



The Abdus Salam
**International Centre
for Theoretical Physics**
50th Anniversary 1964 - 2014



Joint ICTP-IAEA COLLEGE ON ADVANCED PLASMA PHYSICS

18 - 29 August 2014
(Miramare - Trieste, Italy)

Brief Description:

Since much of the known universe is in plasmas state, the study of the plasma state is one of the imperatives in Physics pedagogy and research. The primary objective of this college is advanced pedagogical training for students and researchers from the developing countries. Student and researcher participation from "north countries" is also encouraged. The college program is designed: 1) to teach and stimulate the participants to develop an advanced understanding and perspective of elementary and basic ideas on plasma physics, and 2) to familiarize and train students and researchers in recent developments and advances in experiments, design, theory, modeling, and numerical computation so that their research and dissemination abilities are honed.

Topics:

- Elementary as well as advanced treatment of fundamental processes in plasma physics: Plasma confinement, Collective phenomena, instabilities, Coherent nonlinear phenomena, self-organization, plasma turbulence.
- Their applications to Magnetic Fusion (theory, experiments, design, and simulations) laser generated plasmas, astrophysical and cosmic plasmas (solar, planetary magnetospheres, jets etc.), and exotic plasmas (relativistic, quantum, quantum-relativistic). Fusion applications will be particularly emphasized.
- A poster session to highlight participant research will be organized.

Participation:

Scientists from all countries that are members of the United Nations, UNESCO or IAEA may attend the College. As the activity will be conducted in English, participants should have an adequate working knowledge of this language. Travel and subsistence expenses of participants should be borne by their home institutions. Limited funds are available for some participants who are nationals of, and working in, a developing country, to be selected by the Organizers. However, every effort should be made by candidates to secure at least partial support for their travel expenses. **Registration is free-of-charge for all attendees.**

How to apply:

The "On-line Application" form can be accessed at the **ICTP website**:
http://cdsagenda5.ictp.trieste.it/full_display.php?smr=0&ida=a13216

ACTIVITY SECRETARIAT

Joint ICTP-IAEA
College on Advanced Plasma Physics [smr2599]
Elizabeth Brancaccio (Ms)

the Abdus Salam International Centre for Theoretical Physics
Strada Costiera 11, 34151 Trieste, Italy

DIRECTORS:

Swadesh MAHAJAN
Institute for Fusion Studies, University of
Texas at Austin, USA

Zensho YOSHIDA
University of Tokyo, Japan

Richard KAMENDJE
International Atomic Energy Agency
Vienna, Austria

Daniel O. GOMEZ
Instituto de Astronomia y Fisica del Espacio,
Buenos Aires, Argentina

Local Organizer

Joseph NIEMELA ICTP, Trieste, Italy

Scientific advisory committee

L. Chen (US/China)
S. Cowley (UK)
R. Galvao (Brazil)
J. Herrera (Mexico)
M. Kikuchi (Japan)
V. Krishan (India)
J. Li (China)
P. Morrison (US)
F. Pegoraro (Italy)
S. Prager (US)
R. Dewar (Australia)
H. Saleem (Pakistan)
A. Sen (India)
Avinash Khare (India)
F. Zonca (Italy)

DEADLINE FOR APPLICATION

30 April 2014