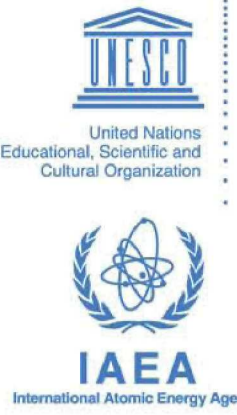




The Abdus Salam  
International Centre for Theoretical Physics



# International Workshop on the Frontiers of Modern Plasma Physics 14 - 25 July 2008

*Miramare, Trieste, Italy*

This two-week intensive workshop on modern plasma physics has a dual purpose:

1) to expose the candidates to new experimental and theoretical methodologies of modern plasma physics,

and

2) to bring them up to date on major developments in the crucial field of thermonuclear fusion including current results and the projected advancements through a variety of next generation machines headed by ITER.

Since ITER is a joint project of both the industrialized and developing countries (three major developing countries are already in the ITER project), ICTP becomes a natural venue for discussion and information dissemination. This workshop will, in substantial part, be devoted to a critical review of the physics and engineering of tokamak plasmas (the core and the edge region). The International perspective provided in this workshop is expected to be beneficial to the participants from developing countries- individually as well as for their national programmes.

## GOAL AND OBJECTIVES

The objectives of this international workshop are to exchange scientific and technological information in the area of fusion physics, in particular the physics of tokamaks, the most advanced concept in the magnetic fusion. We expect a transfer of scientific know-how from the industrial to the developing world.

## TOPICS INCLUDE

Fundamentals of multiscale turbulence in nonuniform magnetized plasmas; Generation of sheared flows and their consequences; Novel plasma heating methods, core-edge coupling, heat and neutron exhaust problems; Steady state current drive; Dust in fusion plasmas; Other critical physics issues related to ITER.

## 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 (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 not more than 45 years old are. Such support is available only for those who attend the entire activity. There is no registration fee.

## Requests for participation

There is no registration fee for attending the Workshop. The "Request for Participation" form is obtainable via Web server: <http://agenda.ictp.it/smr.php?1953> It should be completed, signed and returned by using only one of the following ways:

**If sending an application by e-mail to [smr1953@ictp.it](mailto:smr1953@ictp.it)** please save and send file attachments in either PDF (preferably) or RTF zipped or Doc format.

**If sending an application form by regular mail or courier it should be posted to:**

International Workshop on the Frontiers of Modern Plasma Physics

(smr 1953 c/o Ms. Ave Lusenti)

Abdus Salam International Centre for Theoretical Physics

Strada Costiera 11

34014 Trieste, Italy

(recent photograph & signature of the candidate are compulsory)

**ACTIVITY SECRETARIAT: Telephone: +39-040-2240544**

**Telefax: +39-040-2240585**

**E-mail: [smr1953@ictp.it](mailto:smr1953@ictp.it)**

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

Trieste, December 2007

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## DEADLINE

for requesting participation:

**31 March 2008**