Record Nr. UNINA9910143643903321 Advances in chemical physics [[electronic resource]]. Volume 122 **Titolo** Dynamical systems and irreversibility: Proceedings of the XXI Solvay Conference on Physics / / edited by Ioannis Antoniou; series editors, I. Prigogine and Stuart A. Rice Pubbl/distr/stampa New York; Chichester, : Wiley, 2002 **ISBN** 1-280-34270-6 9786610342709 0-470-34769-4 0-471-23427-3 0-471-61957-4 Descrizione fisica 1 online resource (379 p.) Collana Advances in chemical physics; ; v. 122 Altri autori (Persone) Antonioul <1955-> (Ioannis) Prigoginel (Ilya) RiceStuart Alan <1932-> Disciplina 539 541 Chemistry, Physical and theoretical Soggetti Chemical processes Differentiable dynamical systems Quantum theory Electronic books. Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali "A special volume of Advances in chemical physics." Includes bibliographical references and indexes. Nota di bibliografia Nota di contenuto DYNAMICAL SYSTEMS AND IRREVERSIBILITY A SPECIAL VOLUME OF ADVANCES IN CHEMICAL PHYSICS VOLUME 122; EDITORIAL BOARD; CONTRIBUTORS TO VOLUME 122; ADMINISTRATIVE BOARD OF THE INTERNATIONAL SOLVAY INSTITUTES FOR PHYSICS AND CHEMISTRY: SCIENTIFIC COMMITTEE FOR PHYSICS OF THE INTERNATIONAL SOLVAY INSTITUTES FOR PHYSICS AND CHEMISTRY; THE SOLVAY CONFERENCES ON PHYSICS; CONTENTS; PREFACE; OPENING SPEECH; INTRODUCTORY REMARKS; PART ONE DISCRETE MAPS; NON-MARKOVIAN EFFECTS IN

THE STANDARD MAP; THERMODYNAMICS OF A SIMPLE HAMILTONIAN

CHAOTIC SYSTEM; HARMONIC ANALYSIS OF UNSTABLE SYSTEMS
PROPERTIES OF PERMANENT AND TRANSIENT CHAOS IN CRITICAL
STATESFROM COUPLED DYNAMICAL SYSTEMS TO BIOLOGICAL
IRREVERSIBILITY; PART TWO TRANSPORT AND DIFFUSION;
IRREVERSIBILITY IN REVERSIBLE MULTIBAKER MAPS-TRANSPORT AND
FRACTAL DISTRIBUTIONS; DIFFUSION AND THE POINCARE-BIRKHOFF
MAPPING OF CHAOTIC SYSTEMS; TRANSPORT THEORY FOR COLLECTIVE
MODES AND GREEN-KUBO FORMALISM FOR MODERATELY DENSE
GASES; NEW KINETIC LAWS OF CLUSTER FORMATION IN N-BODY
HAMILTONIAN SYSTEMS; PART THREE QUANTUM THEORY,
MEASUREMENT, AND DECOHERENCE; QUANTUM PHENOMENA OF
SINGLE ATOMS

QUANTUM SUPERPOSITIONS AND DECOHERENCE: HOW TO DETECT INTERFERENCE OF MACROSCOPICALLY DISTINCT OPTICAL STATESQUANTUM DECOHERENCE AND THE GLAUBER DYNAMICS FROM THE STOCHASTIC LIMIT; CP VIOLATION AS ANTIEIGENVECTOR-BREAKING; PART FOUR EXTENSION OF QUANTUM THEORY AND FIELD THEORY; DYNAMICS OF CORRELATIONS. A FORMALISM FOR BOTH INTEGRABLE AND NONINTEGRABLE DYNAMICAL SYSTEMS; GENERALIZED QUANTUM FIELD THEORY; AGE AND AGE FLUCTUATIONS IN AN UNSTABLE QUANTUM SYSTEM; MICROPHYSICAL IRREVERSIBILITY AND TIME ASYMMETRIC QUANTUM MECHANICS POSSIBLE ORIGINS OF QUANTUM FLUCTUATION GIVEN BY ALTERNATIVE QUANTIZATION RULESAUTHOR INDEX; SUBJECT INDEX

Sommario/riassunto

Leading research, perspectives, and analysis of dynamical systems and irreversibility Edited by Nobel Prize winner Ilya Prigogine and renowned authority Stuart A. Rice, the Advances in Chemical Physics series provides a forum for critical, authoritative evaluations in every area of the discipline. In a format that encourages the expression of individual points of view, experts in the field present comprehensive analyses of subjects of interest. Volume 122 collects papers from the XXI Solvay Conference on Physics, dedicated to the exploration of ""Dynamical Systems and Irreversibility."" loan