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Nota di contenuto	Time, chaos and the laws of nature -- Natural laws and human prediction -- Comment on Boris Chirikov's paper "Natural laws and human prediction" -- Natural laws and the physics of complex systems comments on the report by B. Chirikov -- Discussion of Boris Chirikov's paper -- Under what transformations are laws invariant? -- Contingency and fundamental laws comment on Paul Weingartner "Under what transformations are laws invariant?" -- Discussion of Paul Weingartner's paper -- The status of determinism in an uncontrollable world -- Discussion of David Miller's paper -- Kinds of unpredictability in deterministic systems -- Discussion of Gerhard Schurz' paper -- Decoherence, determinism and chaos revisited -- Discussion of H. Pierre Noyes' paper -- Photons, billiards and chaos -- Discussion of Pat Suppes' paper -- Chaos: Algorithmic complexity vs. Dynamical instability -- Discussion of Robert Batterman's paper -- On the

foundations of synergetics -- Discussion of Arne Wunderlin's paper.

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Sommario/riassunto

Like relativity and quantum theory chaos research is another prominent concept of 20th century physics that has triggered deep and far-reaching discussions in the philosophy of science. In this volume outstanding scientists discuss the fundamental problems of the concepts of law and of prediction. They present their views in their contributions to this volume, but they also are exposed to criticism in transcriptions of recordings made during discussions and in comments on their views also published in this book. Although all authors assume familiarity with some background in physics they also address the philosophers of science and even a general audience interested in modern science's contribution to a deeper understanding of reality.

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