

<<经济生态与环境科学中的数学模>>

图书基本信息

书名：<<经济生态与环境科学中的数学模型(影印版)23/国外数学名著系列>>

13位ISBN编号：9787030166791

10位ISBN编号：7030166795

出版时间：2006-1

出版时间：科学

作者：纳塔利

页数：208

版权说明：本站所提供下载的PDF图书仅提供预览和简介，请支持正版图书。

更多资源请访问：<http://www.tushu007.com>

<<经济生态与环境科学中的数学模>>

内容概要

《经济、生态与环境科学中的数学模型（影印版）》涵盖各种著名模型：经典模型（如柯布一道格拉斯生产函数模型，列昂惕夫投入产出分析，Verhulst-Pearl和Lotka-Volterra种群模型，等等）、世界动力学模型、切尔诺贝利核泄漏之后的水污染传播模型。

本书采用独特的块-块模式进行模型分析，阐明如何通过描述基本实际过程的单个部分（块）建立这些模型，为实用模型的设计提供理论洞察。

《经济、生态与环境科学中的数学模型（影印版）》特别讨论了环境影响下的区域经济—生态相互作用和技术变革的层次型建模。

《经济、生态与环境科学中的数学模型（影印版）》还论述某些数学论题，如离散和连续模型、微分积分方程、优化和分支分析及其他相关问题。

本书在内容上是自含的，适合初学者使用，其精良题材适用于研究生的数学模型课程。

<<经济生态与环境科学中的数学模>>

作者简介

作者：(加拿大)纳塔利 等

<<经济生态与环境科学中的数学模>>

书籍目录

List of Figures Preface 1. Principles of Model Construction 1.1 Role and Place of Mathematical Models in Economic-Ecological Control 1.2 Analysis of Economic-Ecological Control Problems 1.3 Choice of Mathematical Means for Modelling 1.4 Models of Controllable Dynamical Systems Part I. MODELS OF CONTROLLED ECONOMIC SYSTEMS 2. Aggregate Models of Economic Dynamics 2.1 Production Functions and Their Types 2.2 Basic Model of Economic Dynamics 2.3 Shell Model. Optimization Analysis 2.4 Aggregate Model with Renewable Labour Resource 3. Modelling of Technological Change 3.1. Basic Models of Technological Change (TC) 3.2. Autonomous Technological Change and Its Types 3.3. Solow and Shell Models With Autonomous TC 3.4. One-Sector Models With Endogenous TC 3.5. Models Of Technological Innovations 4. Multi-Sector Linear Economic Models 4.1. Leontief Model (" Input—Output " Model) 4.2. Dynamic Leontief Balance 4.3. Von Neumann-Gale Model 4.4. Characteristics Of Multi-Sector Models 4.5. Turnpike Properties 5. Models of Controlled Technological Renovation 5.1. Solow Integral Model 5.2. Kantorovich One-Sector Macroeconomic Model 5.3. Models of Embodied TC in Market Economics 5.4. Integral Production Function 5.5. Glushkov Two-Sector Macroeconomic Model 5.6. Multi-Sector Integral Model 5.7. Differential Models Of Equipment Replacement 6. Optimization Models Of Economic Renovation 6.1. Basic One-Sector Model and Optimization Problem 6.2. Other Optimization Problems 6.3. Two-Sector Model Of Economic Self-Development Part II. MODELS IN ECOLOGY AND ENVIRONMENT 7. Mathematical Models of Biological Communities 7.1 Dynamic Models of Single Species Populations 7.2 Dynamic Models of Two Species Communities 7.3 Age-Dependent Models of Population Dynamics 8. Models Of Air Pollution Propagation 8.1. Basic Notions 8.2. Simple Models Of Ingredient Transport And Diffusion 8.3. The Structure Of Practical Models 9. Models Of Water Pollution Propagation 9.1. Classification Of Models 9.2. Models Of Adsorption And Sedimentation 9.3 Three-Dimensional Model 9.4 Two-Dimensional Horizontal Model. Analysis Of Stationary Flow 9.5. One-Dimensional and Analytical Models 9.6. Zero-Dimensional (Chamber) Models 9.7. On Modeling Of Waste Migration in Underground Water And Soil Part III. MODELS OF ECONOMIC-ECOLOGICAL SYSTEMS 10. Modeling Of Environmental Impact and Resource Extraction 10.1. Aggregate Models with Non-Renewable Resources 10.2. Aggregate Models with Environment State Control 11. Models Of World Dynamics : Structure and Results 11.1. Forrester Global Model 11.2. Modifications of Forrester Model 11.3. Mesarovic-Pestel Model 11.4. Leontief-Ford Model 12. Models for Pollution Propagation Control In Air And Water 12.1. Models for Plant Allocation Control 12.2. Control of Plant's Pollution Intensity 12.3. Control Of Water Contamination Propagation

<<经济生态与环境科学中的数学模>>

编辑推荐

《经济、生态与环境科学中的数学模型(影印版)》适合研究生、广大数学工作者及其他科研人员阅读

版权说明

本站所提供下载的PDF图书仅提供预览和简介, 请支持正版图书。

更多资源请访问:<http://www.tushu007.com>