

SECOND ANNOUNCEMENT

3^d Ph.D. School on “Mathematical Modeling of Complex Systems”

Heraklion, Crete, Greece, 15 – 27 July, 2013



In the framework of the European research and training activities in Complexity Science we announce the continuation of a series of annual **Ph.D. Schools on “Mathematical Modeling of Complex Systems”**. The first event took place in Patras, Greece, in July of 2011 (see <http://www.math.upatras.gr/~phdsch11>), the second one in July, 2012, at the University of Pescara, Italy (see <http://www.nodycosy.unich.it>) and the 3d one is announced as follows:

Time: 15 – 27 July, 2013

Location: Technological Educational Institute (TEI) of Crete, Heraklion, Greece

This Ph.D. School is intended for postgraduate students primarily from European countries (but students from other countries are also invited to apply) and offers four coherent lecture courses, taught by experts in each field, on:

I. Foundations of Complexity Science

Steven Bishop (London), Tassos Bountis (Patras), David K. Campbell (Boston), Gregoire Nicolis (Brussels)

II. Complex Networks: Theory and Applications

Panos Argyrakis (Thessaloniki), Barouch Barzel (Boston), Jeff Johnson (London)

III. Complex Quantum Systems

Jurgen Lisenfeld (Karlsruhe), Tsampikos Kottos (Wesleyan), Stelios Tzortzakis, Giorgos Tsironis, Xenophon Zotos (Heraklion)

IV. Complexity in Social Sciences

Rosaria Conte (Rome), Dirk Helbing (Zurich), Klaus Mainzer (Munich)

The School is dedicated to the memory of Professor John S. Nicolis. A special poster competition will take place and a "John S. Nicolis prize" will be awarded to the student with the best poster presentation.

Scientific Organizing Committee: Prof. Jeff Johnson (British Open University, President of European Complex Systems Society), Prof. Dirk Helbing (Chair of Sociology, Modeling and Simulation, ETH, Zürich), Prof. Klaus Mainzer (Technical University, München), Prof. Rosaria Conte (Head of the Laboratory of Agent Based Social Simulation, Rome), Prof. Giorgos Tsironis (Chairman, University of Crete and FORTH), Prof. Tassos Bountis (University of Patras), Prof. Panos Argyrakis (U. of Thessaloniki).

A. How to Apply

European postgraduate students aiming to obtain a Master's or Ph.D. degree in any scientific area involving complex systems are invited to apply to the Chairman of the Scientific Organizing Committee, Prof. G. P. Tsironis (or at the School's website at <http://nls.physics.uoc.gr> or <http://nlsconf.physics.uoc.gr>) in the email address: nls@physics.uoc.gr. Each applicant is asked to submit a CV, including a transcript of grades obtained in his/her undergraduate studies, as well as a personal statement explaining why the School will be useful to his/her current studies.

Based on the above information, the Scientific Organizing Committee will select 30-35 applicants each year. To obtain a **Certificate of Participation** the selected students should attend all lectures and exercise sessions of the School (see Preliminary Program). Students who also undertake to do a project on a special topic belonging to any one of the 4 courses, will have their project graded by one of the instructors and depending on their performance may receive a **Certificate of Participation with Distinction**.

All interested students are invited to submit their application **at the latest by May 15, 2013**, following the instructions posted on the School's website. They will be informed about the decision of the Scientific Organizing Committee regarding their acceptance **by the end of May 2013**.

The selected students will be asked to download and read **preparatory course material** provided by the instructors and placed on the School's website by the **end of May 2013**. In this way, the students will be better prepared to follow the lectures and exercise sessions of the School.

B. Attendance Fee, Living Expenses, and Financial Support

The **attendance fee** for each student participating in the Ph.D. School is 350 euro. This includes:

- a) Participation in all lectures and exercise sessions
- b) Official folder and all printed material related to the Ph.D. School
- c) Participation in all the School's social activities
- d) Breakfast, lunch and coffee breaks during the School.

Comfortable single individual rooms will be provided to the students at the housing facilities of the Technological Education Institute of Crete at approximately 12 euros per day.

The School will provide **limited financial support** to some of the selected students, on the basis of their need, to cover living expenses and part of the attendance fee.

C. "John S. Nicolis prize" for the best poster competition

Participating students are expected to bring with them a poster that presents their current research work. These posters will be put on display in the duration of the school while a short presentation of this work will be organized. The Organizing Committee of the School will select the best poster and award the "John S. Nicolis prize" in memory of the late professor John S. Nicolis who has been a constant inspiration to all activities in Complex and Nonlinear Science in Greece.