

A Bibliography of *The Princeton Companion to Applied Mathematics*

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Abstract

This is a bibliography of publications in the book *The Princeton Companion to Applied Mathematics*.

HDG⁺15, Hig15q, Hig15u, Ste15b, Win15].
Approach [Gra15]. **Approximation** [Cuy15]. **Arithmetic** [Hig15h]. **Astronomy** [Saa15a]. **Asymptotics** [Mar15a, Mil15].
Attitudes [Gri15c]. **Automatic** [Gri15a]. **Avatars** [KR15].

Title word cross-reference

N [Saa15a, Yin15]. ***W*** [CJ15].

-Body [Saa15a, Yin15].

Adaptation [KR15]. **Aided** [Tuc15a].
Aircraft [Cha15a]. **Airport** [Lio15].
Algebra [Bro15, Hig15o]. **Algebraic** [Sot15]. **Algorithms** [Hig15b]. **Analysis** [CS15a, Hig15o, Kam15a, Mar15f, Mor15, ØS15, Tuc15a, Tuc15b]. **Applications** [Bro15, Bud15, ØS15, Str15a]. **Applied** [BB15, BGSS15, Hig15a, Hig15j, Hig15m,

Baggage [Lio15]. **Ball** [Arn15]. **Bayesian** [Hig15a]. **Beliefs** [Gri15c]. **Benford** [Hil15].
Bessel [Mar15b]. **Bifurcation** [Gle15a].
Big [Ach15b]. **Biology** [Nie15a].
Biomechanics [Jen15]. **Black** [Hig15c].
Body [Saa15a, Yin15]. **Book** [Ste15a].
Boundary [Mar15c]. **Bubbles** [Pro15].
Buildings [BBC15]. **Burgers** [Mar15d].

Cahn [NC15]. **Calculations** [Can15].
Calculus [FL15]. **Canonical** [Hig15l].
Cardiac [Pan15]. **Case** [Fit15]. **Cauchy** [Mar15e]. **Chains** [Mei15a]. **Changing** [Fit15]. **Chaos** [Gle15b]. **Chemical** [Fei15b].
Chinese [xY15]. **Chip** [HHV15]. **Classical**

[Ton15]. **Cloaking** [BL15]. **Color** [Hig15d]. **Combinatorial** [Vyg15]. **Combinatorics** [Win15]. **Communication** [Wil15]. **Companion** [HDG⁺15]. **Complex** [Gle15c, Mar15f]. **Compressed** [Eld15]. **Computation** [Tur15]. **Computational** [Key15a]. **Computer** [Tuc15a]. **Computer-Aided** [Tuc15a]. **Computing** [Don15]. **Conformal** [Cro15a]. **Conservation** [Den15b, Key15b]. **Continuous** [Wri15]. **Continuum** [Jam15]. **Control** [BBC15, Hig15e, RÅ15]. **Convexity** [Hen15]. **Convolution** [HM15]. **Cosmology** [Ell15]. **Counterterrorism** [Gri15c]. **Culture** [Men15].

Dark [Saa15a]. **Data** [Kam15a]. **Decomposition** [Hig15r]. **Delta** [Upt15]. **Design** [HHV15]. **Differences** [Hig15f]. **Differential** [Eva15, HL15, Mei15b, Sül15]. **Differentiation** [Gri15a]. **Diffusion** [Mar15g]. **Digital** [Hig15d]. **Dimensional** [CS15a]. **Dirac** [Den15a]. **Diseases** [BvdD15]. **Divergent** [BH15]. **Dynamical** [Hol15]. **Dynamics** [Bud15, Mof15a, Shu15].

Earth [Shu15, Sni15]. **Economics** [Eke15]. **Effective** [McP15]. **Efficient** [BBC15]. **Einstein** [Mac15]. **Electronic** [Can15]. **Element** [Hig15g]. **Elementary** [dDM15]. **Energy** [BBC15]. **Energy-Efficient** [BBC15]. **Environment** [Fit15]. **Equation** [Ber15, Cha15c, Che15, Den15a, Den15d, Gle15f, Her15, Hig15c, Lau15, Mar15d, Mar15g, Mar15k, Mar15n, NC15]. **Equations** [Cla15, Den15c, Eva15, Gle15d, Gle15g, HL15, Hig15s, Kre15, Mac15, Mar15e, Mar15h, Mar15l, Mei15b, Mof15b, Ray15, Sül15]. **Ergodicity** [Gle15b]. **Euler** [Gle15d, Mar15h]. **Europe** [Est15]. **Evaluating** [dDM15]. **Evolving** [Gri15c]. **Experience** [Est15]. **Experimental** [BB15]. **Fast** [Roc15, Yin15]. **Field** [Mac15]. **Film** [Ber15]. **Financial** [CS15b]. **Finite** [Hig15f, Hig15g]. **Finite-Element** [Hig15g]. **Flame** [Mat15]. **Flight** [Arn15, Wan15]. **Floating** [Hig15h]. **Floating-Point** [Hig15h]. **Flows** [God15]. **Fluid** [Mof15a]. **Foams** [WH15]. **Form** [Hig15l]. **Formation** [Sch15]. **Fourier** [Roc15]. **Framework** [Str15a]. **France** [Est15]. **Function** [CJ15, Fei15a, Mar15i, Upt15]. **Functions** [GV15, Hig15i, Mar15b, Tem15, Upt15, dDM15].

