]. **change** [KPW20]. **changing** [Cia22]. **characteristic** [CS23b]. **charged** [HLW20, HL20a, HLS22, Shi24]. **charged-particle** [HLW20, HL20a, HLS22, Shi24]. **chemistry** [BDP22]. **Chorin** [KS20]. **Circuits** [BCLD24]. **class** [HK22b, KLMNS22]. **closed** [EGK22, KLL21]. **cluster** [HMW23]. **clustering** [TNW21]. **clusters** [DBR22]. **coarse** [Nat20a, Nat20b]. **coefficient** [Cia22]. **coefficients** [EMPS20, JLZ20, NN21]. **Coercive** [CWS24, CMR21]. **Coercivity** [CWS22, CWS23, DHL20, Hal21]. **Cohen** [CHL21a]. **coherent** [CFDI24]. **collocation** [DP20, GSH23]. **compactifications** [MT20]. **compatibility** [Hal21]. **complement** [SNO20]. **complements** [DBR22]. **Complete** [HK23]. **completion** [ZJN21]. **complex** [CGGH24, TLO22a, TLO22b]. **complexes** [HLMZ24]. **complexity** [BGIP23, MMRV24]. **compressible** [FLMS23, KLMNS22, KN21, MNR22, SS22, Sun22]. **Compression** [HvR24]. **computable** [LV22]. **Computation** [BRS23, ERSS20, KH20]. **computational** [BGIP23, BKR21]. **computations** [Uhl24]. **Computing** [MS20, BAMR22, GSH23]. **Concentration** [CHY23]. **condition** [Mat22, XY21, ZJK23]. **conditioning** [DV24]. **conditions** [CCDS23, DLO20, EOR22, HK23, HL21b, JK20, KH20, KN21, Lei22, Nab21, ON22, HL21a]. **cones** [CW20]. **conforming** [AP21, CW20, GK20, HLMZ24, QZ24, ZZ22]. **consensus** [HJK21]. **consensus-based** [HJK21]. **conservation** [AHV24, CMNS24, GJT20, GTV22, GL20]. **Conservative** [CJT21]. **constrained** [AK22, BNW20, GSTU20, GSY20, GKK+24, Jin22]. **constraint** [CZ22, WS21]. **constraints** [DV24, GF22]. **Construction** [KN21, AB21, BBF22]. **Continuous** [BGM22b, LLL24, MS20]. **continuous-time** [MS20]. **continuum** [GH21]. **control**

[AN20, BBFR21, BGW23, BCGT23, CMR21, CP23, FK23, GT24, GSY20, GKK+24, HSS+20, NSAD24, PK22, VZ22, Win20]. **controls** [MRT20]. **convection** [BNO20, BNO22, CS23b, JK22, Liu21]. **convection-diffusion** [BNO20]. **convection-diffusion-reaction** [JK22]. **convection-dominated** [BNO22]. **converge** [Wan21]. **Convergence** [BD21, CFS20, CS20, FPT20, FRZ21, GJT20, GGS22, HJK21, HPSV21, Jin22, BMS23a, BPR21, CP24, CK20, DS21, FS20, GF22, GL20, GSTU20, HT22, Har21, HLO20, JWL22, KS20, PS22, Sag22, SS23a, SSW20]. **Convergent** [CT22, CZ22, KL17, KLL21, NKL21]. **convex** [ATW22, BySTZ21, CT22, OS22]. **convexity** [BySTZ21]. **convolution** [JK20, MR21]. **Corners** [DNT21, HK23]. **Corrected** [WM21]. **Correction** [CWS23, CH21, FCH22b, HL21a, HW21a, LO21, LRS20, Nat20a, NKL21, OZ23, TLO22a, LL21b]. **COS** [Jun24]. **cost** [HPSV21]. **could** [Fun22]. **coupled** [BB22, BDG22, HMW23, WZL22, YL24, ZJK23]. **coupling** [BKR21, DS21, KL17, NKL21, ON22]. **couplings** [FMP22]. **CP** [ZJN21]. **crack** [CZB22]. **cross** [CFS20, CP22, Sei22]. **cross-diffusion** [CFS20]. **cross-points** [CP22]. **Crouzeix** [BOS22, BW21, Guo20, Ji23]. **crystal** [CLL+22]. **crystals** [BNW20]. **cube** [NP21a]. **cubed** [BBC23]. **cubic** [LW21]. **cuboid** [HLMZ24]. **curvature** [EGK22, GN21, HL22]. **curves** [AA21]. **cuspidal** [AL20]. **cut** [BHL20]. **CutFEM** [BHL22, LLL24, LL24].

