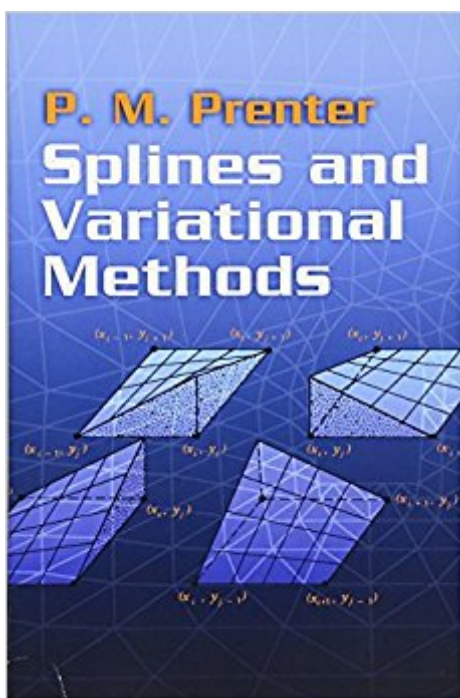


The book was found

Splines And Variational Methods (Dover Books On Mathematics)



Synopsis

One of the clearest available introductions to variational methods, this text requires only a minimal background in calculus and linear algebra. Its self-contained treatment explains the application of theoretic notions to the kinds of physical problems that engineers regularly encounter. The text's first half concerns approximation theoretic notions, exploring the theory and computation of one- and two-dimensional polynomial and other spline functions. Later chapters examine variational methods in the solution of operator equations, focusing on boundary value problems in one and two dimensions. Additional topics include least squares and other Galerkin methods. Many helpful definitions, examples, and exercises appear throughout the book. A classic reference in spline theory, this volume will benefit experts as well as students of engineering and mathematics.

Book Information

Series: Dover Books on Mathematics

Paperback: 334 pages

Publisher: Dover Publications; 2008 edition (December 18, 2008)

Language: English

ISBN-10: 0486469026

ISBN-13: 978-0486469027

Product Dimensions: 6.1 x 0.7 x 9.1 inches

Shipping Weight: 15.2 ounces (View shipping rates and policies)

Average Customer Review: 5.0 out of 5 stars 1 customer review

Best Sellers Rank: #1,394,629 in Books (See Top 100 in Books) #102 in [Books > Science & Math > Mathematics > Applied > Vector Analysis](#) #1142 in [Books > Science & Math > Mathematics > Mathematical Analysis](#)

Customer Reviews

One of the clearest available introductions to variational methods, this text requires only a minimal background in calculus and linear algebra. Its self-contained treatment explains the application of theoretic notions to the kinds of physical problems that engineers regularly encounter. The text's first half concerns approximation theoretic notions, exploring the theory and computation of one- and two-dimensional polynomial and other spline functions. Later chapters examine variational methods in the solution of operator equations, focusing on boundary value problems in one and two dimensions. Additional topics include least squares and other Galerkin methods. Many helpful

definitions, examples, and exercises appear throughout the book. A classic reference in spline theory, this volume will benefit experts as well as students of engineering and mathematics. Dover (2008) unabridged republication of the edition published by John Wiley & Sons, Inc., New York, 1975. 336pp. 6 1/8 x 9 1/4. Paperbound. ALSO AVAILABLE Introduction to Numerical Analysis, F. B. Hildebrand. 669pp. 5 3/8 x 8 1/2. 0-486-65363-3 The Finite Element Method, Thomas J. R. Hughes. 672pp. 6 1/2 x 9 1/4. 0-486-41181-8 Finite Elements and Approximation, O. C. Zienkiewicz and K. Morgan. 352pp. 5 3/8 x 8 1/2. 0-486-45301-4 For current price information write to Dover Publications, or log on to www.doverpublications.com and see every Dover book in print.

Very good engineering oriented examination of Lagrange and Hermite polynomials leading up to splines including their uses in collocation and the Rayleigh-Ritz finite element method. Includes mesh-generation for two-dimensional boundary value problems and interpolations. Too bad this author only wrote this book. Lots of examples and pictures.

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

Splines and Variational Methods (Dover Books on Mathematics) Tensors, Differential Forms, and Variational Principles (Dover Books on Mathematics) Mechanics of Structures: Variational and Computational Methods Variational Methods in Image Processing (Chapman & Hall/CRC Mathematical and Computational Imaging Sciences Series) Finite-Dimensional Variational Inequalities and Complementarity Problems (Springer Series in Operations Research and Financial Engineering) Numerical Methods for Scientists and Engineers (Dover Books on Mathematics) Chebyshev and Fourier Spectral Methods: Second Revised Edition (Dover Books on Mathematics) Mathematical Methods in the Theory of Queuing (Dover Books on Mathematics) Hilbert Space Methods in Partial Differential Equations (Dover Books on Mathematics) Modern Methods in Topological Vector Spaces (Dover Books on Mathematics) READING ORDER: TAMI HOAG: BOOKS LIST OF THE BITTER SEASON, KOVAC/LISKA BOOKS, HENNESSY BOOKS, QUAID HORSES, DOUCET BOOKS, DEER LAKE BOOKS, ELENA ESTES BOOKS, OAK KNOLL BOOKS BY TAMI HOAG Mathematics and the Imagination (Dover Books on Mathematics) Mathematics for Quantum Mechanics: An Introductory Survey of Operators, Eigenvalues, and Linear Vector Spaces (Dover Books on Mathematics) The Nature and Power of Mathematics (Dover Books on Mathematics) Mathematics and the Physical World (Dover Books on Mathematics) Undecidable Theories: Studies in Logic and the Foundation of Mathematics (Dover Books on Mathematics) One Hundred Problems in Elementary Mathematics (Dover Books on Mathematics) Mathematics for the Nonmathematician (Dover Books on Mathematics) Understanding Infinity: The Mathematics of

Infinite Processes (Dover Books on Mathematics) Concepts of Modern Mathematics (Dover Books on Mathematics)

[Contact Us](#)

[DMCA](#)

[Privacy](#)

[FAQ & Help](#)