

<<随机分析应用导论>>

图书基本信息

书名：<<随机分析应用导论>>

13位ISBN编号：9787506266031

10位ISBN编号：7506266032

出版时间：2004-4

出版人：世界图书出版公司

作者：Fima C Klebaner

页数：321

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>

<<随机分析应用导论>>

内容概要

During the past twenty years, there has been an increasing demand for tools and methods of Stochastic Calculus in various disciplines. One of the greatest demands appears to have come from the growing area of Mathematical Finance where Stochastic Calculus is used for pricing and hedging of financial derivatives, such as options. In Engineering, most popular applications of Stochastic Calculus are in filtering and control theory. In Physics, Stochastic Calculus is used to study the effects of random excitations on various physical phenomena. In Biology, Stochastic Calculus is used to model the effects Of stochastic variability in reproduction and environment on populations.

书籍目录

1 Preliminaries From Calculus 1.1 Continuous and Differentiable Functions 1.2 Right and Left-Continuous Functions 1.3 Variation of a Function 1.4 Riemann Integral 1.5 Stieltjes Integral 1.6 Differentials and Integrals 1.7 Taylor ' s Formula and other results 2 Concepts of Probability Theory 2.1 Discrete Probability Model 2.2 Continuous Probability Model 2.3 Expectation and Lebesgue Integral 2.4 Transforms and Convergence 2.5 Independence and Conditioning 2.6 Stochastic Processes in Continuous Time 3 Basic Stochastic Processes 3.1 Brownian Motion 3.2 Brownian Motion as a Gaussian Process 3.3 Properties of Brownian Motion Paths 3.4 Three Martingales of Brownian Motion 3.5 Markov Property of Brownian Motion 3.6 Exit Times and Hitting Times 3.7 Maximun and Minimun of Brownian Motion 3.8 Distribution of Hitting Times 3.9 Reflection Principlced and Joint Distrbutions 3.10 Zeros of Browinian Motion.Arcsine Law 3.11 Size of Increments of Brownian MoTion 3.12 Brownian Motion in Hight Dimensions4 Borwnian Motion Claculus5 Stochastic Differential Equations6 Diffusion Processes7 Martinglases8 Calculus for Semimartingales9 Pure Jump Processes10 Change of Probability Measure11 Applications in Finace12 Applications in Biology13 Applications on Engineering and PhysicsReferences

<<随机分析应用导论>>

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>