Record Nr. UNINA9911010526403321 Autore Rybski Diego Titolo Compendium of Urban Complexity / / edited by Diego Rybski Cham:,: Springer Nature Switzerland:,: Imprint: Springer,, 2025 Pubbl/distr/stampa **ISBN** 3-031-82666-3 Edizione [1st ed. 2025.] Descrizione fisica 1 online resource (457 pages) Understanding Complex Systems, , 1860-0840 Collana 530.1 Disciplina Soggetti System theory Geographic information systems Mathematics Social sciences Statistical physics Urban policy Complex Systems Geographical Information System Mathematics in the Humanities and Social Sciences Statistical Physics **Urban Policy** Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di contenuto City Size Distributions -- Urban Scaling Laws -- The Benets and Costs of Agglomeration: Insights from Economics and Complexity -- Urban Mobility -- The Long-run Impacts of Migration on the City Population Size Distribution -- The Gravity Model for Social Systems --Segregation in Cities -- Monocentric or Polycentric City? An Empirical Perspective -- Urban Climate Through the Lens of Complex System Science -- Designing Complexity? The Role of Self-Organization in Urban Planning and Design -- Fractality of Cities -- Entropy and the City: Origins, Trajectories and Explorations of the Concept in Urban Science -- An Introduction to Mathematical Concepts of Power-laws in

Cities and Urban Systems.

Sommario/riassunto

This book brings together key findings, insights, and theories at the

intersection of two disciplines - city science and complex systems. It

features a curated collection of chapters contributed by emerging scholars conducting cutting-edge research in complexity science, interdisciplinary physics, and quantitative geography. The compendium is tailored to a thematically diverse audience, spanning quantitative fields such as statistical and mathematical physics, as well as socially-focused domains like geography and urban planning. By integrating novel methods and insights from physics, economics, and geography, this book appeals to an interdisciplinary spectrum of graduate students and academic researchers studying cities as complex systems.