D [BD21, LW21]. **Darcy** [BB22]. **data** [BGM22b, DES21, GH21]. **decay** [DHL20, PS21, XL20]. **decomposition** [BS21, BMS23b, DNT21, DJC20, DBR22, GGS22, Nat20a, Nat20b, NN21]. **deep** [BTU22]. **definite** [FLNS21]. **degenerating** [KKK22b]. **degree** [LL21a]. **Dekker** [LO21, LO20]. **deluxe** [Huy22]. **densities** [Sag22]. **density** [LLW24]. **dependent** [BFM22, CMNS24, CS23a, GSH23, JLZ20, NKL22]. **derivation** [CFEV21, CJT21]. **derivative** [LLMP24]. **derivatives** [CCDS23, Win20]. **Detection** [NSAD24]. **deterministic** [HI23]. **develop** [Fun22]. **Development** [CHL21a]. **DG** [MSSCT21]. **Difference** [BGM22a, HH20, LZ20]. **differential** [BGJR23, KS24]. **differential-algebraic** [BGJR23]. **differentiation** [BPR21]. **diffusion** [BMS23a, BNO20, BNO22, CCZ20, CFS20, CHHM22, CS23b, DS22, EGK22, FLNS21, JK22, Liu21, NN21, Rie23]. **Diffusion-dominated** [BNO20]. **diffusive** [LSV21]. **dilation** [CWHPV23]. **dimensional** [AN20, CGGH24, CH20, CH21, CZB22, GH21, JZZ22, KW23, Liu21, MP23, Yse20]. **dimensions** [FMS21, WM21, Yse24]. **Direct** [ATW22, ABMS21, Liu21, NSAD24, SNO20]. **direction** [HK22b]. **Dirichlet** [CWS24, HSS+20, Win20, XY21]. **Dirichlet-to-Neumann** [XY21]. **Discontinuous** [AN20, ABMS21, BBJP20, CS23b, DRG+20, GK20, GLW21, GTV22, HK22b, HHMX21, HSS+20, LL24, LLS24, Liu21, WS21]. **discrete** [BDG22, CGGH24, DHL20, ERSS20, GLW21, GSTU20, HJK21, HKP20, Har21, HK22b, HH20, Ji23, KL17, Kri20, Kri21, LZ20, LW21, NKL21, SMdD22, XRV21]. **discretisations** [CS23a]. **discretization**

[DHW23, HL21a, HL21b, HK22b, LLS24, PK22]. **discretizations** [Huy22]. **discretized** [HvR24, Uhl24]. **dispersive** [CJT21, EOR22]. **displacement** [ABMS21, BGM22b, Sun22]. **dissipation** [CZ22]. **dissipative** [HH20, SX21]. **distance** [MS20]. **distributed** [FK23]. **distribution** [HJP20, XN23]. **div** [ZZ22]. **div-conforming** [ZZ22]. **divdiv** [HLMZ24]. **Divergence** [GK20]. **Divergence-conforming** [GK20]. **does** [Wan21]. **Domain** [BS21, ADGS23, AL20, BMS23b, CDE20, DNT21, DBR22, GÖSS20, GGS22, KK20, KH20, Nat20a, Nat20b]. **domains** [AA24, BDP22, BySTZ21, BFM22, CWS22, CWS23, CWHPV23, CWS24, CDE20, DS21, HK23, HHK+24]. **dominated** [BNO20, BNO22]. **Double** [Rie23, CWHPV23]. **double-layer** [CWHPV23]. **DPG** [FHS20, FHN22]. **dqds** [FP22]. **Drift** [Shi24]. **driven** [CZ22]. **DtN** [LY22]. **dual** [BK22a, Jin22]. **dynamic** [BGJR23, HL21a, HL21b, Nab21]. **Dynamical** [Pag21, GQS23, KNV21]. **dynamics** [BTU22, FS24, HLW20, HL20a, HLS22, Pöt23, Shi24].

E-schemes [Kri21]. **edge** [Cia22, DBR22]. **effect** [AJH21]. **Efficient** [CFDI24, Loi20, NP21a, BKR21, CZ21, KPW20]. **eigenfunctions** [LV22]. **eigenspaces** [GSH23]. **eigenvalue** [AHP21, AL20, CP24, CGT24, FP22, GK20, Hal21, RDYL21]. **eigenvalues** [CEP21, Tro22]. **elastic** [ABMS21, BR20, DBR22, GN21, LY22]. **elasticity** [CGGH24, HHMX21]. **elastodynamics** [ADGS23, DRG+20]. **electrical** [GH21]. **electrode** [GH21]. **electromagnetic** [Cia22, NKL22]. **electronic** [HMW23]. **element** [AJH21, BOS22, BL24, BW21, BGIP23, Ber21, BPP24, BHL20, BNO20, BHL22, BNO22, CCWG+24, CCZ20, CLY22, CWHMB21, CMS20, CLX21, CHL21a, CH20, CH21, CZB22, DST22, EBL22, ER20, EGN24, FHKP24, FMS21, GÖSS20, Guo20, HKP20, HL22, HLMZ24, JWL22, Ji23, KK20, KS24, KKK22b, KLL21, KPP+21, LZ20, LY22, MCT20, NN21, PK22, Sei22, XY21]. **Elements** [NSAD24, ADGS23, AP21, ATW22, CW20, Cia22, FK23, GK20, GL22, HW21a, HW21b, ZZ22]. **elliptic** [CEP21, CKP22, CNP22, CMR21, CLX21, CDE20, Har21, HL20b, HW21a, HW21b, HSS+20, MP23, NN21, SSVS21, SNO20]. **Energy** [MNR22, BL24, CH20, CH21, EG23, HH20, LCO24, SX21, Win20]. **energy-dissipative** [HH20]. **enforcing** [BySTZ21]. **enriched** [HW21a, HW21b, YL24]. **ensemble** [BBFR21, CHL+21b, PS22]. **entropic** [GKK+24]. **Entropy** [GF22, Kri20, Kri21, BRS23, BS21, BCG20, CMNS24, GJT20]. **enumeration** [Chk24]. **Equation** [BKR21, ABNP21, BBJP20, BySTZ21, BNO20, BNO22, CFEV21, CP23, FS24, GT24, GGS22, Guo20, HK23, JZZ22, KH20, Le 23, LM21, LW21, MR21, MRT20, Nab21, PK22, SS23a, Sei22, XY21]. **Equation-free** [BKR21]. **equations** [dAFR20, AA21, AN20, BBMRB21, Ber20, BK22b, BPR21, BCG20, BD21, BFM22, CHY23, CCDS23, CMR21, CHHM22, CWS22, CWS23, CWS24, CDE20, DHL20, FPT20, FLNS21, Fun22, HMW23, HL21a, HL21b, HH20,

