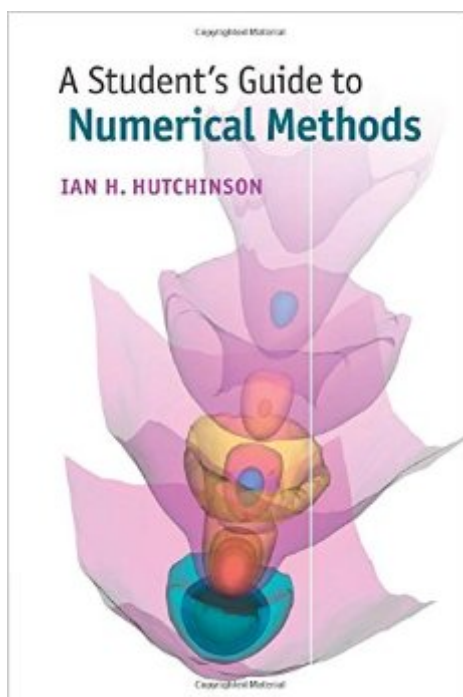


The book was found

A Student's Guide To Numerical Methods



Synopsis

This concise, plain-language guide for senior undergraduates and graduate students aims to develop intuition, practical skills and an understanding of the framework of numerical methods for the physical sciences and engineering. It provides accessible self-contained explanations of mathematical principles, avoiding intimidating formal proofs. Worked examples and targeted exercises enable the student to master the realities of using numerical techniques for common needs such as solution of ordinary and partial differential equations, fitting experimental data, and simulation using particle and Monte Carlo methods. Topics are carefully selected and structured to build understanding, and illustrate key principles such as: accuracy, stability, order of convergence, iterative refinement, and computational effort estimation. Enrichment sections and in-depth footnotes form a springboard to more advanced material and provide additional background. Whether used for self-study, or as the basis of an accelerated introductory class, this compact textbook provides a thorough grounding in computational physics and engineering.

Book Information

Paperback: 216 pages

Publisher: Cambridge University Press; Student edition (June 24, 2015)

Language: English

ISBN-10: 1107479509

ISBN-13: 978-1107479500

Product Dimensions: 6 x 0.4 x 9 inches

Shipping Weight: 13.9 ounces (View shipping rates and policies)

Average Customer Review: 4.0 out of 5 stars [See all reviews](#) (1 customer review)

Best Sellers Rank: #605,750 in Books (See Top 100 in Books) #46 in [Books > Science & Math > Mathematics > Matrices](#) #85 in [Books > Engineering & Transportation > Engineering > Reference > Measurements](#) #395 in [Books > Science & Math > Physics > Mathematical Physics](#)

Customer Reviews

Excellent resource for the beginner. It has a very nice choice of topics, and it is well written.

[Download to continue reading...](#)

Numerical Techniques for Direct and Large-Eddy Simulations (Chapman & Hall/CRC Numerical Analysis and Scientific Computing Series) A Student's Guide to Numerical Methods FORTRAN 77 and Numerical Methods for Engineers and Scientists Traffic Flow Theory: Characteristics,

Experimental Methods, and Numerical Techniques Partial Differential Equations: Analytical and Numerical Methods, Second Edition Stochastic Models, Information Theory, and Lie Groups, Volume 2: Analytic Methods and Modern Applications (Applied and Numerical Harmonic Analysis) An Introduction to Numerical Methods and Analysis Numerical Methods for Scientists and Engineers (Dover Books on Mathematics) Numerical Methods: Design, Analysis, and Computer Implementation of Algorithms Numerical Analysis for Engineers: Methods and Applications, Second Edition (Textbooks in Mathematics) Numerical Partial Differential Equations: Finite Difference Methods (Texts in Applied Mathematics) Numerical Methods for Fluid Dynamics: With Applications to Geophysics (Texts in Applied Mathematics) Riemann Solvers and Numerical Methods for Fluid Dynamics: A Practical Introduction Numerical Methods for Engineers A First Course in Numerical Methods (Computational Science and Engineering) High Throughput Screening: Methods and Protocols (Methods in Molecular Biology) (Methods in Molecular Biology, 190) Selected Unsolved Problems in Coding Theory (Applied and Numerical Harmonic Analysis) Modern Fortran Explained (Numerical Mathematics and Scientific Computation) Numerical Recipes Example Book (FORTRAN) 2nd Edition Introduction to the Numerical Modeling of Groundwater and Geothermal Systems: Fundamentals of Mass, Energy and Solute Transport in Poroelastic Rocks (Multiphysics Modeling)

[Dmca](#)