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Soggetti	Statistical physics Game theory Social sciences—Data processing Social sciences—Computer programs Sociophysics Econophysics Evolution (Biology) Python (Computer program language) Statistical Physics and Dynamical Systems Game Theory, Economics, Social and Behav. Sciences Computational Social Sciences Data-driven Science, Modeling and Theory Building Evolutionary Biology Python
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Nota di contenuto	Chapter 1. Introduction -- Chapter 2. Modeling Complex Systems -- Chapter 3. Evolutionary Games I: Statistical Physics -- Chapter 4 Evolutionary Games II: Applications -- Chapter 5. Conclusions.
Sommario/riassunto	This book presents an introduction to Evolutionary Game Theory (EGT) which is an emerging field in the area of complex systems attracting the attention of researchers from disparate scientific communities. EGT allows one to represent and study several complex phenomena, such as the emergence of cooperation in social systems, the role of conformity

in shaping the equilibrium of a population, and the dynamics in biological and ecological systems. Since EGT models belong to the area of complex systems, statistical physics constitutes a fundamental ingredient for investigating their behavior. At the same time, the complexity of some EGT models, such as those realized by means of agent-based methods, often require the implementation of numerical simulations. Therefore, beyond providing an introduction to EGT, this book gives a brief overview of the main statistical physics tools (such as phase transitions and the Ising model) and computational strategies for simulating evolutionary games (such as Monte Carlo algorithms on lattices). This book will appeal to students and researchers in this burgeoning field of complex systems.