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Nota di contenuto	Introduction / Giovanni Gallavotti -- Boltzmann and the end of the mechanistic worldview / Jurgen Renn -- What if Boltzmann had known about quantum mechanics / Elliott H. Lieb -- Entropy, nonequilibrium, chaos and infinitesimals / Giovanni Gallavotti -- From time-symmetric microscopic dynamics to time-asymmetric macroscopic behavior: an overview / Joel L. Lebowitz -- What physical quantities make sense in nonequilibrium statistical mechanics? / David Ruelle -- Boltzmann, ergodic theory, and chaos / Donald S. Ornstein -- 134 years of Boltzmann equation / Carlo Cercignani -- H-theorem and beyond: Boltzmann's entropy in today's mathematics / Cedric Villani -- On the Boltzmann equation for weakly nonlinear wave equations / Herbert Spohn -- Entropy, probability and dynamics / E.G.D. Cohen -- Realizing Boltzmann's dream: computer simulations in modern statistical mechanics / Christoph Dellago, Harald A. Posch -- Statistical properties of the cluster dynamics of the systems of statistical mechanics / Andrei Gabrielov, Vladimir Keilis-Borok, Yakov G. Sinai, Ilya Zaliapin -- Boltzmann and evolution: some basic questions of biology seen with atomistic glasses / Peter Schuster -- Ludwig Boltzmann - the restless prophet / Wolfgang L. Reiter.
Sommario/riassunto	Ludwig Eduard Boltzmann (1844-1906) was an Austrian physicist famous for his founding contributions in the fields of statistical

mechanics and statistical thermodynamics. He was one of the most important advocates for atomic theory when that scientific model was still highly controversial. To commemorate the 100th anniversary of his death in Duino, the International Symposium "Boltzmann's Legacy" was held at the Erwin Schrodinger International Institute for Mathematical Physics in June 2006. This text covers a wide spectrum of topics ranging from equilibrium statistical and nonequilibrium statistical physics, ergodic theory and chaos to basic questions of biology and historical accounts of Boltzmann's work. Besides the lectures presented at the symposium the volume also contains contributions specially written for this occasion. The articles give a broad overview of Boltzmann's legacy to the sciences from the standpoint of some of present day's leading scholars in the field. The book addresses students and researchers in mathematics, physics and the history of science.