Gamma [Mar15i]. **General** [Ell15, Ste15a]. **Generalized** [Upt15]. **Generation** [Nie15b]. **Geometry** [Gra15, Sot15]. **Ginzburg** [Cha15c]. **Goals** [Hig15j]. **Golf** [Arn15]. **Government** [Est15, xY15]. **Granular** [God15]. **Graph** [DH15, Dav15b, Win15]. **Green's** [Sni15]. **High** [Don15]. **High-Performance** [Don15]. **Hilliard** [NC15]. **History** [BGSS15]. **Homogenization** [San15a]. **Hooke** [Mar15j]. **Hybrid** [Gle15e, Gra15]. **Ice** [Gol15]. **Image** [Sap15]. **Imaging** [CB15, Eps15, Hig15d, Sni15]. **Impact** [Bud15]. **Industrial** [Lev15b]. **Inerters** [Smi15]. **Infectious** [BvdD15]. **Inference** [Hig15a]. **Influence** [Est15, xY15]. **Information** [Ver15]. **Insect** [Wan15]. **Inspires** [Lev15b]. **Integral** [HM15, Kre15]. **Interest** [Ste15a]. **Interval** [Tuc15a, Tuc15b]. **Invariants** [Den15b]. **Inverse** [SS15]. **Inverted** [Ach15a]. **Jordan** [Hig15l]. **Kinetic** [VM15]. **Kit** [McK15]. **Knotting** [Buc15]. **Korteweg** [Her15]. **Krylov** [Sim15]. **Lagrange** [Gle15d]. **Lambert** [CJ15].

Landau [Cha15c]. **Language** [Hig15m]. **Languages** [Hig15q]. **Laplace** [Mar15k]. **Law** [Hil15, Mar15j]. **Laws** [Den15b, Key15b]. **Layer** [Mar15c]. **Level** [San15b]. **Linear** [Hig15o, Wri15]. **Linking** [Buc15]. **Location** [BBC15]. **Logistic** [Gle15f]. **Lorenz** [Gle15g]. **Lyapunov** [Hig15s].

Macromolecules [Buc15]. **Magnetohydrodynamics** [Hug15]. **Making** [Fit15]. **Manifolds** [Den15e]. **Many** [Str15a]. **Mapping** [Cro15a]. **Markov** [Mei15a]. **Mathematical** [DS15, Eke15, Erm15, Gow15, Hig15j, Jen15, Lay15, Lev15b, Sap15]. **Mathematician** [Est15]. **Mathematicians** [xY15]. **Mathematics** [BB15, BGSS15, CS15b, Fit15, Gol15, Hig15a, Hig15m, HDG⁺15, Hig15q, Hig15u, KR15, Lev15b, Men15, Ste15a, Ste15b]. **Mathieu** [GV15]. **Matrices** [Hig15i]. **Matrix** [Hig15o, Kea15]. **Matter** [Kam15b, Men15, Saa15a]. **Max** [Bro15]. **Max-Plus** [Bro15]. **Maxwell** [Den15c]. **Mechanics** [Fre15, Gri15b, Jam15, Ton15]. **Mediated** [Men15]. **Medical** [Eps15]. **Medium** [McP15]. **Method** [Hig15g, Ray15, San15b, Yin15]. **Methods** [Hig15n]. **Mining** [Kam15a, MB15]. **Model** [Ben15]. **Modeling** [Gra15, LeV15a, Lev15b, McK15, Pan15, San15c, Tur15]. **Modern** [Alo15]. **Multipole** [Yin15]. **Multiscale** [San15c].

Navier [Mof15b]. **Network** [Mor15]. **Networks** [Gri15c, Wil15]. **Neuroscience** [Erm15]. **Newton's** [Ray15]. **Noise** [Cha15a]. **Nonlinear** [Ray15, Wri15]. **Nonsmooth** [Bud15]. **Number** [Nie15b]. **Numeric** [Gra15]. **Numerical** [HL15, Haw15, Hig15o, Lyn15, Sül15]. **Optics** [Alo15]. **Optimal** [BBC15].

