



School and Conference on Mathematics and Physics of Soft and Biological Matter

2 - 13 May 2011

Miramare, Trieste, Italy

The Abdus Salam International Centre for Theoretical Physics (ICTP) is organizing a **School and Conference on Mathematics and Physics of Soft and Biological Matter**, to be held from 2 to 13 May 2011 in Trieste, Italy. It will be directed by A. DeSimone (SISSA, Trieste, Italy), J.-F. Joanny (Institut Curie, Paris, France), T. Lubensky (University of Pennsylvania, Philadelphia, U.S.A.) and S. Ramaswamy (IISc, Bangalore, India).

Soft Condensed Matter and Biophysics have seen a vigorous development in the last twenty years. The potential impact of this new science is remarkable: from the industrial applications of the "Physics of Daily Life", to the development of quantitative tools for the study of the biophysics of the cell, to the molecular engineering of new drugs and biomaterials. The main topics of this School and Conference will be:

- responsive materials and elasticity of partially ordered soft matter;

- cellular mechanics and motility;

- self-propelled organisms and engineered analogues: individual and collective behavior.

The first week will consist of introductory courses given by F. MacKintosh (Vrije Universiteit), M.C. Marchetti (Syracuse), J. Plastino (Paris), T. Powers (Brown), M. Shelley (Courant), and M. Warner (Cambridge).

The second week will be devoted to an international research conference reviewing recent results. Invited speakers will include: M. Bowick (Syracuse), H. Chaté (CEA Saclay), R. Goldstein (Cambridge), R. Golestanian (Oxford), F. Jülicher (Dresden), K. Kruse (Saarland), T. Ishikawa (Sendai), M.C. Marchetti (Syracuse), D. Marenduzzo (Edinburgh), A. Mogilner (Davis), P. Palffy-Muhoray (Kent), T. Powers (Brown), J. Prost (Paris), Penger Tong (Hong Kong), E.G. Virga (Pavia), M. Warner (Cambridge), Xiangjun Xing (Shanghai), J. Yeomans (Oxford).

PARTICIPATION

Scientists and students from all countries which are members of the United Nations, UNESCO or IAEA may attend the School. As it will be conducted in English, participants should have an adequate working knowledge of that language. Although the main purpose of the Centre is to help research workers from developing countries, through a programme of training activities within a framework of international cooperation, a limited number of students and post-doctoral scientists from developed countries are also welcome to attend.

As a rule, travel and subsistence expenses of the participants should be borne by the home institution. Every effort should



DIRECTORS

A. DESIMONE (SISSA, Trieste, Italy) J.-F. JOANNY (Institute Curie, Paris, France) T. LUBENSKY (University of Pennsylvania, Philadelphia, USA) S. RAMASWAMY (IISc, Bangalore, India)

LOCAL ORGANIZER Ramadas Ramakrishnan (ICTP)

LECTURERS

F. MacKintosh (Vrije Universiteit) C. Marchetti (Syracuse) J. Plastino (Institute Curie) T. Powers (Brown) M. Shelley

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 for those who attend the entire activity. There is no registration fee.

HOW TO APPLY FOR PARTICIPATION

The application form can be accessed at the activity website <u>http://agenda.ictp.it/smr.php?2235</u> Once in the website, comprehensive instructions will guide you step-by-step, on how to fill out and submit the application form.

ACTIVITIY SECRETARIAT:

Telephone: +39-040-2240-201 Telefax: +39-040-2240-7490 E-mail: <u>smr2235@ictp.it</u> ICTP Home Page: <u>http://www.ictp.it/</u> (Courant Institute) **M. Warner** (Cambridge)

DEADLINE for requesting participation

10 January 2011

October 2010