



Leszek Gawarecki, Vidyadhar Mandrekar

Stochastic Differential Equations in Infinite Dimensions

with Applications to Stochastic Partial Differential Equations

Series: Probability and Its Applications

- Most comprehensive coverage of the modern techniques used for solving problems in infinite dimensional stochastic differential equations
- Presents major methods, including compactness, coercivity, monotonicity, in different set-ups
- Provides a broad range of new results and applications

2011, XVI, 291 p.

Printed book

Hardcover

74,99 € | £64.99 | \$89.99

^[1]80,24 € (D) | 82,49 € (A) | CHF

88,50

Softcover

59,99 € | £54.99 | \$74.99

^[1]64,19 € (D) | 65,99 € (A) | CHF

71,00

eBook

50,28 € | £43.99 | \$59.99

^[2]50,28 € (D) | 50,28 € (A) | CHF

56,50

Available from your library or
springer.com/shop

MyCopy ^[3]

Printed eBook for just

€ | \$ 24.99

springer.com/mycopy

The systematic study of existence, uniqueness, and properties of solutions to stochastic differential equations in infinite dimensions arising from practical problems characterizes this volume that is intended for graduate students and for pure and applied mathematicians, physicists, engineers, professionals working with mathematical models of finance. Major methods include compactness, coercivity, monotonicity, in a variety of set-ups. The authors emphasize the fundamental work of Gikhman and Skorokhod on the existence and uniqueness of solutions to stochastic differential equations and present its extension to infinite dimension. They also generalize the work of Khasminskii on stability and stationary distributions of solutions. New results, applications, and examples of stochastic partial differential equations are included. This clear and detailed presentation gives the basics of the infinite dimensional version of the classic books of Gikhman and Skorokhod and of Khasminskii in one concise volume that covers the main topics in infinite dimensional stochastic PDE's. By appropriate selection of material, the volume can be adapted for a 1- or 2-semester course, and can prepare the reader for research in this rapidly expanding area.

Order online at springer.com / or for the Americas call (toll free) 1-800-SPRINGER / or email us at: customerservice@springernature.com. / For outside the Americas call +49 (0) 6221-345-4301 / or email us at: customerservice@springernature.com.

The first € price and the £ and \$ price are net prices, subject to local VAT. Prices indicated with [1] include VAT for books; the €(D) includes 7% for Germany, the €(A) includes 10% for Austria. Prices indicated with [2] include VAT for electronic products; 19% for Germany, 20% for Austria. All prices exclusive of carriage charges. Prices and other details are subject to change without notice. All errors and omissions excepted. [3] No discount for MyCopy.

