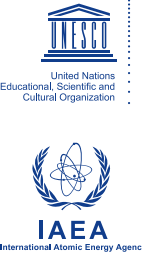




The Abdus Salam

**International Centre
for Theoretical Physics**

www.ictp.it



Spring College on the Physics of Complex Systems

20 May – 14 June 2013

(Miramare - Trieste, Italy)

The Abdus Salam ICTP and SISSA, in collaboration with the partner institutions of the Master in the Physics of Complex Systems (<http://www.polito.it/pcs>) organize the *Spring College on Physics of Complex Systems* from 20 May to 14 June 2013.

Many complex systems in physics, biology, engineering and economics are characterized by a large number of interacting degrees of freedom giving rise to a non-trivial collective behavior. The theoretical and computational tools for a quantitative analysis of complex systems are often rooted in modern (statistical, quantum) physics, and developing a sound methodological basis is essential for students who want to pursue studies in this field.

The Spring College on the Physics of Complex Systems is part of the Master program in Physics of Complex Systems, and aims at giving students the opportunity to get in touch with a selection of topics at the forefront of research, during an intensive 4-weeks program.

Courses and Lecturers:

- + Silvio Franz (LPTMS Orsay)
Spin Glasses, Structural Glasses and Information Theory
- + Ken Sekimoto (Paris VII)
Advanced Methods of Stochastic Dynamics and Thermodynamics
- + Andrea Trombettoni (SISSA)
Nonlinear Dynamics of Ultracold Atoms
- + Cristian Micheletti and Giovanni Bussi (SISSA)
Non-equilibrium Statistical Mechanics of Bio-polymers
- + Bert (HJ) Kappen (Nijmegen)
Machine Learning, inference, optimization and control

Participation

Applicants from all countries that are members of the United Nations, UNESCO or IAEA may attend. As the College will be conducted in English, participants should have an adequate working knowledge of this language. Candidates are warmly advised to solicit recommendation letters to be sent by their supervisors in support of their application.

As a rule, travel and subsistence expenses of the participants should be borne by their home institutions. Every effort should be made by candidates to secure support for their fare (or at least half-fare). However, limited funds are available for some participants, who are nationals of, and working in, a developing country, and who are not more than 45 years old. Such support is available only to those attending the entire activity. *There is no registration fee.*

HOW TO APPLY FOR PARTICIPATION

The Online Application can be accessed at the activity website: <http://agenda.ictp.it/smr.php?2461>. Comprehensive instructions will guide you step-by-step on how to fill out and submit the application form. Kindly send all file attachments in Word or Acrobat format.

Secretariat: Ms. Rosa del Rio (smr 2461)

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ICTP Home Page: <http://www.ictp.it>

Organizing Committee

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(Politecnico di Torino, Italy)**

Local organizer

**M. Marsili
(ICTP, Trieste, Italy)**

DEADLINE

28 February 2013