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2.4 BIFURCATIONS OF MAPS2.5 EXERCISES; 3 PERIODIC SOLUTIONS; 3.1 PERIODIC SOLUTIONS; 3.1.1 Autonomous Systems; 3.1.2 Nonautonomous Systems; 3.1.3 Comments; 3.2 FLOQUET THEORY; 3.2.1 Autonomous Systems; 3.2.2 Nonautonomous Systems; 3.2.3 Comments on the Monodromy Matrix; 3.2.4 Manifolds of a Periodic Solution; 3.3 POINCARE MAPS; 3.3.1 Nonautonomous Systems; 3.3.2 Autonomous Systems; 3.4 BIFURCATIONS; 3.4.1 Symmetry-Breaking Bifurcation; 3.4.2 Cyclic-Fold Bifurcation; 3.4.3 Period-Doubling or Flip Bifurcation; 3.4.4 Transcritical Bifurcation; 3.4.5 Secondary Hopf or Neimark Bifurcation
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6 NUMERICAL METHODS

Sommario/riassunto

A unified and coherent treatment of analytical, computational and experimental techniques of nonlinear dynamics with numerous illustrative applications. Features a discourse on geometric concepts such as Poincar? maps. Discusses chaos, stability and bifurcation analysis for systems of differential and algebraic equations. Includes scores of examples to facilitate understanding.