KNV21, KS24, KL17, KLMNS22, KN21, Lei22, Li21, Liu21, Mat22, Pöt23, QZ24, SX21, TLO22a, TLO22b, WM21, WS21, Yse20, Yse24, NKL21]. **equilibrated** [CCZ20]. **Error** [BK22a, BTU22, HK22b, Win20, XRV21, AM22, BL22, BCGT23, BK22b, BDG22, CCZ20, CKP22, CFEV21, CMS20, CH20, CH21, FLMS23, FS24, GT24, GLW21, GTV22, GÖSS20, HJK21, HKP20, HI23, HK22a, HL20b, KK20, Kop20, KV21, KPP+21, LSW22, Lei22, LV22, MP21, MP23, Nab21, SSVS21, SMS20, SMS22]. **essential** [CWS22, CWS23]. **estimate** [GÖSS20, Nab21]. **estimates** [AM22, BK22a, BPP24, BK22b, BTU22, CFEV21, CMS20, CH20, CH21, EG23, FMP22, FLMS23, GTV22, HJK21, HKP20, HK22a, HL20b, KK20, Kop20, KPP+21, SMS20, SMS22, Win20, XRV21]. **estimation** [KV21, SNO20]. **estimator** [CCZ20]. **estimators** [BRS23]. **Euler** [BCG20, FLMM20, KLMNS22, LM21]. **Eulerian** [BFM22]. **European** [Jun24]. **evolution** [CLL+22, LL24]. **evolutionary** [FPT20]. **Evolving** [HL22, BK22b, KLL21]. **Exact** [SMdD22]. **existence** [Li21, SNO20]. **expansion** [Yse20]. **expansions** [XL20]. **Explicit** [SMS20, HL21a, HL21b, SMS22]. **Exponential** [BMS23a, FS20, TNW21, CS23b, DHL20, FS24, Rie23]. **extended** [BHL22]. **exterior** [AA24, KL17, NKL21]. **Extremal** [DP20]. **extreme** [Tro22].

families [ZZ22]. **family** [HLMZ24]. **Fast** [BDG20, KKK+22a, LPU23, PS24, BC24, JL20]. **faster** [Wan21]. **FastTwoSum** [LO21, LO20]. **FEM** [BMS23a, BNW20, CNRS23, EMPS20, FMP22, FS20, LSW22, NN21]. **FEM-BEM** [FMP22]. **FEMs** [CNP22, GQS23, Sun22]. **ferromagnetic** [BCLD24]. **FFT** [CZ21]. **Fiber** [RDYL21]. **field** [BB22, HLW20, HL20a]. **field-of-values** [BB22]. **fields** [Cia22, CK20]. **filling** [CZ22]. **filtered** [FPT20, HLW20]. **filtering** [BC24, CHL+21b, CZ21]. **filters** [BBMRB21]. **Finite** [BGM22a, CH20, HKP20, AHV24, AP21, ATW22, AJH21, BOS22, BL24, BW21, BGIP23, Ber21, BHL20, BNO20, BHL22, BNO22, CCZ20, CGT20, CZ22, CFS20, CLY22, CHHM22, CMS20, CLX21, CHL21a, Cia22, CZB22, ER20, EGN24, FLMM20, FLMS23, FHKP24, FK23, GF22, GK20, GL20, GL22, HW21a, HW21b, HH20, HL22, HLMZ24, JWL22, Ji23, KK20, KS24, KKK22b, KLL21, LZ20, LY22, Nab21, NN21, PK22, XY21, ZZ22, CH21, NSAD24]. **finite-element** [CMS20]. **finite-volume** [Nab21]. **First** [Füh20, DRG+20, FPT20]. **First-order** [Füh20]. **Fisher** [BBJP20]. **fixed** [SS23a]. **floating** [HI23]. **flow** [EGK22, GN21, GL22, HL22, KLL21, PS24, ZJK23]. **flows** [BL24, BCG20, CGT20, CMS20, GSTU20, MNR22]. **fluid** [BTU22, BDG22, SS22, ZJK23]. **fluid-structure** [BDG22, SS22]. **fluids** [OS22, SS22]. **flux** [CLY22, GJT20, GTV22]. **Fokker** [JZZ22, DHL20, NSD20]. **forcing** [JZZ22]. **form** [AK20, DRG+20]. **Formulation** [GL20, BGM22a, Ber21, FHS20, QZ24, SNO20]. **forth** [JL20].

