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Titolo	Random Walk and Diffusion Models : An Introduction for Life and Behavioral Scientists / / by Wolf Schwarz
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Nota di contenuto	Introduction -- Discrete random Walks -- The Correlated Random Walk -- The Diffusion Limit -- The Wiener process -- More general Diffusion Processes -- Differential Equations for Probabilities -- Applications.
Sommario/riassunto	This book offers an accessible introduction to random walk and diffusion models at a level consistent with the typical background of students in the life sciences. In recent decades these models have become widely used in areas far beyond their traditional origins in physics, for example, in studies of animal behavior, ecology, sociology, sports science, population genetics, public health applications, and human decision making. Developing the main formal concepts, the book provides detailed and intuitive step-by-step explanations, and moves smoothly from simple to more complex models. Finally, in the last chapter, some successful and original applications of random walk and diffusion models in the life and behavioral sciences are illustrated in detail. The treatment of basic techniques and models is consolidated

and extended throughout by a set of carefully chosen exercises.