

INTERNATIONAL WORKSHOP ON FRONTIERS OF PLASMA SCIENCE

21 August - 1 September 2006

Miramare, Trieste, Italy

PURPOSE AND NATURE

Collective processes dominate the myriad phenomena which lend challenge and excitement to the plasma state. Driven and stimulated by the problems posed by fusion, accelerators, laboratory experiments and space-astrophysical observations, it is believed that the next advance in understanding the complex self-organizing ability of a plasma will come from investigating the simultaneous existence of a hierarchy of interacting scales, both in equilibrium and in the perturbed state. The advent of short pulse high intensity lasers has opened up the areas of high energy density and relativistic plasmas. These new advances have brought within reach the laboratory simulation of astrophysical phenomena such as X-ray bursts, jets, and supernovae remnants. This Workshop will be devoted to an intense discussion of multi-scale physics laying the foundation of a deeper understanding of plasmas with flows, plasmas interacting strongly with radiation, and the classic but yet to be fully solved problems of particle, energy, and angular momentum transport of relevance in fusion and space plasmas.

PROGRAMME

The aim of this Workshop is to bring together theoretical, computational plasma physicists, observationalists and experimentalists to review and discuss the state of the art in cutting edge plasma research. The Workshop format will lend itself to forging strong interactions between the participants through sessions built around "themes".

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

The **Application Form** is obtainable from the ICTP WWW server: http://cdsagenda5.ictp.it/full_display.php?smr=0&ida=a05217 (which will be constantly up-dated) or from the activity Secretariat. It should be completed and returned before **24 March 2006** to:

**International Workshop on Frontiers of Plasma Science
(smr1765)**

the Abdus Salam International Centre for Theoretical Physics
Strada Costiera 11, 34014 Trieste, Italy.

or

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DEADLINE

for requesting participation

24 March 2006