Fortin [DST22]. **forward** [Sag22]. **FOSLS** [GS24]. **four** [CNRS23]. **Fourier** [XY21]. **fourth** [CNRS23]. **fourth-order** [CNRS23]. **fractal** [CCWG+24, CWHMB21, JK20]. **fractional** [BMS23a, DS22, FLNS21, NSD20, Rie23]. **fractured** [BHL20]. **fragmentation** [SS23a]. **framework** [AA21, BGW23, HT22, VZ22]. **Fredholm** [dAFR20]. **free** [BCGT23, BKR21, JWL22, Le 23]. **frequency** [CFDI24, EBL22, LSW22]. **friction** [ZJK23]. **friction-type** [ZJK23]. **full** [HMW23]. **full-coupled** [HMW23]. **Fully** [BDG22, LV22, GLW21, HK22b, HH20, Huy22, KL17, Kri20, Kri21, LW21, NKL21, XRV21, YL24]. **fully-coupled** [YL24]. **fully-discrete** [GLW21, Kri20, Kri21]. **function** [LLMP24]. **Functional** [KPP+21]. **functionals** [APR22, MMV22]. **Functions** [PS21, APR22, Ji23, XL20, Yse20]. **fundamental** [AA24].

Galerkin [AN20, BBJP20, CWS22, CWS23, CS23b, DRG+20, EBL22, EMPS20, GK20, GLW21, Hal21, HK22b, HHMX21, HSS+20, LLS24, Liu21, PK22, WS21, YL24]. **gap** [BOS22]. **gas** [EG23]. **Gauss** [APR22, dAFR20]. **Gaussian** [BL22, CFDI24]. **GenEO** [MCT20]. **General** [RLK20, BJPV20, KN21]. **generalized** [CK20, CZB22, FHKP24, IGS21]. **generating** [Van23]. **generic** [AB21]. **geometric** [BL24, Ber20]. **geometry** [Shi24]. **Gevrey** [FS20]. **global** [Har21]. **Goal** [BGIP23]. **Goal-oriented** [BGIP23]. **Godunov** [GJT20, GTV22]. **Gordon** [FS24]. **grad** [ZZ22]. **graded** [ADGS23]. **gradient** [CGT20, CMS20, CLL+22, Jin22]. **Grid** [Le 23]. **Grid-free** [Le 23]. **grids** [AB21, KW23]. **Gross** [AHP21]. **group** [CS20]. **Guaranteed** [CEP21, CP24, CGT24, CFEV21, GT24]. **guarantees** [CIV21].

Hamilton [BPR21, CCDS23, FPT20]. **Hamiltonian** [BGJR23, Pag21]. **Hanke** [Rea24]. **hard** [EBL22]. **harmonic** [CIV21]. **harmonics** [BBC23]. **Hausdorff** [CCWG+24]. **Hausdorff-measure** [CCWG+24]. **HDG** [QZ24, SSVS21]. **heat** [TLO22a, TLO22b]. **Helmholtz** [AA21, CFEV21, CFDI24, DNT21, GGS22, HK23, LSW22, XY21]. **HHO** [BCGT23]. **hierarchical** [EMPS20, Sei22]. **High** [KW23, KS24, AP21, AB21, CEP21, CGT24, CFDI24, CLX21, EBL22, JZZ22, LSW22, MP23, Yse24]. **High-dimensional** [KW23, MP23]. **high-frequency** [CFDI24, EBL22]. **High-order** [KS24, CEP21, CGT24, CLX21]. **Higher** [ADGS23, CCZ20, CT22, NN21, Yse20]. **Higher-order** [ADGS23, CT22, NN21]. **Hilliard** [ABNP21, BK22b, Nab21]. **Hilliard-type** [BK22b]. **Hölder** [CK20]. **holomorphic** [Hal21]. **homogeneous** [MT20]. **homogenisation** [BKR21]. **homotopy** [RDYL21]. **Hood** [DST22]. **Hopf** [KS20]. **hp** [GLW21, ADGS23, BMS23a, FS20]. **hp-discontinuous** [GLW21]. **hp-FEM** [FS20]. **Hybrid** [LRS19, BJPV20, CEP21, CT22, CGT24, CHHM22, DBR22, PK22, LRS20]. **hybridizable** [HSS+20]. **hyperbolic** [CMNS24, LPU23, ON22]. **hypersingular** [MCT20]. **hypocoercivity** [DHL20].

