



# WINTER COLLEGE ON INTERFEROMETRY AND APPLICATIONS IN MODERN PHYSICS

**February 2 - 13, 2004**  
**Miramare-Trieste, Italy**

The Abdus Salam International Centre for Theoretical Physics (ICTP), in collaboration with the International Commission for Optics (ICO), the Optical Society of America (OSA) and the International Society for Optical Engineering (SPIE), International Society on Optics Within Life Sciences (OWLS), will organize a *Winter College on Interferometry and Applications in Modern Physics*, which will be held at ICTP, Trieste, Italy, from *February 2 to 13, 2004*.

**DIRECTORS:** **E. Arimondo** (Dip. di Fisica, Università di Pisa, Italy)  
**R. Dändliker** (Institut de Microtechnique, Université de Neuchâtel, Switzerland)  
**R.S. Sirohi** (Indian Institute of Technology - Delhi, India)

**LOCAL ORGANIZER:** **G. Denardo** (ICTP, Italy)

The College will expose the participants to the basic and recent achievements in the theory and applications of interferometry in classical and quantum Physics. The programme consists of lectures by international experts, group discussions and laboratory demonstrations. The aim is to provide the background needed to follow the most advanced literature.

## MAIN TOPICS

- *Non-linear interferometry*
- *Heterodyne interferometry*
- *Holographic interferometry*
- *Interferometry in Spectroscopy*
- *X-ray interferometry*
- *Atom interferometry*
- *Microfabricated Structures*
- *Interferometric gravitational waves detection*

The programme will also include some demonstrations and laboratory exercises.

The **LAMP** (Laser, Atomic and Molecular Physics) programme will include group discussions and internal seminars by participants. Those who intend to deliver a seminar are expected to come to ICTP prepared with all the material needed for their talk.

## **PARTICIPATION**

Scientists and students from all countries that are members of the UN, UNESCO or IAEA can attend the College. As the College will be conducted in English, participants should have an adequate working knowledge of that language.

As a rule, travel and subsistence expenses of the participants are borne by the home institutions. However, limited funds are available for some participants from developing countries, who will be selected by the Organizers. Such financial support is available only for those who attend the entire activity. As scarcity of funds allows travel to be granted only in a few exceptional cases, every effort should be made by candidates to secure support for their fare (or at least half-fare) from their home country. There is no registration fee to attend the College.

Those wishing to participate should complete and return the "Request for Participation" form, to be found at the back of the Bulletin (also obtainable via e-mail: [smr1553@ictp.trieste.it](mailto:smr1553@ictp.trieste.it), using as subject "get announcement", or via WWW Server: <http://agenda.ictp.trieste.it/agenda/> and at web address <http://www.ictp.trieste.it/~smr1553/>), and send it, *before November 1, 2003*, to:

the Abdus Salam International Centre for Theoretical Physics  
Winter College on Interferometry (ref. smr.1553)  
Strada Costiera 11  
I-34014 Trieste, Italy

Telephone: +39-040-2240227    Telefax: +39-040-2240558    E-mail: [smr1553@ictp.trieste.it](mailto:smr1553@ictp.trieste.it)

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***Deadline for  
Requesting funds***

**November 1, 2003**