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Soggetti	Dynamics Ergodic theory System theory Numerical analysis Calculus of variations Dynamical Systems and Ergodic Theory Systems Theory, Control Numerical Analysis Calculus of Variations and Optimal Control; Optimization
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Nota di bibliografia	Includes bibliographical references (pages [221]-227) and index.
Nota di contenuto	Dynamics, Perturbation and Discretization -- Setup and Preliminaries -- Strongly Attracting Sets -- Weakly Attracting Sets -- Relation between Discretization and Perturbation -- Discretizations of Attractive Sets -- Domains of Attraction -- Appendices. Viscosity Solutions. Comparison Functions. Numerical Examples.
Sommario/riassunto	This book provides an approach to the study of perturbation and discretization effects on the long-time behavior of dynamical and control systems. It analyzes the impact of time and space discretizations on asymptotically stable attracting sets, attractors, asymptotically controllable sets and their respective domains of attractions and reachable sets. Combining robust stability concepts from nonlinear control theory, techniques from optimal control and differential games and methods from nonsmooth analysis, both qualitative and quantitative results are obtained and new algorithms are

developed, analyzed and illustrated by examples.

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