II [BNO22, CIV21, HK23, LL24]. **IIA** [AM22]. **ill** [DV24, Jin22, PS22]. **ill-conditioning** [DV24]. **ill-posed** [Jin22, PS22]. **illposed** [PR23]. **image** [JNPS23]. **immersed** [JWL22, Ji23]. **impedance** [GH21]. **implementation** [LZ20, ON22]. **implementations** [CZ21]. **implicit** [HL21a, HL21b, HK22b, Huy22, KLMNS22, LM21]. **implicit-explicit** [HL21a, HL21b]. **implies** [Li21]. **Improved** [FLMS23, FS24, GS24, KMZ23, JLZ20]. **improvements** [AK21]. **including** [HPSV21, Mat22]. **Incomplete** [JZ20]. **incompressible** [BDG22, GQS23, MSSCT21, PS24]. **indefinite** [CKP22, CNP22]. **independent** [BBF22]. **inequalities** [KS24, Kri20, Kri21]. **inexact** [Nat20a, Nat20b]. **inflow** [KN21]. **inflow/outflow** [KN21]. **information** [ABMS21]. **initial** [RLK20]. **initial-value** [RLK20]. **inspired** [ES24, FLMM20]. **instability** [MS20]. **instationary** [EG23]. **integral** [dAFR20, AA21, CWS22, CWS23, CWS24, HvR24, WM21]. **integration** [GKK+24, KPW20, vdBBS24]. **integrator** [FS24, HL20a, LW21]. **integrators** [CS20, HLS22, MV20]. **integrodifference** [Pöt23]. **interacting** [CFS20]. **interaction** [BDG22, EGK22]. **interactions** [SS22]. **interface** [ABNP21, CLX21, HW21a, HW21b, ZJK23]. **Interior** [BPP24, BySTZ21, KL17, NKL21]. **internal** [ABMS21, NSD20]. **Interpolation** [BBC23, SS23b, BGW23, FCH22a, FCH22b, IGS21, KKK+22a, KMZ23, SMS22]. **introduction** [Uhl24]. **invariant** [CWHPV23]. **inverse** [BNO20, BNO22, DES21, HJP20, Har21, HK22a, SSW20, SNO20]. **inverses** [FMP22]. **inversion** [ABMS21, PS22]. **investigation** [BBFR21]. **involving** [APR22, SS22]. **ion** [Ber21, GF22]. **isogeometric** [BDK+20, DS21, SMS20]. **isotropic** [FS20]. **iteration** [BGJR23, DFTW20, DJC20, Rea24]. **iterations** [BDG20]. **Iterative** [MMRV24, BC24, CZ21, HPSV21, JZ20, PR23, Yse24].

Jacobi [BPR21, CCDS23, FPT20]. **joined** [DBR22]. **junctions** [EGN24].

Kacanov [DFTW20]. **Kalman** [CHL+21b, PS22]. **Kernel** [BBF22, HMSS24, KKK+22a, KW23]. **kernel-based** [KKK+22a, KW23]. **Kernel-independent** [BBF22]. **kind** [dAFR20, CWS22, CWS23, CWS24]. **knowing** [HJP20]. **KPP** [BBJP20]. **Krylov** [AK21, BRS23, Huy22, PS21, RICO23, Tro22]. **Krylov-BDDC** [Huy22]. **Kutta** [MR21].

Lack [ALP23]. **Lagrangian** [CCDS23, SMdD22]. **Landweber** [Rea24]. **Laplace** [AA21, CWS24, DHW23, Guo20, HK22a, SSW20, Yse20, Yse24]. **Laplace-based** [SSW20]. **Laplace-like** [Yse20, Yse24]. **Laplacian** [Loi20]. **Large** [HLS22, BRS23, MP21]. **Large-stepsize** [HLS22]. **Lattice** [Chk24, BGM22a, KKK+22a]. **lattice-point** [KKK+22a]. **Lavrentiev** [BOS22]. **laws** [AHV24, CMNS24, GJT20, GTV22, GL20]. **Lawson** [FS24, HLO20]. **Lawson-type** [FS24]. **layer**

[CWHPV23, DRG+20, LLMP24]. **layers** [CS23b, NKL22]. **leak** [ZJK23]. **learning** [BTU22, XN23]. **Least** [FK23, Füh20, LM21]. **Least-squares** [FK23, Füh20, LM21]. **Legendre** [Wan21]. **Leray** [KS20]. **level** [Ji23, MCT20, Nat20a, Nat20b, PS24, SSW20]. **Lie** [CS20]. **like** [DJC20, Yse20, Yse24]. **limit** [ABNP21, LSV21]. **limited** [XL20, XN23]. **linear** [ABMS21, ALP23, BGJR23, BK22b, CKP22, CNP22, CHHM22, Chk24, EOR22, FCH22a, FCH22b, GSY20, HJP20, HK22b, HHMX21, Jin22, KK20, MMV22, PS22, PR23, SSVS21, VZ22]. **linear-quadratic** [VZ22]. **linearization** [HPSV21, Zen23]. **linearized** [SNO20]. **linearly** [KLMNS22]. **Lipschitz** [CWS22, CWS23, CWHPV23, CWS24]. **liquid** [BNW20]. **Lithium** [Ber21]. **Lithium-ion** [Ber21]. **local** [BC24, CS23b, LLW24]. **Locality** [LLW24]. **localization** [HM24]. **localized** [FHKP24]. **locally** [CWHPV23]. **locally-dilation-invariant** [CWHPV23]. **lognormal** [EMPS20]. **Long** [CHHM22, HL20a, FS24]. **Long-term** [HL20a]. **Long-time** [CHHM22, FS24]. **loosely** [BDG22]. **Lotka** [CHY23]. **low** [BDG20, BCG20, BV22, JNPS23, KNV21, KMZ23, LW21, MMRV24]. **low-rank** [BV22, KMZ23]. **low-regularity** [LW21]. **Lower** [Kop20, CEP21, CP24, CGT24]. **lowest** [CKP22]. **lowest-order** [CKP22]. **lumped** [ER20].

