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Titolo	Measures of Complexity [[electronic resource]] : Proceedings of the Conference, Held in Rome September 30–October 2, 1987 // edited by Luca Peliti, Angelo Vulpiani
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Descrizione fisica	1 online resource (VII, 151 p.)
Collana	Lecture Notes in Physics, , 0075-8450 ; ; 314
Disciplina	530.1
Soggetti	Mathematical physics Biophysics Biological physics Theoretical, Mathematical and Computational Physics Biological and Medical Physics, Biophysics
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Nota di contenuto	Complexity and forecasting in dynamical systems -- On Complexity -- Boolean networks which learn to compute -- A dynamical learning process for the recognition of correlated patterns in symmetric spin glass models -- Neural networks that learn temporal sequences -- Hierarchical diffusion -- Random walks, random surfaces, and complexity -- Complexity in large technological systems -- An introduction to the theory of computational complexity -- Measures of biologically meaningful complexity -- Complex systems, organization and networks of automata -- Complexity in ecological systems.
Sommario/riassunto	Complexity is a puzzling and important concept in contemporary research in many disciplines. This book addresses the problem of defining complexity by carefully analysing in what sense complexity means measure in such areas as the theory of dynamical systems, condensed matter physics, ecology, immunology and the theory of neural networks. The information content of complexity is studied and similarities and differences in the various concepts of complexity are highlighted, sometimes provocatively. The book could open the way to

finding a paradigm of complexity, and should become a standard reference for a wide audience of researchers in the physical and biological sciences.
