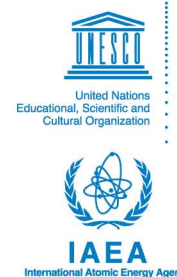




**The Abdus Salam
International Centre for Theoretical Physics**



Workshop on Singular Optics and its Applications to Modern Physics

30 May – 3 June 2011

(Miramare - Trieste, Italy)

The Abdus Salam International Centre for Theoretical Physics is organizing a *Workshop on Singular Optics and its Applications to Modern Physics* to be held at ICTP, Trieste, Italy from 30 May to 3 June 2011.

The primary aim of this workshop is to explore current frontiers of research in topics related to singularities in optics, and in other contexts where singularities are present, particularly in quantum fluids. The generation, manipulation and applications of optical vortices will be discussed, including connections to vortices and vortex structures in other physical systems.

Topics include:

- 1- Generation and manipulation of optical vortices
- 2- Imaging from micro- to astronomical-systems
- 3- Optical tweezers
- 4- Quantum information
- 5- Random optical vortices and beam patterns
- 6- Vortices in quantum turbulence
- 7- BEC and exciton-polariton condensates
- 8- Liquid crystals

Participation

Applicants from all countries that are members of the United Nations, UNESCO or IAEA may attend. As the Workshop will be conducted in English, participants should have an adequate working knowledge of this 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 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?2241>. 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 2241)

the Abdus Salam International Centre for Theoretical Physics - Strada Costiera 11 - 34151 Trieste, Italy

Telephone: +39-040-2240396 - Telefax: +39-040-22407396

E-mail: smr2241@ictp.it

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

Director

Ebrahim Karimi
(University of Naples, Italy)

Local Organizer

Joseph Niemela
(ICTP, Trieste, Italy)

Speakers include

Carlo Barengi
(Newcastle University, UK)

Natasha Berloff
(University of Cambridge, DAMTP, UK)

Sir Michael Berry
(University of Bristol, UK)

Mark Dennis
(University of Bristol, UK)

Sonja Franke-Arnold
(University of Glasgow, UK)

Isaac Freund
(Bar-Ilan University, Israel)

Lorenzo Marrucci
(University of Naples, Italy)

Miles Padgett
(University of Glasgow, UK)

Enrico Santamato
(University of Naples, Italy)

Fabio Sciarrino
(Sapienza University of Rome, Italy)

Marat S. Soskin
(NASU, Ukraine)

Fabrizio Tamburini
(University of Padova, Italy)

**Application
DEADLINE**

15 February 2011