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Autore	Luo Albert C. J
Titolo	Two-dimensional Self and Product Cubic Systems, Vol. II : Crossing- linear and Self-quadratic Product Vector Field / / by Albert C. J. Luo
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ISBN	3-031-59574-2
Edizione	[1st ed. 2024.]
Descrizione fisica	1 online resource (X, 238 p. 46 illus., 45 illus. in color.)
Disciplina	515.39
Soggetti	Dynamics
	Nonlinear theories
	Engineering mathematics
	Engineering - Data processing
	Multibody systems
	Vibration
	Mechanics, Applied
	Universal algebra
	Applied Dynamical Systems
	Mathematical and Computational Engineering Applications
	General Algebraic Systems
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Self and Product Cubic Systems Double-saddles, Third-order Saddle nodes Vertical Saddle-node Series and Switching Dynamics Saddle-nodes and third-order Saddles Source and Sink Simple equilibrium networks and switching dynamics.
Sommario/riassunto	This book is the thirteenth of 15 related monographs on Cubic Dynamical Systems, discusses self- and product-cubic systems with a crossing-linear and self-quadratic products vector field. Equilibrium series with flow singularity are presented and the corresponding switching bifurcations are discussed through up-down saddles, third- order concave-source (sink), and up-down-to-down-up saddles infinite-equilibriums. The author discusses how equilibrium networks

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with paralleled hyperbolic and hyperbolic-secant flows exist in such cubic systems, and the corresponding switching bifurcations obtained through the inflection-source and sink infinite-equilibriums. In such cubic systems, the appearing bifurcations are: saddle-source (sink) hyperbolic-to-hyperbolic-secant flows double-saddle third-order saddle, sink and source third-order saddle-source (sink) Develops a theory of self and product cubic systems with a crossing-linear and self-quadratic products vector field; Presents equilibrium networks with paralleled hyperbolic and hyperbolic-secant flows with switching by up-down saddles; Shows equilibrium appearing bifurcations of various saddles, sinks, and flows.