

《概率论与随机过程中的泛函分析！

图书基本信息

书名：《概率论与随机过程中的泛函分析（影印版）》

13位ISBN编号：9787040236064

10位ISBN编号：7040236060

出版时间：2008年03月

出版社：高等教育出版社

作者：博布罗斯基

页数：303 页

版权说明：本站所提供下载的PDF图书仅提供预览和简介以及在线试读，请支持正版图书。

更多资源请访问：www.tushu000.com

《概率论与随机过程中的泛函分析！

内容概要

本书主要包含国外反映近代数学发展的纯数学与应用数学方面的优秀书籍，天元基金邀请国内各个方向的知名数学家参与选题的工作，经专家遴选、推荐而出版。

目录

Preface

1 Preliminaries, notations and conventions

1.1 Elements of topology

1.2 Measure theory

1.3 Functions of bounded variation. Riemann-Stieltjes integral

1.4 Sequences of independent random variables

1.5 Convex functions. Holder and Minkowski inequalities

1.6 The Cauchy equation

2 Basic notions in functional analysis

2.1 Linear spaces

2.2 Banach spaces

2.3 The space of bounded linear operators

3 Conditional expectation

3.1 Projections in Hilbert spaces

3.2 Definition and existence of conditional expectation

3.3 Properties and examples

3.4 The Radon-Nikodym Theorem

3.5 Examples of discrete martingales

3.6 Convergence of self-adjoint operators

3.7 ... and of martingales

4 Brownian motion and Hilbert spaces

4.1 Gaussian families & the definition of Brownian motion

4.2 Complete orthonormal sequences in a Hilbert space

4.3 Construction and basic properties of Brownian motion

4.4 Stochastic integrals

5 Dual spaces and convergence of probability measures

5.1 The Hahn-Banach Theorem

5.2 Form of linear functionals in specific Banach spaces

5.3 The dual of an operator

5.4 Weak and weak* topologies

5.5 The Central Limit Theorem

5.6 Weak convergence in metric spaces

5.7 Compactness everywhere

5.8 Notes on other modes of convergence

6 The Gelfand transform and its applications

6.1 Banach algebras

6.2 The Gelfand transform

6.3 Examples of Gelfand transform

6.4 Examples of explicit calculations of Gelfand transform

6.5 Dense subalgebras of $C(S)$

6.6 Inverting the abstract Fourier transform

6.7 The Factorization Theorem

7 Semigroups of operators and Levy processes

7.1 The Banach-Steinhaus Theorem

《概率论与随机过程中的泛函分析！

- 7.2 Calculus of Banach space valued functions
- 7.3 Closed operators
- 7.4 Semigroups of operators
- 7.5 Brownian motion and Poisson process semigroups
- 7.6 More convolution semigroups
- 7.7 The telegraph process semigroup
- 7.8 Convolution semigroups of measures on semigroups
- 8 Markov processes and semigroups of operators
 - 8.1 Semigroups of operators related to Markov processes
 - 8.2 The Hille-Yosida Theorem
 - 8.3 Generators of stochastic processes
 - 8.4 Approximation theorems
- 9 Appendixes
 - 9.1 Bibliographical notes
 - 9.2 Solutions and hints to exercises
 - 9.3 Some commonly used notations
- References
- Index

《概率论与随机过程中的泛函分析！

精彩短评

- 1、这个好，就喜欢用分析的观点看概率和随机过程

《概率论与随机过程中的泛函分析！

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:www.tushu000.com