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	Sommario/riassunto	Ergodic theorems are a cornerstone of the theory of stochastic processes and their applications. This volume delves into ergodic theorems with explicit power and exponential upper bounds for convergence rates, focusing on Markov chains, renewal processes, and regenerative processes. The book offers a powerful and constructive probabilistic framework by employing the elegant coupling method in conjunction with test functions. Theoretical findings are illustrated with applications to perturbed stochastic networks, alternating Markov

processes, risk processes, quasi-stationary distributions, and the renewal theorem, all of which feature explicit convergence rate bounds. Many results presented here are groundbreaking, appearing in publication for the first time. This is the first volume of a two-volume monograph dedicated to ergodic theorems. While this volume centers on Markovian and regenerative models, the second volume extends the scope to semi-Markov processes and multi-alternating regenerative processes with semi-Markov modulation. Designed with researchers and advanced students in mind, the content is thoughtfully structured by complexity, making it suitable for self-study or as a resource for upper-level coursework. Each chapter is self-contained and complemented by a comprehensive bibliography, ensuring its value as a long-lasting reference. An essential resource for theoretical and applied research, this book significantly contributes to the field of stochastic processes and will remain a key reference for years to come.