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Titolo	Large Deviations in Physics : The Legacy of the Law of Large Numbers / / edited by Angelo Vulpiani, Fabio Cecconi, Massimo Cencini, Andrea Puglisi, Davide Vergni
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Collana	Lecture Notes in Physics, , 0075-8450 ; ; 885
Disciplina	530.0285
Soggetti	Mathematical physics Mechanics Statistical physics Dynamics Applied mathematics Engineering mathematics Theoretical, Mathematical and Computational Physics Classical Mechanics Complex Systems Applications of Mathematics Statistical Physics and Dynamical Systems
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Nota di contenuto	Ergodicity – A Basic Concept -- Large Deviations in Statistical Mechanics: Rigorous and Non-Rigorous -- Large Deviation Techniques for Long-Range Interactions -- Fluctuation-Dissipation and Fluctuation Relations: From Equilibrium to Nonequilibrium Phenomena and Back -- Stochastic Fluctuations in Deterministic Systems -- Large Deviation and Disordered Systems -- Large Deviations in Turbulence -- Ergodicity Breaking Challenges Monte Carlo Methods -- Anomalous Diffusion: Deterministic and Stochastic Perspectives -- The Use of Fluctuation Relations for the Analysis of Free-Energy Landscapes.
Sommario/riassunto	This book reviews the basic ideas of the Law of Large Numbers with its

consequences to the deterministic world and the issue of ergodicity. Applications of Large Deviations and their outcomes to Physics are surveyed. The book covers topics encompassing ergodicity and its breaking and the modern applications of Large deviations to equilibrium and non-equilibrium statistical physics, disordered and chaotic systems, and turbulence.
