

<<偏微分方程>>

图书基本信息

书名：<<偏微分方程>>

13位ISBN编号：9787302099802

10位ISBN编号：7302099804

出版时间：2004-12

出版时间：清华大学出版社

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页数：420

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内容概要

This book has evolved from a two-term graduate course in partial differential equations which I have taught at Northeastern University many times since 1980. The first term is intended to give the student a basic and classical introduction to the subject, including first-order equations by the method of characteristics and linear second-order equations which arise in mathematical physics: the wave equation, Laplace equation, and heat equation. All of this material is more than adequately covered by many textbooks which are readily available. The second term, however, is intended to introduce the student to a wide variety of more modern methods, especially the use of functional analysis, which has characterized much of the recent development of partial differential equations. This latter material is not as readily available, except in a number of specialized reference books. This textbook is intended to bridge this gap by providing the student with a basic introduction to the subject and an exposure to some of the more modern methods.

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书籍目录

Chapter 1 First-Order Equations 1.1 The Cauchy Problem for Quasilinear Equations 1.2 Weak Solutions for Quasilinear Equations 1.3 General Nonlinear Equations 1.4 Concluding remarks on First-Order Equations Chapter 2 Principles for Higher-Order Equations 2.1 The Cauchy Problem 2.2 Second-Order Equations in Two Variables 2.3 Linear Equations and Generalized Solutions Chapter 3 The Wave Equation 3.1 The One-Dimensional Wave Equation 3.2 Higher Dimensions 3.3 Energy Methods 3.4 Lower-order Terms Chapter 4 The Laplace Equation 4.1 Introduction to the Laplace Equation 4.2 Potential Theory and Green's Functions 4.3 General Existence Theory 4.4 Eigenvalues of the Laplacian Chapter 5 The Heat Equation 5.1 The Heat Equation in a Bounded Domain 5.2 The Pure Initial Value Problem 5.3 Regularity and Similarity Chapter 6 Linear Functional Analysis 6.1 Function Spaces and Linear Operators 6.2 Application to the Dirichlet Problem 6.3 Duality and Compactness 6.4 Sobolev Imbedding Theorems 6.5 Generalizations and Refinements Chapter 7 Differential Calculus Methods Chapter 8 Linear Elliptic Theory Chapter 9 Two Additional Methods Chapter 10 Systems of Conservation Laws Chapter 11 Linear and Nonlinear Diffusion Chapter 12 Linear and Nonlinear Waves Chapter 13 Nonlinear Elliptic Equations

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