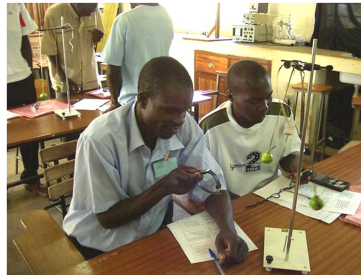




The Abdus Salam  
International Centre for Theoretical Physics



# PHYSWARE



**A COLLABORATIVE WORKSHOP ON LOW-COST EQUIPMENT AND APPROPRIATE TECHNOLOGIES THAT PROMOTE UNDERGRADUATE LEVEL, HANDS-ON PHYSICS EDUCATION THROUGHOUT THE DEVELOPING WORLD**

**16 – 27 February 2009**

*Miramare, Trieste, Italy*

**The goal of this workshop is to** enhance the quality of physics understanding for students in the developing countries. This workshop will focus on mechanics teaching as the first in a series of international and regional workshops on important physics topics. Participants will be expected to become leaders of similar efforts in their local regions. During the workshop these teacher-leaders will share and work with prototypes of affordable "hands on" equipment that can be locally adapted for construction by teachers and their students throughout the developing world. The workshop participants will also develop instructional materials, create construction plans, and ideas for activities to help educators make effective use of the equipment.

## TOPICS AND ACTIVITIES

- 1. Low-cost Equipment Development** for Teaching Mechanics: Participants will work in teams to exchange ideas about equipment that can serve local educational needs and be constructed by teachers and their students;
- 2. Active Learning Materials Development** for Teaching Mechanics: Participants will also work in teams to develop activities that will help them and fellow teachers make effective use of low cost equipment; and
- 3. Using Emerging Technologies for Physics Teaching:** With the assistance of the ICTP M-Lab staff and leaders in the development and use of new educational technologies, participants will discuss ways to help teachers in developing countries make effective use of new relatively low-cost electronic and computer technologies for computer based data collection and analysis as well as networking.

## PARTICIPATION

Scientists and students from all countries which are members of the United Nations, UNESCO or IAEA may attend the Workshop. As it 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 the home institution. Every effort should be made by candidates to secure support for their 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 for this event.

The **Application Form** is available on the ICTP WWW server: <http://agenda.ictp.it/smr.php?1928> (which will be constantly updated) or from the activity Secretariat. It should be completed and returned before **10 October 2008** to:

### PHYSWARE

(smr 1928) (c/o Ms. Stanka Tanaskovic)  
the Abdus Salam International Centre for Theoretical Physics  
Strada Costiera 11, 34014 Trieste, Italy.

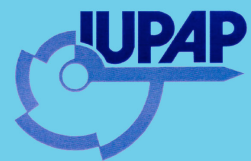
or

[smr1928@ictp.it](mailto:smr1928@ictp.it) (please save and send file attachments in PDF or RTF format)

**Telephone: +39-040-22409911      Telefax: +39-040-22407911**

**E-mail: [smr1928@ictp.it](mailto:smr1928@ictp.it)  
ICTP Home Page: <http://www.ictp.it>**

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**Joe Niemela (ICTP)**

**APPARATUS DEVELOPMENT  
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**PRESENTERS WILL INCLUDE  
WORKSHOP ORGANIZERS, ICTP  
PERSONNEL AND SELECT  
PARTICIPANTS**

## APPLICATION DEADLINE

**10 October 2008**