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Nota di contenuto	Preface and Introduction -- Notation -- Ergodicity for Functional Stochastic Equations under Dissipativity -- Ergodicity for Functional Stochastic Equations without Dissipativity -- Convergence Rate of Euler-Maruyama Scheme for FSDEs -- Large Deviations for FSDEs -- Stochastic Interest Rate Models with Memory: Long-Term Behavior -- Existence and Uniqueness -- Markov Property and Variation of Constants Formulas.
Sommario/riassunto	This brief treats dynamical systems that involve delays and random disturbances. The study is motivated by a wide variety of systems in real life in which random noise has to be taken into consideration and the effect of delays cannot be ignored. Concentrating on such systems that are described by functional stochastic differential equations, this work focuses on the study of large time behavior, in particular, ergodicity. This brief is written for probabilists, applied mathematicians, engineers, and scientists who need to use delay systems and functional stochastic differential equations in their work. Selected topics from the brief can also be used in a graduate level topics course in probability and stochastic processes.