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7. Noise or Critical Fluctuations? Equilibrium vs Non-equilibrium8. Outlook; Acknowledgements; References; 5. Acquiring long-range memory through adaptive avalanches S. Boettcher; 1. Introduction; 2. Motivation from Self-organized Criticality; 3. Spin Glass Ground States with Extremal Optimization; 4. EO Dynamics; 5. Annealed Optimization Model; 6. Evolution Equations for Local Search Heuristics; 6.1. Extremal optimization algorithm; 6.2. Update probabilities for extremal optimization; 6.3. Update probabilities for metropolis algorithms; 6.4. Evolution equations for a simple barrier model
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1. Introduction

Sommario/riassunto

This invaluable book captures the proceedings of a workshop that brought together a group of distinguished scientists from a variety of disciplines to discuss how networking influences decision making. The individual lectures interconnect psychological testing, the modeling of neuron networks and brain dynamics to the transport of information within and between complex networks. Of particular importance was the introduction of a new principle that governs how complex networks talk to one another - the Principle of Complexity Management (PCM). PCM establishes that the transfer of information fr