

<<微分方程及边值问题>>

图书基本信息

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内容概要

本书以一些模型问题为背景，借助于数学软件Maple，Mathematica及MATLAB，利用符号运算、图像表示和数值解法等手段，系统地介绍了（线性与非线性）微分方程的基本概念和基本方法。

通过40多个实际模型的讨论，使读者对建模、求解、分析解所反映的性质这一过程进行全面的了解。利用Maple，Mathematica及MATLAB在图形显示、符号计算、数值计算方面的功能，定性地分析了微分方程解的性质，700余幅图将方向场、解曲线、相平面等概念形象直观地表示出来。

另外，书中选配了1900余道习题供读者使用。

本书可供学习数学建模或微分方程的学生作为参考书，对于从事计算与建模的科技人员，本书也具有很高的价值。

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书籍目录

Application Modules Preface
 CHAPTER 1 First-Order Differential Equations 1.1 Differential Equations and Mathematical Models 1.2 Integrals as General and Particular Solutions 1.3 Slope Fields and Solution Curves 1.4 Separable Equations and Applications 1.5 Linear First-Order Equations 1.6 Substitution Methods and Exact Equations
 CHAPTER 2 Mathematical Models and Numerical Methods 2.1 Population Models 2.2 Equilibrium Solutions and Stability 2.3 Acceleration-Velocity Models 2.4 Numerical Approximation: Euler's Method 2.5 A Closer Look at the Euler Method 2.6 The Runge-Kutta Method
 CHAPTER 3 Linear Equations of Higher Order 3.1 Introduction: Second-Order Linear Equations 3.2 General Solutions of Linear Equations 3.3 Homogeneous Equations with Constant Coefficients 3.4 Mechanical Vibrations 3.5 Nonhomogeneous Equations and Undetermined Coefficients 3.6 Forced Oscillations and Resonance 3.7 Electrical Circuits 3.8 Endpoint Problems and Eigenvalues
 CHAPTER 4 Introduction to Systems of Differential Equations 4.1 First-Order Systems and Applications 4.2 The Method of Elimination 4.3 Numerical Methods for Systems
 CHAPTER 5 Linear Systems of Differential Equations 5.1 Matrices and Linear Systems 5.2 The Eigenvalue Method for Homogeneous Systems 5.3 Second-Order Systems and Mechanical Applications 5.4 Multiple Eigenvalue Solutions 5.5 Matrix Exponentials and Linear Systems 5.6 Nonhomogeneous Linear Systems
 CHAPTER 6 Nonlinear Systems and Phenomena
 CHAPTER 7 Laplace Transform Methods
 CHAPTER 8 Power Series Methods
 CHAPTER 9 Fourier Series Methods
 CHAPTER 10 Eigenvalues and Boundary Value Problems
 References for Further Study
 Appendix: Existence and Uniqueness of Solutions
 Answers to Selected Problems
 Index

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