Optimization [Vyg15, Wri15]. **Ordinary** [HL15, Mei15b]. **Orthogonal** [Hig15p]. **Pages** [GC15]. **Painlevé** [Cla15]. **Paper** [Hig15k]. **Partial** [Eva15, Sül15]. **Pattern** [Sch15]. **Pendulums** [Ach15a]. **Performance** [Don15]. **Personal** [Est15]. **Perturbation** [Mil15]. **Phenomena** [Mar15o]. **Physics** [Can15]. **Physiology** [Lay15]. **Picture** [Ach15b]. **Plus** [Bro15]. **Point** [Hig15h]. **Policy** [Cro15b]. **Polynomials** [Hig15p]. **Popular** [Men15]. **Portfolio** [BLN15]. **Prediction** [Lyn15]. **Pregnancy** [McK15]. **Princeton** [HDG⁺15]. **Principle** [Hig15t]. **Problem** [Coo15, Saa15a, Yin15]. **Problems** [SS15]. **Processing** [Gra15, MP15, Sap15]. **Programming** [Hig15q, Wri15]. **Projects** [Tur15]. **Proofs** [Tuc15a]. **Propagation** [Mat15].

Quantification [MW15]. **Quantum** [Gri15b].

Radar [CB15]. **Random** [Kea15, Nie15b]. **Random-Matrix** [Kea15]. **Ranking** [GC15]. **Rapidly** [Fit15]. **Rattling** [Bud15]. **Ray** [Lio15]. **Reactions** [Fei15b]. **Read** [Hig15k]. **Reduction** [Ben15]. **Relativity** [Ell15, Haw15]. **Representations** [Men15]. **Reproducible** [DS15]. **Research** [DS15, Fit15, Hig15j]. **Riccati** [Lau15]. **Riemann** [Mar15e]. **Robotics** [Wam15].

Salesman [Coo15]. **Scaling** [CS15a]. **Scholes** [Hig15c]. **Schrödinger** [Den15d]. **Science** [Cro15b, Key15a]. **Sciences** [DS15]. **Screening** [Lio15]. **Sea** [Gol15]. **Searching** [Dav15b]. **Sensing** [Eld15]. **Sensor** [BBC15]. **Series** [BH15]. **Set** [San15b]. **Shallow** [Mar15l]. **Shallow-Water** [Mar15l]. **Shock** [Cha15b]. **Shocks** [Key15c]. **SIAM** [Cro15b]. **Signal** [MP15]. **Singular** [Hig15r]. **Singularities** [Mar15m]. **Sliding**

[Bud15]. **Slipping** [Bud15]. **Social** [Gri15c]. **Soft** [Kam15b]. **Solid** [Can15]. **Solids** [Fre15]. **Solution** [HL15, Hig15n, Sül15]. **Spaces** [Fei15a, Hig15d]. **Special** [Tem15]. **Spectral** [Dav15a]. **Sport** [PQ15]. **Spread** [BvdD15]. **State** [Can15]. **States** [Cro15b]. **Stochastic** [\mathcal{OS} 15]. **Stokes** [Mof15b]. **Structure** [Can15]. **Subspaces** [Sim15]. **Sylvester** [Hig15s]. **Symbolic** [Gra15]. **Symmetric** [Str15a]. **Symmetry** [Ste15b]. **System** [Shu15]. **Systems** [Gle15c, Gle15e, Hol15, Nie15a, Saa15b].

Tail [BH15]. **Taming** [BH15]. **Tasks** [Lev15b]. **Teach** [Str15b]. **Ten** [KR15]. **Tensors** [Den15e]. **Testing** [McK15]. **Text** [MB15]. **Theorem** [Sni15]. **Theories** [McP15]. **Theory** [BLN15, Cuy15, Dav15a, DH15, Gle15a, Kea15, Mil15, RÅ15, Ver15, VM15, Win15]. **These** [Men15]. **Thin** [Ber15]. **Thin-Film** [Ber15]. **Tomography** [Lio15]. **Transform** [Roc15]. **Transforms** [HM15]. **Traveling** [Coo15]. **Tricomi** [Che15]. **Tsunami** [LeV15a]. **Turbulence** [Hun15].

U.K. [Fit15]. **Uncertainty** [MW15]. **Understand** [Hig15k]. **United** [Cro15b]. **Using** [Sni15].

Value [Hig15r]. **Variational** [Hig15t]. **Variations** [FL15]. **via** [Tuc15a]. **View** [Hig15q]. **Vishnu** [KR15]. **Visualization** [PJ15]. **Voting** [Saa15b]. **Vries** [Her15].

Water [Mar15l]. **Wave** [Mar15n, Mar15o]. **Waves** [Cha15b]. **Weather** [Lyn15]. **Web** [GC15]. **Workflow** [Hig15v]. **Write** [Ste15a]. **Writing** [Gow15].

X [Lio15]. **X-Ray** [Lio15].

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