

1. Record Nr.	UNINA9911019151103321
Autore	Nayfeh Ali Hasan <1933->
Titolo	Applied nonlinear dynamics : analytical, computational, and experimental methods / / Ali H. Nayfeh, Balakumar Balachandran
Pubbl/distr/stampa	New York, : Wiley, c1995
ISBN	9786612010514 9781282010512 1282010514 9783527617548 352761754X 9783527617555 3527617558
Descrizione fisica	1 online resource (703 p.)
Collana	Wiley series in nonlinear science
Altri autori (Persone)	BalachandranBalakumar
Disciplina	515.35 621.38131
Soggetti	Dynamics Nonlinear theories
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	"A Wiley-Interscience publication."
Nota di bibliografia	Includes bibliographical references (p. 589-661) and index.
Nota di contenuto	APPLIED NONLINEAR DYNAMICS; CONTENTS; PREFACE; 1 INTRODUCTION; 1.1 DISCRETE-TIME SYSTEMS; 1.2 CONTINUOUS-TIME SYSTEMS; 1.2.1 Nonautonomous Systems; 1.2.2 Autonomous Systems; 1.2.3 Phase Portraits and Flows; 1.3 ATTRACTING SETS; 1.4 CONCEPTS OF STABILITY; 1.4.1 Lyapunov Stability; 1.4.2 Asymptotic Stability; 1.4.3 Poincare Stability; 1.4.4 Lagrange Stability (Bounded Stability); 1.4.5 Stability Through Lyapunov Function; 1.5 ATTRACTORS; 1.6 COMMENTS; 1.7 EXERCISES; 2 EQUILIBRIUM SOLUTIONS; 2.1 CONTINUOUS-TIME SYSTEMS; 2.1.1 Linearization Near an Equilibrium Solution 2.1.2 Classification and Stability of Equilibrium Solutions 2.1.3 Eigenspaces and Invariant Manifolds; 2.1.4 Analytical Construction of Stable and Unstable Manifolds; 2.2 FIXED POINTS OF MAPS; 2.3 BIFURCATIONS OF CONTINUOUS SYSTEMS; 2.3.1 Local Bifurcations of Fixed Points; 2.3.2 Normal Forms for Bifurcations; 2.3.3 Bifurcation

Diagrams and Sets; 2.3.4 Center Manifold Reduction; 2.3.5 The Lyapunov-Schmidt Method; 2.3.6 The Method of Multiple Scales; 2.3.7 Structural Stability; 2.3.8 Stability of Bifurcations to Perturbations; 2.3.9 Codimension of a Bifurcation; 2.3.10 Global Bifurcations

2.4 BIFURCATIONS OF MAPS 2.5 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 POINCARÉ 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

3.5 ANALYTICAL CONSTRUCTIONS 3.5.1 Method of Multiple Scales; 3.5.2 Center Manifold Reduction; 3.5.3 General Case; 3.6 EXERCISES; 4 QUASIPERIODIC SOLUTIONS; 4.1 POINCARÉ MAPS; 4.1.1 Winding Time and Rotation Number; 4.1.2 Second-Order Poincare Map; 4.1.3 Comments; 4.2 CIRCLE MAP; 4.3 CONSTRUCTIONS; 4.3.1 Method of Multiple Scales; 4.3.2 Spectral Balance Method; 4.3.3 Poincare Map Method; 4.4 STABILITY; 4.5 SYNCHRONIZATION; 4.6 EXERCISES; 5 CHAOS; 5.1 MAPS; 5.2 CONTINUOUS-TIME SYSTEMS; 5.3 PERIOD-DOUBLING SCENARIO; 5.4 INTERMITTENCY MECHANISMS; 5.4.1 Type I Intermittency

5.4.2 Type III Intermittency 5.4.3 Type II Intermittency; 5.5 QUASIPERIODIC ROUTES; 5.5.1 Ruelle-Takens Scenario; 5.5.2 Torus Breakdown; 5.5.3 Torus Doubling; 5.6 CRISES; 5.7 MELNIKOV THEORY; 5.7.1 Homoclinic Tangles; 5.7.2 Heteroclinic Tangles; 5.7.3 Numerical Prediction of Manifold Intersections; 5.7.4 Analytical Prediction of Manifold Intersections; 5.7.5 Application of Melnikov's Method; 5.7.6 Comments; 5.8 BIFURCATIONS OF HOMOCLINIC ORBITS; 5.8.1 Planar Systems; 5.8.2 Orbits Homoclinic to a Saddle; 5.8.3 Orbits Homoclinic to a Saddle Focus; 5.8.4 Comments; 5.9 EXERCISES

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 Poincaré maps. Discusses chaos, stability and bifurcation analysis for systems of differential and algebraic equations. Includes scores of examples to facilitate understanding.

2. Record Nr.	UNINA9910961413003321
Autore	Yagi Kiichiro <1947-, >
Titolo	Austrian and German economic thought : from subjectivism to social evolution / Kiichiro Yagi
Pubbl/distr/stampa	London : , : Routledge, , 2010
ISBN	1-283-44128-4 9786613441287 0-203-83076-8 1-136-82461-8
Edizione	[1st ed.]
Descrizione fisica	1 online resource (202 p.)
Collana	Routledge studies in the history of economics
Disciplina	330.15/70943
Soggetti	Austrian school of economics Evolutionary economics Economists - Austria Economists - Germany
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	General introduction -- Portrait of an Austrian liberal : Max Menger's liberal position -- Carl Menger as journalist and tutor of Crown Prince -- Carl Menger's Grundsätze in the making -- Carl Menger and historicism in German economics -- Anonymous history in Austrian economic thought -- Alternative equilibrium vision in Austrian economics -- Karl Knies, Max Weber, and Austrians : a Heidelberg connection -- Determinateness and indeterminateness in Schumpeter's economic sociology : the origin of social evolution -- Evolutionist turn of the Marx-Weber problem.
Sommario/riassunto	This book intends to renovate the view of social sciences in the German-speaking world. It explores the intellectual tension in the social science in Austria and Germany in the late-nineteenth and early-twentieth centuries. It deals with how the emergence of the new school (Austrian School) changed the focus of social science in the German speaking world, and how it prepared the introduction of an evolutionary perspective in economics, politics, and sociology. Based on (mostly hitherto unknown) primary evidence, this development is

lively described in a series of encounters and decisions by
