

Computational Models of Political and Social Events

July 18 - July 25, 2009, Lipari Island – Italy

Deadline: April 30, 2009



General aim and scope. Following the two very successful school series of the Lipari International Summer School on Computer Science and Bioinformatics and Computational Biology, it is felt as appropriate to start a new summer school series dedicated to a very well established, challenging and fast growing discipline: Computational Social Sciences. The focus of Computational Social Science is on rendering social theory into computational constructs to investigate and experiment in situations where direct observations of human behavior is not possible or not ethical. The development of new theory and new insights that can be applied from the artificial to the natural world.

The spirit of the new series is the same as the old one. In particular, all efforts will be made to expose young researchers to formal lectures given by recognized authorities in the field, while at the same time enjoying the relaxing atmosphere of one of the most beautiful Italian islands. Tutorial sessions will also take place and will be delivered either by the Directors of the summer school or by qualified young scientists in their research groups. The aim and scope of the tutorials is to provide knowledge that is perceived as fundamental both to a young scientist willing to become scientifically active in the field and to a young scientist simply willing to get acquainted with the area. Both the formal lectures and the tutorial will be tailored to an interdisciplinary audience.

Aim and scope: The theme of the school ***Computational Models of Political and Social Events*** will focus on mathematical and computational models in political science. The models of reference will be sociopolitical complexity, governance, and socio-natural systems in evolving environments. There are four lecture series, each of three hours, and four tutorials, each of one hour. Two series of lectures are devoted to computational and mathematical modeling for political events, with special emphasis on event data analysis, agent-based modeling, while the other two are devoted to game theory and group behaviour. The tutorials will cover the most recent advances in Data Mining, Statistics and foundation of political and social science.

Lecturers

- Prof. Phil Schrodtt
Department of Political Science, University of Kansas, USA
Political Science
- Prof. Claudio Cioffi-Revilla
Center for Social Complexity - George Mason University, USA
Political Science
- Prof. Roy Lindelauf
Faculty of Economics and Business Administration - Royal Netherlands Defense Academy, Netherlands
Math/game theory
- Prof. V.S. Subrahmanian
Computer Science Department and Director - Univ. of Maryland Inst. for Advanced Computer Studies, USA
Computer Science

Tutorials

Computer Science

- Dr. G. Giuffrida
University of Catania, Italy
Data base and Data mining: tools and techniques
- Dr. C.I. Sismeiro
Imperial College, London, UK
Statistical Models: tools and techniques

Social and Political Science

- Prof. M.C. Agodi
Università Federico II di Napoli, Italy
Socio-logic: the formal models
- Prof. R. Bichi
Università Cattolica di Milano, Italy
Socio-logic: the informal models

Practical Sections

Computer Science

- Dr. R. Giugno, Dr. A. Pulvirenti
University of Catania, Italy
Data mining using Weka

Social and Political Science

- Dr. Cesare Garofalo
University of Catania, Italy
Agent-Based Models using NetLogo

Lodging and transportation: Participants will be arranged in a comfortable hotel at very special rates. The conference room (in the same hotel) is air-conditioned and equipped with all conference materials. Special areas are reserved to students for the afternoon coursework and study. The island of Lipari can be easily reached from Milazzo, Palermo, Naples, Messina and Reggio Calabria by ferry or hydrofoil (50 minutes from Milazzo). Two kinds of participants are welcome. Students: Participants who are expected to do afternoon courseworks and take a final exam. Auditors: participants who are not interested in taking the final exam. Students who have successfully taken the final exam, will receive a 6 credits certificate.

Registration fee:

- Senior participants Euro 600 (Late registration Euro 700);
- Graduate and undergraduate Students Euro 350 (Late registration Euro 450).

Registration fee does not include hotel and meals. Deadline for application is **April 30, 2009**. Applicants must include a short curriculum vitae and specify two professors whom letters of recommendation will be asked to, if deemed necessary. Applicants will be notified about admission by May 10, 2009. **The official language is English.**

School Directors

- **Prof. Alfredo Ferro**, *University of Catania*
- **Prof. V.S. Subrahmanian**, *University of Maryland*

Scientific Committee

Computer Science

- Giovanni Giuffrida, University of Catania
- Rosalba Giugno, University of Catania
- Alfredo Pulvirenti, University of Catania

Political and Social Sciences

- Giovanni Gennaro, University of Catania
- Carlo Pennisi, University of Catania
- Giuseppe Vecchio, University of Catania

People interested in receiving further information about the school can contact:

Lipari School Organization

Prof. Alfredo Ferro -- Susanna Caramello (Lipari School secretary)

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