

Ergodic Behavior of Markov Processes

With Applications to Limit Theorems

The general topic of this book is the ergodic behavior of Markov processes. A detailed introduction to methods for proving ergodicity and upper bounds for ergodic rates is presented in the first part of the book, with the focus put on weak ergodic rates, typical for Markov systems with complicated structure. The second part is devoted to the application of these methods to limit theorems for functionals of Markov processes. The book is aimed at a wide audience with a background in probability and measure theory. Some knowledge of stochastic processes and stochastic differential equations helps in a deeper understanding of specific examples.

Contents

Part I: Ergodic Rates for Markov Chains and Processes

Markov Chains with Discrete State Spaces

General Markov Chains: Ergodicity in Total Variation

MarkovProcesseswithContinuousTime

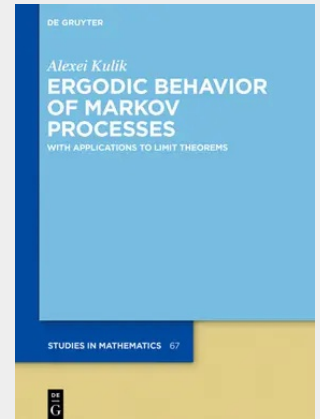
Weak Ergodic Rates

Part II: Limit Theorems

The Law of Large Numbers and the Central Limit Theorem

Functional Limit Theorems

The series is devoted to the publication of monographs and high-level textbooks in mathematics, mathematical methods and their applications. Apart from covering important areas of current interest, a major aim is to make topics of an interdisciplinary nature accessible to the non-specialist. The works in this series are addressed to advanced students and researchers in mathematics and theoretical physics. In addition, it can serve as a guide for lectures and seminars on a graduate level. The series de Gruyter Studies in Mathematics was founded ca. 30 years ago by the late Professor Heinz Bauer and Professor Peter Gabriel with the aim to establish a series of monographs and textbooks of high standard, written by scholars with an international reputation presenting current fields of research in pure and applied mathematics. While the editorial board of the Studies has changed with the years, the aspirations of the Studies are unchanged. In times of rapid growth of mathematical knowledge carefully written monographs and textbooks written by experts are needed more than ever, not least to pave the way for the next generation of mathematicians. In this sense the editorial board and the publisher of the Studies are devoted to continue the Studies as a service to the mathematical community. Please submit any book proposals to Niels Jacob.



149,95 €

140,14 € (zzgl. MwSt.)

Lieferfrist: bis zu 10 Tage

Artikelnummer: 9783110458701

Medium: Buch

ISBN: 978-3-11-045870-1

Verlag: De Gruyter

Erscheinungstermin: 23.11.2017

Sprache(n): Englisch

Auflage: 1. Auflage 2017

Serie: ISSN

Produktform: Gebunden

Gewicht: 581 g

Seiten: 257

Format (B x H): 170 x 240 mm

