

Nonlinear Dynamics of Nanosystems

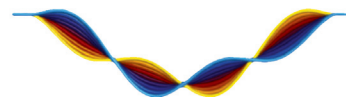
www.tu-chemnitz.de/physik/KSND/eng/nldnano.php

August 28-30, 2006
Chemnitz, Germany

Aims:

Systems operating on the scale of several nanometers provide new challenges regarding their dynamical properties. Especially nonlinear dynamical processes are of fundamental importance for the functionality of nanosystems. Although a thorough comprehension is essential for the future development of technical applications, there is still a lack of understanding of these processes.

The goal of this symposium is therefore to work out the qualitative changes that occur when dynamical systems are scaled down to nanosize. The focus of the symposium will be especially on the effects on the nonlinear dynamical behaviour of scaling, stochasticity and quantum mechanics. The aim is to elaborate new guiding principles and nonlinear dynamics scenarios, which are valid for quite different types of nanoscopic systems. The symposium aims at bringing together researchers working in different fields of nanoscience and dynamical systems.



Nonlinear Dynamics
of Nanosystems
Chemnitz 2006

Main topics:

Scaling laws and classical dynamics on the nanoscale
Stochasticity and nonlinear motion on the nanoscale
Quantum effects and nonlinearity on the nanoscale

Confirmed invited speakers:

J. S. Aldridge (Pasadena), J. Bürki (Tucson), A. N. Cleland (Santa Barbara), T. Emig (Paris), D. Erickson (Ithaca), D. J. Evans (Canberra), P. Gaspard (Brussels), P. C. Hammel (Columbus), S. Kohler (Augsburg), J. Krug (Cologne), R. Lifshitz (Tel Aviv), I. Mezic (Santa Barbara), M. R. Paul (Blacksburg), A. Raman (West Lafayette), M. L. Roukes (Pasadena), S. E. Russek (Boulder), E. Schöll (Berlin), M. I. Stockman (Atlanta), D. Tomanek (East Lansing / Regensburg), V. Vogel (Zurich)

Organizers:

Günter Radons (Chemnitz),
Benno Rumpf (Chemnitz),
Heinz Georg Schuster (Kiel)

Contact:

E-mail: nldnano@tu-chemnitz.de
Phone: ++49 (0) 371-531-33212



CHEMNITZ UNIVERSITY
OF TECHNOLOGY



VolkswagenStiftung