MAC [FLMS23]. **Mach** [BCG20]. **magnetic** [HLW20, HL20a]. **magnetized** [FRZ21]. **magnetohydrodynamics** [GQS23]. **makes** [MV20]. **manifolds** [GN21]. **mapping** [CDE20]. **mass** [ER20]. **mass-lumped** [ER20]. **matched** [DRG+20]. **matching** [LL21b]. **Matérn** [CK20]. **Mathematical** [Nat20b, Nat20a]. **matrices** [AK21, BRS23, BDG20, DP20, PS21, Sei22]. **matrix** [APR22, BBF22, BV22, FMP22, HMSS24, MS20, MSSCT21, NP21b, Uhl24]. **matrix-theoretic** [MSSCT21]. **Maximal** [MH21, AM22]. **Maximizing** [WZL22]. **maximum** [BDP22, LZ20]. **Maxwell** [NKL21, AJH21, KL17]. **MDFEM** [NN21]. **mean** [EGK22, HL22]. **means** [dAFR20]. **measure** [CCWG+24, ERSS20, GKK+24]. **measurements** [GH21]. **measures** [LRS19, LRS20]. **mechanics** [SMdD22]. **media** [BHL20, Sun22]. **medium** [BGM22b]. **meets** [LPU23]. **mesh** [LLL24, LL24, Li21]. **meshes** [ADGS23, BJPV20, HLMZ24, Kop20, LLL24, LL24]. **method** [AHP21, AA24, AK21, BOS22, BL24, BC24, BJPV20, BL22, BPP24, BCD20, BySTZ21, BHL20, BNO20, BNO22, CCWG+24, CEP21, CGT24, CLY22, CWS22, CWS23, CLX21, CHL21a, CS23b, CZB22, DS22, DS21, DRG+20, ER20, EOR22, EGN24, FHKP24, FMS21, Füh20, FHN22, GL20, GÖSS20, GSH23, HMW23, HW21a, HW21b, HSS+20, JL20, Ji23, Jin22, Jun24, KK20, KS20, LLS21, Le 23, LM21, LZ20, LY22, LSV21, Mat22, MP21, NN21, RDYL21, SSVS21, YL24, Yse24, ZJN21]. **methods** [AM22, BGIP23, BRS23, BTU22, CWHMB21, CP22, DNT21, EBL22, ES24, GLW21, GGS22, HLO20, HL22, KW23, KPP+21, LRS19, LRS20, Liu21, MN24, Nat20a, Nat20b, OZ17, OZ23, Pag21, QZ24, RLK20, SSW20, Sei22,

Tro22, WS21, XY21, Zen23, Zha21, ZJK23]. **metric** [ERSS20]. **MHD** [WS21]. **Mimicking** [GH21]. **Mindlin** [FHS20]. **minimization** [BK22a, CT22, Zen23]. **Minimum** [LL21b, LCO24]. **Minimum-correction** [LL21b]. **miscible** [Sun22]. **Mixed** [GL22, PK22, ATW22, BJPV20, CNP22, CLY22, ER20, GQS23, Sun22]. **model** [BR20, Ber21, BNW20, BHL20, CLY22, CHL21a, Cia22, DES21, FHS20, Huy22, YL24]. **modelling** [BBMRB21]. **models** [CZ22, HM24, OS22]. **modes** [DBR22]. **modified** [SS23a, Shi24]. **Moment** [MN24, CMNS24, LL21b]. **Moment-SoS** [MN24]. **Monge** [Ber20, BySTZ21, GT24]. **Monk** [CHL21a]. **monotone** [CMR21]. **monotonicity** [LZ20]. **Monte** [LRS20, GV23, GKK+24, LRS19, LSV21, SSW20]. **mortar** [DS21]. **motion** [LLL24]. **much** [Wan21]. **Mullins** [EGN24]. **multi** [EGN24, Liu21]. **multi-dimensional** [Liu21]. **multi-phase** [EGN24]. **multicomponent** [MNR22]. **multidimensional** [JNPS23, WS21]. **multifidelity** [XN23]. **Multilevel** [CHL+21b, GV23, KW23, LSV21]. **multiparameter** [RDYL21]. **Multipatch** [BDK+20]. **multiple** [DS21, HLS22]. **multipoint** [CLY22]. **Multiresolution** [HMSS24]. **multiscale** [BJPV20]. **multistep** [RLK20]. **Multivariate** [NN21, NP21a].

