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Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Hexagonal Distributions in Economic Geography and Krugman's Core-Periphery Model -- Group-Theoretic Bifurcation Theory -- Agglomeration in Racetrack Economy -- Introduction to Economic Agglomeration on a Hexagonal Lattice -- Hexagonal Distributions on Hexagonal Lattice -- Irreducible Representations of the Group for Hexagonal Lattice -- Matrix Representation for Economy on Hexagonal Lattice -- Hexagons of Christaller and L"osch: Using Equivariant Branching Lemma -- Hexagons of Christaller and L"osch: Solving Bifurcation Equations.
Sommario/riassunto	This book contributes to an understanding of how bifurcation theory adapts to the analysis of economic geography. It is easily accessible not only to mathematicians and economists, but also to upper-level undergraduate and graduate students who are interested in nonlinear mathematics. The self-organization of hexagonal agglomeration patterns of industrial regions was first predicted by the central place theory in economic geography based on investigations of southern Germany. The emergence of hexagonal agglomeration in economic geography models was envisaged by Krugman. In this book, after a brief introduction of central place theory and new economic geography, the missing link between them is discovered by elucidating the

mechanism of the evolution of bifurcating hexagonal patterns. Pattern formation by such bifurcation is a well-studied topic in nonlinear mathematics, and group-theoretic bifurcation analysis is a well-developed theoretical tool. A finite hexagonal lattice is used to express uniformly distributed places, and the symmetry of this lattice is expressed by a finite group. Several mathematical methodologies indispensable for tackling the present problem are gathered in a self-contained manner. The existence of hexagonal distributions is verified by group-theoretic bifurcation analysis, first by applying the so-called equivariant branching lemma and next by solving the bifurcation equation. This book offers a complete guide for the application of group-theoretic bifurcation analysis to economic agglomeration on the hexagonal lattice.
