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Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Contents -- Preface -- Finite Markov Chains -- Finite Markov Chains II -- Branching Processes -- Renewal Theory -- Poisson Process -- Birth and Death Processes I -- Birth and Death Processes II -- Continuous-Time Markov Chains -- Brownian Motion -- Autoregressive Models -- Basic Probability Review -- Maple Programming -- References.
Sommario/riassunto	The book presents an introduction to Stochastic Processes including Markov Chains, Birth and Death processes, Brownian motion and Autoregressive models. The emphasis is on simplifying both the underlying mathematics and the conceptual understanding of random processes. In particular, non-trivial computations are delegated to a computer-algebra system, specifically Maple (although other systems can be easily substituted). Moreover, great care is taken to properly introduce the required mathematical tools (such as difference equations and generating functions) so that even students with only a basic mathematical background will find the book self-contained. Many detailed examples are given throughout the text to facilitate and reinforce learning. Jan Vrbik has been a

Professor of Mathematics and Statistics at Brock University in St Catharines, Ontario, Canada, since 1982. Paul Vrbik is currently a PhD candidate in Computer Science at the University of Western Ontario in London, Ontario, Canada.