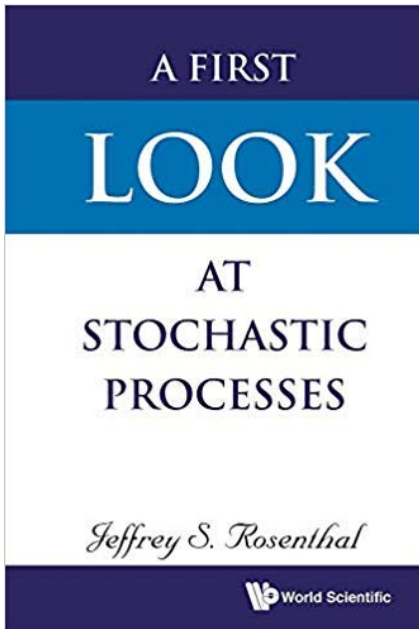


A First Look at Stochastic Processes



About the Book

This textbook introduces the theory of stochastic processes, that is, randomness which proceeds in time. Using concrete examples like repeated gambling and jumping frogs, it presents fundamental mathematical results through simple, clear, logical theorems and examples. It covers in detail such essential material as Markov chain recurrence criteria, the Markov chain convergence theorem, and optional stopping theorems for martingales. The final chapter provides a brief introduction to Brownian motion, Markov processes in continuous time and space, Poisson processes, and renewal theory.

Interspersed throughout are applications to such topics as gambler's ruin probabilities, random walks on graphs, sequence waiting times, branching processes, stock option pricing, and Markov Chain Monte Carlo (MCMC) algorithms.

The focus is always on making the theory as well-motivated and accessible as possible, to allow students and readers to learn this fascinating subject as easily and painlessly as possible.

Author: Jeffrey S. Rosenthal

Publisher: World Scientific
(Distributed exclusively by
Dev Publishers &
Distributors)

Edition: First

Year: 2020

Dimension: 15 x 23 cm

No. of Pages: 212

Weight: 330 gm

ISBN: 9780000988003

Binding: Softcover

Territory: South Asia

Price: Rs 1095