

21st CONFERENCE – SUMMER SCHOOL

NONLINEAR SCIENCE AND COMPLEXITY

21 July – 2 August 2008, National Technical University, Athens, GREECE

Scientific Organizing Committee:

K. Hizanidis (NTUA, Athens), **E. Floratos** (University of Athens), **A. Vakakis** (NTUA, Athens), **A. Provata** («Demokritos» Research Center, Athens), **K. Eftaxias** (University of Athens), **T. Bountis** (University of Patras), **G. Tsironis** (University of Crete), **L. Vlahos** (University of Thessaloniki).

Local Organizing Committee:

A. Provata (NCRS «Demokritos», Athens), **P. Katsaloulis** (NCRS «Demokritos», Athens), **I. Kominis** (National Polytechnic, Athens), **F. Diakonos** (University of Athens), **M. Axenides** (NCRS «Demokritos», Athens), **N. Efremidis** (University of Crete), **V. Rothos** (University of Thessaloniki), **Ch. Skokos** (Max Planck Institute, Dresden).

Topics:

Chaos and Fractals. Strange Attractors and Hamiltonian Dynamics, Integrability and Bifurcations. Solitons, Nonlinear Ordinary Differential and Difference Equations. Spatially Extended Systems, Pattern Formation, Nonlinear Analysis of Time Series, Signals and Images, Synchronization and Control of Chaos. Applications to Complex Systems in Physics, Chemistry, Biology, Medicine, Economics and Engineering.

Participation:

Besides young researchers, we encourage the participation of graduate students and undergraduate students (who are in the last 1-2 years of their studies), as well as High School teachers who have an active interest in the topics of the meeting. The lectures are given by Greek and foreign Professors and researchers working in Universities and Laboratories in Greece and around the world. We also welcome presentations by Masters and Ph.D. degree candidates, in the form of short talks (30') and /or posters. Applications for such presentations are made through the individual Application Forms and are granted after obtaining the approval of the Scientific Organizing Committee of the meeting.

Daily Program:

The basic lectures of the Conference – Summer School are given in the mornings in the form of hourly introductory presentations (9.00-13.30), while the afternoons are reserved for short talks of more specialized interest, as well as poster presentations (15.00-17.30).

Local Expenses:

There is a limited amount of funding that is mainly reserved for the local expenses of all invited speakers. Part of the expenses of young researchers and graduate students is also provided by the Local Organizing Committee, upon evaluation of each individual application. First priority is given to young researchers presenting a short talk or a poster, then to graduate students working on their Ph.D. in an area related to Nonlinear Science and Complexity and then to the remaining graduate and undergraduate students. The registration fee of 150 Euro covers all coffee – breaks, the folder of the meeting and free admission to all social activities (conference dinner, cultural evening and excursion). For students the registration fee is 75 Euro.

Application Forms:

All those interested to participate in the 21st Conference – Summer School can fill out an Application Form provided at the website <http://www.math.upatras.gr/~crans> and submit it at the latest by **June 15, 2008 by e-mail**, or post it to one of the following addresses:

- Prof. K. Hizanidis, Professor, Department of Electrical Engineering, National Technical University, Zografos, Athens 15773, Tel.: 210 7723685, Fax: 210 – 7723513, E-mail: kyriakos@central.ntua.gr
- A. Provata, Researcher A', Institute of Physical Chemistry, "Demokritos" National Center for Scientific Research, Aghia Paraskevi, Athens, 15310 Greece, Fax: 0030 -210 - 6511766, Tel. 0030 – 210 - 6503964, E-mail: aprovata@chem.demokritos.gr
