the Abdus Salam International Centre for Theoretical Physics (ICTP) will organize the

Workshop on Plasma Physics "Capacity Building in Plasma Applications and Diagnostic Techniques"

7 - 11 March 2005 *Miramare, Trieste, Italy*

PURPOSE AND NATURE

The Workshop will build on the ICTP/IAEA Workshop on Plasma Physics: Capacity Building in Plasma Applications and Diagnostic Techniques held in November 2003. The Workshop's objectives are to strengthen the utilization of existing experimental plasma devices in developing country laboratories and to provide a unique opportunity for young researchers from developing countries to participate in challenging plasma physics experiments via an international collaborative team. This is accomplished through a call for developing country host laboratory experimental proposals, the provision of expert mentors to assist with their development and preparation, and the refinement of each proposal during the Workshop via collaborative teams composed of the participants. The Workshop strives to sustain international collaboration in plasma physics and technology through these specifically goal-oriented activities.

MAIN OBJECTIVES

The primary objectives of the Workshop are the provision of guidelines for successful programme building in developing countries as well as the review and discussion of fundamental issues in the practice of plasma physics and technology. Specifically the Workshop will review and discuss the results of the hosted experiment carried out at the University of Pune, India, in November 2004. Up to five new experimental proposals from developing country institutes will also be accepted for consideration. During the Workshop, each proposal will be analyzed, refined, and presented for review by collaborative teams formed from the participants. In addition, reviews of diagnostics, analysis tools, and simulation techniques will be presented via plenary talks. Submission of the associated host laboratory experimental proposal form should be sent to ICTP no later than 1 February 2005.

PROGRAMME

The format of the Workshop consists of working group discussions, plenary lectures, oral presentations, and reviews of current research. Participants will be assigned to experimental proposal working groups corresponding to their research interests. The tone of the Workshop is informal and participation is limited in order to promote efficient discussion and exchange of ideas and experiences.

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. **DIRECTORS**

Brian Stewart (ICTP, Trieste, Italy)

Günther Mank (IAEA, Vienna, Austria)

Artur Malaquias

(IAEA, Vienna, Austria)

TOPICS

Possible topics for hosted experimental proposals include:

Industrial, Environmental, and Engineering Applications

Plasma in Life Sciences

Advanced Diagnostics, Monitoring, Control, and Simulations

Physics of Fusion Plasmas

Laser Produced Plasmas and Material Processing

The **Application Form** is obtainable from the ICTP WWW server: **http://agenda.ictp.trieste.it/agenda/current/fullAgenda.php?email=0&ida=a04318** (which will be constantly up-dated) or from the activity Secretariat. It should be completed and returned before <u>15 November 2004</u> to:

Workshop on Plasma Physics (smr 1698) the Abdus Salam International Centre for Theoretical Physics Strada Costiera 11, 34014 Trieste, Italy.

or

smr1698@ictp.trieste.it (please save and send file attachments in RTF format) Telephone: +39-040-2240544 Telefax: +39-040-2240585 E-mail: smr1698@ictp.trieste.it ICTP Home Page: http://www.ictp.trieste.it DEADLINE

for requesting participation

15 November 2004

September 2004