

FINAL ANNOUNCEMENT

2nd Ph.D. School on “Mathematical Modeling of Complex Systems”

Pescara, Italy, 16 – 28 July, 2012



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 the summer of 2011 (see <http://www.math.upatras.gr/~phdsch11>) and the second one is announced as follows:

Time: 16 – 28 July, 2012

Location: International Center for Nonlinear Dynamics and Complex Systems, University of Chieti Pescara (<http://www.dmqte.unich.it/nodycosy/>).

This Ph.D. School is intended for postgraduate students from all over Europe and offers four coherent lecture courses, taught by experts in each field, on:

- I. Foundations of Complex Networks
- II. Statistical Physics of Complex Systems
- III. Complex Systems in Biology
- IV. Complexity in Economics and Social Sciences

Scientific Organizing Committee: Prof. Jeff Johnson (British Open University, President of European Complex Systems Society), Prof. Tassos Bountis (University of Patras), Prof. Manuel Velarde (University Complutense of Madrid), Prof. Carlo Mari (Chairman, University of Chieti-Pescara), Prof. Anastasios Bezerianos (University of Patras), Prof. Ko van der Weele (University of Patras), Assoc. Prof. Angela De Sanctis (University of Chieti-Pescara).

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 at c.mari@unich.it (or at the School's website when it becomes available). 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 25-30 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, 2012**, 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 2012**.

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 2012. 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 300 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 the festive School Dinner, Saturday July 21, and the School Excursion, Sunday July 22,
- d) Light lunches (sandwiches and refreshments) and all coffee breaks during the School.

Comfortable individual rooms will be provided to the students at comfortable seaside hotels of Pescara. The cost is approximately 30 euro per day for a double room and 45 euro per day for a single room.

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. List of Courses

Course Title	Instructors	Hours
I. Foundations of Complex Networks	1) Baruch Barzel (Boston)	4
	2) Jeff Johnson (London)	4
	3) Markus Kirkilionis (Warwick)	4
II. Physics of Complex Systems	1) Constantino Tsallis (Rio de Janeiro)	4
	2) Tassos Bountis (Patras)	4
	3) Ko van der Weele (Patras)	4
III. Complex Systems in Biology	1) Dr Alessandro De Moura (Aberdeen),	4
	2) Anastasios Bezerianos (Patras)	4
	3) Fabio Babiloni (Roma)	4
	4) Thanassis Fokas (Cambridge)	4
IV. Complexity in Economics and Social Sciences	1) Laura Gardini and Gian Italo Bischi (Urbino)	4
	2) Rosaria Conte (Roma)	4
	3) Carlo Mari (Pescara) and Erol Kurt (Ankara)	4
	4) Dimitris Ghikas (Patras) and Angela De Sanctis (Pescara)	4