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Nota di contenuto	Chapter 1 Constant and Self-cubic Vector fields -- Chapter 2 Crossing-linear and Self-cubic Vector Fields -- Chapter 3 Crossing-quadratic and Self-Cubic Vector Fields -- Chapter 4 Two Single-variable Cubic Vector Fields.
Sommario/riassunto	This book, the first of 15 related monographs, presents systematically a theory of cubic nonlinear systems with single-variable vector fields. The cubic vector fields are of self-variables and are discussed as the first part of the book. The 1-dimensional flow singularity and bifurcations are discussed in such cubic systems. The appearing and switching bifurcations of the 1-dimensional flows in such 2-dimensional cubic systems are for the first time to be presented. Third-order source and sink flows are presented, and the third-order parabola flows are also presented. The infinite-equilibriums are the switching bifurcations for the first and third-order source and sink

flows, and the second-order saddle flows with the first and third-order parabola flows, and the inflection flows. The appearing bifurcations in such cubic systems includes saddle flows and third-order source (sink) flows, inflection flows and third-order up (down)-parabola flows. Develops the theory for 1-dimensionnal flow singularity and bifurcations to elucidate dynamics of nonlinear systems; Provides a new research direction in nonlinear dynamics community; Shows how singularity and bifurcations occur not only for equilibriums and attractors but also for 1-dimensional flows.
