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; 1.10 The Kolmogorov Backward Equation
1.11 Figures of Merit. Diffusion Modelling of High-Dimensional Systems 1.12 Common Analytical Techniques to Determine Probability Densities of Diffusion Processes. The Kolmogorov Forward Equation
; 1.12.1 Probability density ; 1.12.2 Invariant probability density
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Sommario/riassunto

This book is the first one devoted to high-dimensional (or large-scale) diffusion stochastic processes (DSPs) with nonlinear coefficients. These processes are closely associated with nonlinear Ito's stochastic ordinary differential equations (ISODEs) and with the space-discretized versions of nonlinear Ito's stochastic partial integro-differential equations. The latter models include Ito's stochastic partial differential equations (ISPDEs). The book presents the new analytical treatment which can serve as the basis of a combined, analytical-numerical approach to greater computational efficie