



The Foundations of Chaos Revisited: From Poincaré to Recent Advancements /

Skiadas, Christos.,
editor

Springer International Publishing :
Imprint: Springer,
2016

Libros electrónicos

Recursos electrónicos

Monografía

With contributions from a number of pioneering researchers in the field, this collection is aimed not only at researchers and scientists in nonlinear dynamics but also at a broader audience interested in understanding and exploring how modern chaos theory has developed since the days of Poincaré. This book was motivated by and is an outcome of the CHAOS 2015 meeting held at the Henri Poincaré Institute in Paris, which provided a perfect opportunity to gain inspiration and discuss new perspectives on the history, development and modern aspects of chaos theory. Henri Poincaré is remembered as a great mind in mathematics, physics and astronomy. His works, well beyond their rigorous mathematical and analytical style, are known for their deep insights into science and research in general, and the philosophy of science in particular. The Poincaré conjecture (only proved in 2006) along with his work on the three-body problem are considered to be the foundation of modern chaos theory

<https://rebiunoda.pro.baratznet.cloud:38443/OpacDiscovery/public/catalog/detail/b2FpOmNlbGVicmF0aW9uOmVzLmJhcmF0ei5yZW4vMTc5MDcxOTA>

Título: The Foundations of Chaos Revisited: From Poincaré to Recent Advancements edited by Christos Skiadas

Editorial: Cham Springer International Publishing Imprint: Springer 2016

Descripción física: 1 recurso en línea XIV, 261 p. 93 illus., 54 illus. in color

Mención de serie: Understanding Complex Systems 1860-0832 Springer eBooks

Contenido: Preface -- Henri Poincaré's inventions in dynamical systems and topology -- From nonlinear oscillations to chaos theory -- Hydrodynamic turbulence as a nonstandard transport phenomenon -- Non-equilibrium statistical mechanics of turbulence: comments on Ruelle's intermittency theory -- The Kolmogorov law of turbulence - what can rigorously be proved? -- History of chaos from a French perspective -- Measuring quasiperiodicity -- Heat transfer in a complex medium -- Plasma hysteresis and instability: a memory perspective -- Stochastic anti-resonance in polarization phenomena -- A simple plankton model with complex behavior -- Fractal Radar: Towards 1980 – 2015 -- Simulation of multidimensional nonlinear dynamics by one-dimensional maps with many parameters -- Sudden cardiac death and turbulence -- Absolute negative mobility in a ratchet flow

Detalles del sistema: Modo de acceso: World Wide Web

ISBN: 9783319297019 978-3-319-29701-9

Materia: Physics System theory Statistical physics Vibration Dynamical systems Dynamics Physics Nonlinear Dynamics Vibration, Dynamical Systems, Control Complex Systems History and Philosophical Foundations of Physics

Autores: Skiadas, Christos., editor

Entidades: SpringerLink (Online service)

Punto acceso adicional serie-Título: Understanding Complex Systems 1860-0832

Baratz Innovación Documental

- Gran Vía, 59 28013 Madrid
- (+34) 91 456 03 60
- informa@baratz.es