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Autore   Amster Pablo

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Nota di contenuto   Periodic solutions of Hamiltonian systems with symmetries -- Prescribed energy periodic solutions of Kepler problems with relativistic corrections -- A survey on some existence results for the relativistic pendulum equation -- Recent advances on periodic motions in parallel-plate electrostatic actuators -- Analysis of a mathematical model of competition in a chain of periodic chemostats in series -- Nontrivial solutions of a parameter-dependent Nontrivial solutions of a parameter-dependent -- Branches of forced oscillations for a class of implicit equations involving the -Laplacian -- Atypical bifurcation for a class of delay differential equations -- New elements for a theory of chaos topology.

Sommario/riassunto   This volume explores the application of topological techniques in the study of delay and ordinary differential equations with a particular focus on continuum mechanics. Chapters, written by internationally recognized researchers in the field, present results on problems of

existence, multiplicity localization, bifurcation of solutions, and more. Topological methods are used throughout, including degree theory, fixed point index theory, and classical and recent fixed point theorems. A wide variety of applications to continuum mechanics are provided as well, such as chemostats, non-Newtonian fluid flow, and flows in phase space. Topological Methods for Delay and Ordinary Differential Equations will be a valuable resource for researchers interested in differential equations, functional analysis, topology, and the applied sciences.