

FIRST ANNOUNCEMENT

6th PH.D. SUMMER SCHOOL - CONFERENCE ON “MATHEMATICAL MODELING OF COMPLEX SYSTEMS”

University “d’Annunzio”, Pescara, Italy 3 – 11 July, 2019

Dedicated to the memory of **Gregoire Nicolis**



In the framework of the European research and training activities in Complexity Science, we announce the 6th Ph.D. School-Conference on “Mathematical Modeling of Complex Systems” as follows:

Date: 3 – 11 July, 2019

Location: University “G. d’Annunzio”, campus of Pescara, Italy

This is the next in a series of events that started at the University of Patras, Greece, in July 2011 (see <http://www.math.upatras.gr/~phdsch11>) and continued at the University of Pescara, Italy, in July 2012 (<http://www.nodycosy.unich.it>), July 2013 at the Technological Educational Institute of Crete, Heraklion, Greece <http://nlsconf2013.physics.uoc.gr> July 2014 at the “Kritiki Estia” in Athens, Greece (see <http://nlsconf2014.physics.uoc.gr>), and the 5th at Patras <http://www.math.upatras.gr/~phdsch15>.

The focus of the 6th Ph.D. School is on the connections between Information Theory and Complexity through the fundamental role of Entropy.

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 modules, taught by experts in each field, on:

I. Fundamental Concepts of Complexity in Physical Systems

A. Bountis (Astana), J. P. van der Weele (Patras), M. Robnik (Maribor), M. G. Velarde (Madrid)

II. Complexity in Biomedical Sciences

A. Bezerianos (Singapore/Patras), A. S. Fokas (Cambridge), A. Provata (Athens), A. Piattelli (Chieti-Pescara), V. Basios (Brussels)

III. Complex Networks and Information Theory

J. J. P. Veerman (Portland), S. Puechmorel (Toulouse), G. Pistone (Torino)

IV. Entropy and Complexity

D. P. K. Ghikas (Patras), C. Tsallis (Rio de Janeiro), S. Thurner (Vienna), R. Hanel (Vienna)

Scientific Organizing Committee:

G. Amato (University “G. d’Annunzio” of Chieti-Pescara)

A. Bountis (Nazarbayev University, Astana)
A. De Sanctis (University "G. d'Annunzio" of Chieti-Pescara)
S. A. Gattone (University "G. d'Annunzio" of Chieti-Pescara)
C. Mari (University "G. d'Annunzio" of Chieti-Pescara)
M. Parton (University "G. d'Annunzio" of Chieti-Pescara)
A. Piattelli (University "G. d'Annunzio" of Chieti-Pescara)
J. J. P. Veerman (Portland State University)
M. G. Velarde (Complutense University of Madrid)
J. P. van der Weele (University of Patras)

Local Organizing Committee:

A. De Sanctis (chair), G. Amato, S. A. Gattone, M. Parton, A. Piattelli

HOW TO APPLY:

Postgraduate or advanced undergraduate students aiming to obtain a Master's or Ph.D. degree in any scientific area involving Complex Systems are invited to apply to Prof. Angela De Sanctis, at a.desanctis@unich.it. 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, including names and contact information of two senior scientists recommending the applicant.

Based on the above information, the Scientific Organizing Committee will select 35 - 40 applicants to attend the School. To obtain a Certificate of Participation the selected students should attend all lectures and exercise sessions of the School. **The total number of instruction hours is nearly 28, which corresponds to 3 ECTS credits**, as stated on the Certificate that each student receives.

All interested students are invited to submit their application **at the latest by May 31, 2019**. They will then be informed about the decision of the Scientific Organizing Committee regarding their acceptance.

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

ATTENDANCE FEE, LIVING EXPENSES, AND FINANCIAL SUPPORT

The attendance fee for each student participating in the Ph.D. School is 150 euro. Limited financial support can be provided to deserving students after sufficient justification. The attendance fee includes:

- A. Participation in all lectures and exercise sessions,
- B. All printed material related to the Ph.D. School,
- C. Participation in all the School's social activities,
- D. Coffee breaks during the School.

Comfortable, low-cost double rooms will be provided to the students at a seaside hotel in Pescara.

On behalf of the Scientific Organizing Committee,
Prof. Angela De Sanctis and Prof. Anastasios Bountis
