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Altri autori (Persone)	Mac CormacEarl R StamenovMaksim
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Nota di contenuto	Intro CONTENTS List of Contributors Preface Introduction Edge-of-Chaos Dynamics in Recursively Organized Neural Systems Fractal Time and the Foundations of Consciousness: Vertical convergence of 1/f phenomena from ion channels to behavioral states Fractal Thinking: Self-organizing brain processing Earl R. Mac Cormac n-Dimensional Nonlinear Psychophysics: Intersensory interaction as a network at the edge of chaos Fractal Neurodynamics and Quantum Chaos: Resolving the mind-brain paradox through novel biophysics The Fractal Maximum-Power Evolution of Brain, Consciousness, and Mind The Fractal-Like Roots of Mind: A tutorial in direct access Chaotic Dynamics and the Development of Consciousness Subject Index.
Sommario/riassunto	This collective volume is the first to discuss systematically what are the possibilities to model different aspects of brain and mind functioning with the formal means of fractal geometry and deterministic chaos. At stake here is not an approximation to the way of actual performance, but the possibility of brain and mind to implement nonlinear dynamic patterns in their functioning. The contributions discuss the following topics (among others): the edge-of-chaos dynamics in recursively

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organized neural systems and in intersensory interaction, the fractal timing of the neural functioning on different scales of brain networking, aspects of fractal neurodynamics and quantum chaos in novel biophysics, the fractal maximum-power evolution of brain and mind, the chaotic dynamics in the development of consciousness, etc. It is suggested that the 'margins' of our capacity for phenomenal experience, are 'fractal-limit phenomena'. Here the possibilities to prove the plausibility of fractal modeling with appropriate experimentation and rational reconstruction are also discussed. A conjecture is made that the brain vs. mind differentiation becomes possible, most probably, only with the imposition of appropriate symmetry groups implementing a flowing interface of features of local vs. global brain dynamics. (Series B).