nanowires [BCLD24]. **Navier** [AN20, BBMRB21, BD21, FLMS23, Fun22, KN21, LM21, Li21, Mat22, MSSCT21, QZ24]. **NCVEM** [CKP22]. **near** [ABNP21]. **Nearest** [NP21b]. **negative** [MMV22]. **nematic** [BNW20]. **Nernst** [HH20, SX21, GF22]. **nestedness** [LL21a]. **network** [HM24]. **networks** [LLMP24, Uhl24]. **Neumann** [BRS23, KK20, XY21]. **neural** [Uhl24]. **Newton** [Huy22]. **node** [TNW21]. **noise** [HJP20, SSW20]. **noise-level-robustness** [SSW20]. **Non** [HK22a, BOS22, BK22b, BFM22, CNP22, CMR21, CH20, CH21, Fun22, Huy22, ON22, PR23]. **Non-asymptotic** [HK22a]. **non-autonomous** [BOS22]. **non-coercive** [CMR21]. **non-energy** [CH20, CH21]. **non-linear** [BK22b, PR23]. **non-monotone** [CMR21]. **non-selfadjoint** [CNP22]. **non-stationary** [BFM22]. **non-stiff** [ON22]. **non-symmetric** [Huy22]. **nonequilibrium** [MNR22]. **nonholonomic** [MV20, SMdD22]. **Nonlinear** [DJC20, CHHM22, HPSV21, Lei22, LW21, TLO22a, TLO22b, XRV21]. **nonlocal** [AHV24]. **Nonnegative** [JNPS23]. **nonsmooth** [NSAD24]. **nonsymmetric** [FP22]. **norm** [DL23, Zen23]. **normal** [Win20]. **norms** [CWS22, CWS23, CH20, CH21, MMV22]. **note** [LO20, LO21]. **nuclear** [DL23]. **number** [BCG20, Jun24]. **Numerical** [ABNP21, BR20, Ber21, CEG+20, CMR21, CZ21, DL23, EGK22, GN21, MT20, NSD20, Pöt23, Zha21, AA21, ALP23, BBFR21, BCD20, BCG20, BD21, CJT21, DV24, FCH22a, FCH22b, GSTU20, GSY20, KH20, KN21, Li21, SS22, SNO20, ZJK23]. **numerics** [TLO22a, TLO22b]. **NURBS** [DS21].

oblique [CCDS23]. **obstacle** [Füh20, HKP20]. **one** [Cia22]. **only** [ABMS21].

open [AA21]. **Operator** [BGJR23, AK21, CWHPV23, DST22, DES21, ES24, GSUT21, MCT20, SNO20]. **operators** [AK20, BAMR22, CEG+20, CEP21, DS22, GSH23, HPSV21, HvR24, SS23b]. **Optimal** [CMS20, GSUT21, XL20, AN20, BBFR21, BGIP23, Ber20, BS21, BMS23b, CP24, CJT21, CP23, DP20, DS21, ERSS20, FK23, GSY20, GKK+24, HPSV21, HT22, JL20, JWL22, MN24, NSAD24, PK22, VZ22]. **Optimization** [DLO20, BDP22, ES24, GV23, HJK21, MSA23, NP21b]. **optimized** [CP22, DNT21]. **option** [Jun24]. **order** [ADGS23, AP21, AB21, BBMRB21, BPR21, CCZ20, CEP21, CT22, CKP22, CNP22, CNRS23, CGT24, CLX21, DRG+20, FPT20, Füh20, HL21a, HL21b, JLZ20, KS24, NN21, ZJN21]. **oriented** [BGIP23]. **orthogonal** [Van23, XL20]. **Orthogonality** [BW21]. **orthonormal** [CIV21]. **Oscillation** [KV21]. **outflow** [KN21]. **overlapping** [GGS22, LLL24, LL24].

P2D [Ber21]. **Panov** [GTV22]. **Panov-type** [GTV22]. **Parabolic** [GKK+24, AM22, Ber20, BPR21, CHY23, GS24, GLW21, GSY20, KNV21, MP23, SS23b, vdBBS24]. **ParaDiag** [KMZ23]. **parallel** [EF21, GGS22]. **parallel-in-time** [EF21]. **parameter** [CMNS24, GSH23, JWL22]. **parameter-dependent** [CMNS24, GSH23]. **parameters** [ABMS21]. **parametric** [BL24, JZZ22]. **Part** [CJT21, Cia22]. **partial** [KS24]. **partially** [JWL22]. **particle** [HLW20, HL20a, HLS22, Le 23, LSV21, Shi24]. **partitions** [KKK22b]. **patch** [BKR21]. **path** [LCO24]. **PDE** [GKK+24]. **PDE-constrained** [GKK+24]. **PDEs** [CNP22, EF21, FMS21, GS24, HSS+20, NN21, TNW21, vdBBS24]. **penalized** [JWL22]. **penalty** [BySTZ21]. **perfectly** [DRG+20]. **periodic** [BAMR22, CEG+20, HHK+24, KKK+22a, LW21, Zha21]. **Perthame** [GJT20]. **perturbed** [CS23b, KH20]. **Petrov** [PK22]. **phase** [EGN24]. **physical** [WS21]. **physical-constraint-preserving** [WS21]. **Physics** [YL24]. **Physics-preserving** [YL24]. **pipe** [GL22]. **Pitaevskii** [AHP21]. **pivot** [SS23a]. **Planck** [GF22, DHL20, HH20, JZZ22, NSD20, SX21]. **Plane** [IGS21, TLO22a, TLO22b]. **plasmas** [FRZ21]. **plate** [FHS20]. **plus** [BDG20]. **PML** [CHL21a]. **point** [HI23, KKK+22a]. **points** [CP22]. **Pointwise** [KK20]. **Poisson** [DFTW20, GF22, HH20, Le 23, SX21]. **polar** [DJC20]. **polygon** [CW20]. **polygon-based** [CW20]. **polygonal** [BJPV20, BySTZ21]. **polygons** [BMS23a]. **polyhedra** [OS22]. **polyhedral** [CWS22, CWS23]. **polynomial** [AK22, Loi20, Wan21, XL20]. **polynomials** [MS20, Van23]. **poroelasticity** [YL24]. **porous** [BGM22b, Sun22]. **port** [BGJR23]. **port-Hamiltonian** [BGJR23]. **posed** [CDE20, Jin22, PS22]. **positive** [FLNS21]. **positivity** [HH20, SX21]. **positivity-preserving** [HH20]. **possibly** [Fun22]. **posteriori** [AM22, BCGT23, CCZ20, CKP22, CFEV21, GLW21, GÖSS20, Kop20, KV21, KPP+21, LV22, MP21, MP23, SSVS21]. **potential** [MRT20]. **power** [DJC20]. **power-like** [DJC20]. **Precision** [HI23]. **Precision-aware** [HI23]. **preconditioner** [AK20]. **preconditioners** [AA21]. **Preconditioning**

