

<<混沌动力系统的概念和结果>>

图书基本信息

书名：<<混沌动力系统的概念和结果>>

13位ISBN编号：9787030313898

10位ISBN编号：7030313895

出版时间：2011-6

出版时间：科学

作者：科莱

页数：230

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>

<<混沌动力系统的概念和结果>>

内容概要

《混沌动力系统的概念和结果》介绍了混沌动力系统的概念和其拓扑性质、双曲率、不变测度、熵和其他概率结果。

<<混沌动力系统的概念和结果>>

书籍目录

- 1 A Basic Problem
- 2 Dynamical Systems
 - 2.1 Basics of Mechanical Systems
 - 2.2 Formal Definitions
 - 2.3 Maps
 - 2.4 Basic Examples of Maps
 - 2.5 More Advanced Examples
 - 2.6 Examples of Flows
- 3 Topological Properties
 - 3.1 Coding, Kneading
 - 3.2 Topological Entropy
 - 3.2.1 Topological, Measure, and Metric Spaces
 - 3.2.2 Some Examples
 - 3.2.3 General Theory of Topological Entropy
 - 3.2.4 A Metric Version of Topological Entropy
 - 3.3 Attractors
- 4 Hyperbolicity
 - 4.1 Hyperbolic Fixed Points
 - 4.1.1 Stable and Unstable Manifolds
 - 4.1.2 Conjugation
 - 4.1.3 Resonances
 - 4.2 Invariant Manifolds
 - 4.3 Nonwandering Points and Axiom A Systems
 - 4.4 Shadowing and Its Consequences
 - 4.4.1 Sensitive Dependence on Initial Conditions
 - 4.4.2 Complicated Orbits Occur in Hyperbolic Systems
 - 4.4.3 Change of Map
 - 4.5 Construction of Markov Partitions
- 5 Invariant Measures
 - 5.1 Overview
 - 5.2 Details
 - 5.3 The Perron-Frobenius Operator
 - 5.4 The Ergodic Theorem
 - 5.5 Convergence Rates in the Ergodic Theorem
 - 5.6 Mixing and Decay of Correlations
 - 5.7 Physical Measures
 - 5.8 Lyapunov Exponents
- 6 Entropy
 - 6.1 The Shannon-McMillan-Breiman Theorem
 - 6.2 Sinai-Bowen-Ruelle Measures
 - 6.3 Dimensions
- 7 Statistics and Statistical Mechanics
 - 7.1 The Central Limit Theorem
 - 7.2 Large Deviations
 - 7.3 Exponential Estimates

<<混沌动力系统的概念和结果>>

7.3. I Concentration

7.4 The Formalism of Statistical Mechanics

7.5 Multifractal Measures

8 Other Probabilistic Results

8.1 Entrance and Recurrence Times

8.2 Number of Visits to a Set

8.3 Extremes

8.4 Quasi-Invariant Measures

8.5 Stochastic Perturbations

9 Experimental Aspects

9.1 Correlation Functions and Power Spectrum

9.2 Resonances

9.3 Lyapunov Exponents

9.4 Reconstruction

9.5 Measuring the Lyapunov Exponents

9.6 Measuring Dimensions

9.7 Measuring Entropy

9.8 Estimating the Invariant Measure

References

Index

<<混沌动力系统的概念和结果>>

编辑推荐

科莱和埃克曼合著的《混沌动力系统的概念和结果（影印版）》是“国外数学名著系列”之一，介绍了混沌动力系统的概念和其拓扑性质、双曲率、不变测度、熵和其他概率结果。适合高等院校数学系研究生、数学科研人员学习参考。

<<混沌动力系统的概念和结果>>

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>