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Titolo	Very First Steps in Random Walks : The Power of Combinatorial Methods and Generating Functions // by Norbert Henze
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Nota di contenuto	1 Introduction -- 2 The Simple Symmetric Random Walk on $Z$ -- 3 Bridges: The Tied-down Random Walk -- 4 Asymmetric Random Walks on $Z$ and Related Topics -- 5 Random Walks on the Integer Lattice $Z^d$ -- 6 Outlook -- 7 Tools from Stochastics, Combinatorics, and Analysis -- Solutions to the Exercises -- Bibliography.
Sommario/riassunto	With this book, which is based on the third edition of a book first written in German about random walks, the author succeeds in a remarkably playful manner in captivating the reader with numerous surprising random phenomena and non-standard limit theorems related to simple random walks and related topics. The work stands out with its consistently problem-oriented, lively presentation, which is further enhanced by 100 illustrative images. The text includes 53 self-assessment questions, with answers provided at the end of each chapter. Additionally, 74 exercises with solutions assist in understanding the material deeply. The text frequently engages in concrete model-building, and the resulting findings are thoroughly discussed and interconnected. Students who have tested this work in introductory seminars on stochastics were particularly fascinated by the

interplay of geometric arguments (reflection principle), combinatorics, elementary stochastics, and analysis. The Author Prof. Dr. Norbert Henze is a Professor of Stochastics at the Karlsruhe Institute of Technology (KIT), Institute of Stochastics, Karlsruhe, Germany. His well-established textbook Stochastics for Beginners (Stochastik für Einsteiger) was first published in 1997. This book is a translation of an original German edition. The translation was done with the help of artificial intelligence. A subsequent human revision was done primarily in terms of content, so that the book may read stylistically differently from a conventional translation.

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