[AP21, BB22, FLNS21, GSUT21, MCT20, MSSCT21]. **predictive** [Uhl24]. **preliminary** [BCD20]. **PRESB** [AK20]. **preserving** [BL24, BBJP20, BNW20, CHY23, EGN24, FRZ21, HH20, LSV21, SX21, WS21, YL24]. **pressure** [BHL20, Mat22, PS24]. **pricing** [Jun24]. **principle** [LZ20]. **prior** [RICO23]. **priori** [CKP22, CNRS23, HL20b, SSVS21]. **prisms** [CW20]. **probabilistic** [HI23]. **probability** [BDP22, LRS19, LRS20, Sag22]. **problem** [AHP21, AN20, AL20, BB22, CS23a, CWS24, CS23b, CH20, CP23, DNT21, DV24, DFTW20, EGN24, FP22, Füh20, HKP20, Har21, LLS24, LY22, CH21]. **problems** [AA24, AJH21, BOS22, BK22a, BBFR21, BNO20, BNO22, CCZ20, CKP22, CNRS23, CMR21, CLX21, CZB22, DES21, EBL22, EOR22, FK23, GN21, GK20, GLW21, GSUT21, GSY20, Hal21, HJP20, HK22a, HL20b, HLO20, HK22b, HW21b, Jin22, JK22, KK20, MP23, MN24, ON22, PS22, PS24, PR23, RLK20, RDYL21, Sag22, SSVS21, SSW20, SNO20, SS23b, Uhl24, Win20, XN23, Zha21, HW21a]. **processes** [CHL+21b]. **product** [CIV21, RDYL21]. **programming** [Chk24]. **Projection** [MMV22, KS20, Mat22, Wan21]. **projector** [BCD20, KNV21]. **projector-splitting** [KNV21]. **projectors** [SMS22]. **proof** [SNO20]. **propagation** [BL22, ER20, JK20]. **properties** [AK20, DP20, IGS21, KNV21, KLMNS22, PS21, RICO23, SMS22]. **Provably** [ON22, WS21]. **Proximal** [Zen23, CLL+22]. **proximal-gradient** [CLL+22]. **pseudo** [EOR22]. **pseudo-spectral** [EOR22]. **pseudodifferential** [GSUT21]. **Publisher** [FCH22b].

QMC [NN21]. **quadratic** [CNRS23, MS20, VZ22]. **quadrature** [APR22, dAFR20, AJH21, CEG+20, JK20, MR21, Rie23, TNW21]. **quadrilaterals** [ATW22]. **quantification** [HHK+24, KKK+22a, Sag22]. **quantum** [BDP22]. **quasi** [GV23, GKK+24, HPSV21, MT20, Zen23]. **quasi-homogeneous** [MT20]. **quasi-Monte** [GV23, GKK+24]. **quasi-optimal** [HPSV21].

Radau [AM22]. **radiation** [HK23]. **Random** [OZ17, AB21, CDE20, HHK+24, KNV21, NN21, OZ23]. **Randomized** [Tro22, ES24, VZ22]. **rank** [BDG20, BV22, JNPS23, KNV21, KMZ23, ZJN21]. **Rate** [SS23a]. **rates** [BD21, CP24, DS21, GS24, Jin22, MH21, PS22, XL20]. **Rational** [APR22, BRS23, FCH22a, FCH22b, PS21, TNW21]. **Raus** [Rea24]. **Raviart** [BOS22, BW21, Guo20, Ji23]. **reaction** [JK22]. **real** [FP22]. **recovery** [ABMS21, BV22, Sun22]. **reduced** [DS22, Pag21]. **reduction** [DES21]. **reference** [HMW23]. **reflections** [LLS21]. **regime** [BNO20, BNO22]. **region** [MSA23]. **regions** [DLO20]. **regression** [LPU23]. **regularising** [HJP20]. **regularities** [XL20]. **Regularity** [CK20, AM22, FS20, JLZ20, LW21]. **regularization** [MMV22, MH21, MMRV24, PR23, Win20]. **regularized** [BK22a, BS21, HKP20, HL20b]. **regularizers** [MMRV24]. **Reissner** [FHS20]. **related** [MSSCT21]. **relations** [BW21, CJT21]. **relative**

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