

1. Record Nr.	UNINA9910903790203321
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Titolo	Two-dimensional Product-Cubic Systems, Vol. IV : Crossing-quadratic Vector Fields // by Albert C. J. Luo
Pubbl/distr/stampa	Cham : , : Springer Nature Switzerland : , : Imprint : Springer, , 2024
ISBN	3-031-57104-5
Edizione	[1st ed. 2024.]
Descrizione fisica	1 online resource (262 pages)
Disciplina	515.39
Soggetti	Dynamics Nonlinear theories Multibody systems Vibration Mechanics, Applied Engineering mathematics Engineering - Data processing Algebra, Universal Applied Dynamical Systems Dynamical Systems Multibody Systems and Mechanical Vibrations Mathematical and Computational Engineering Applications General Algebraic Systems
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Preface -- Crossing-quadratic and product-cubic systems -- Double-inflection-saddles and bifurcation dynamics -- Parabola-saddles and bifurcation.
Sommario/riassunto	This book, the eighth of 15 related monographs, discusses a product-cubic dynamical system possessing a product-cubic vector field and a crossing-univariate quadratic vector field. It presents equilibrium singularity and bifurcation dynamics, and . the saddle-source (sink) examined is the appearing bifurcations for saddle and source (sink). The double-inflection saddle equilibriums are the appearing bifurcations of the saddle and center, and also the appearing

bifurcations of the network of saddles and centers. The infinite-equilibria for the switching bifurcations featured in this volume include: Parabola-source (sink) infinite-equilibria, Inflection-source (sink) infinite-equilibria, Hyperbolic (circular) sink-to source infinite-equilibria, Hyperbolic (circular) lower-to-upper saddle infinite-equilibria. Develops a theory of cubic dynamical systems having a product-cubic vector field and a crossing-quadratic vector field; Shows equilibria and parallel hyperbolic and hyperbolic-secant flows with switching through infinite-equilibria; Presents CCW and CW centers separated by a parallel hyperbolic flow and positive and negative saddles. .

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