



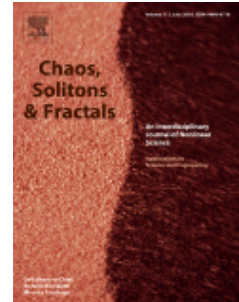
CHAOS, SOLITONS & FRACTALS

An interdisciplinary journal of nonlinear science

AUTHOR INFORMATION PACK

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DESCRIPTION

Chaos, Solitons & Fractals aims to be a leading journal in the **interdisciplinary field of Nonlinear Science**. It encourages the submission of articles concerning the **fundamentals** of the following subjects: **dynamics; non-equilibrium processes in physics; complex matter and networks; computational biology; fluctuations and random processes; self-organization; social phenomena; technology.**

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Noise-induced phenomena in complex dynamical systems Non-equilibrium thermodynamics and fluctuation-dissipation relations Anomalous diffusion, Levy flights and Levy walks Turbulence, fractals and scaling

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Alexander Kitaev, Steklov Mathematical Institute, St. Petersburg, Russian Federation

Integrable systems; Ordinary differential equations and special functions

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Xavier Leoncini, Centre de Physique Théorique, Marseille, France

Yongyao Li, Foshan University, Foshan, China

Sylvain Mangiarotti, Centre d'Etudes Spatiales de la Biosphère (CESBIO), Toulouse, France; Institut de Recherche pour le Développement (IRD), Marseille, France

Theory of nonlinear dynamical systems and chaos modelling from observational data; Applications to environmental behaviors as observed in situ or from space, with a special focus on biosphere (vegetation, ecology, epidemiology) and hydrosphere (karstic springs, ground water, snow)

Jan Nagler, Max Planck Institut (MPI) für Dynamik und Selbstorganisation, Göttingen, Germany

Stochastic systems, with applications at the interface between physics, biology, sociology and economics, in particular phase transitions and tipping points, ergodicity breaking and estimation of risk in uncertain environments

Andrey Pankratov, Russian Academy of Sciences, Nizhny Novgorod, Russian Federation

Noise and fluctuations in dynamical systems and, in particular, in Josephson electronic devices

David Papo, University of Lille 3, Lille, France

Paolo Paradisi, National Research Council of Italy (CNR), Pisa, Italy

Tomaz Prosen, University of Ljubljana, Ljubljana, Slovenia

Quantum chaos; Many-body quantum dynamics; Open quantum systems; Non-equilibrium statistical mechanics and transport

Bruno Otávio Teixeira, Universidade Federal de Minas Gerais (UFMG), Belo Horizonte, Brazil

Davide Valenti, University of Palermo, Palermo, Italy

Non-Equilibrium Statistical Mechanics in classic and quantum physical systems: - stochastic processes and noise induced effects in nonlinear systems; - Josephson junctions; - dynamics of quantum particles in bistable potentials; - models of Population Dynamics with applications to Complex Systems: spatio-temporal dynamics of phytoplankton in marine environment; bacterial growth; - noise effects and stabilizing role of fluctuations (volatility) in financial markets (Econophysics)

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