Joint ICTP-IAEA School on Atomic and Molecular Spectroscopy in Plasmas

6 - 10 May 2019
Trieste, Italy

Further information:
http://indico.ictp.it/event/8660/
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A 5-day series of lectures and computing practical exercises to help Ph.D. students, early career plasma physicists and spectroscopists develop an understanding of the techniques used to model and simulate radiative processes in plasmas.

Description:

The properties of laboratory, industrial and astrophysical plasmas are determined by numerous atomic and molecular processes occurring under a wide range of physical conditions, generally far from equilibrium. The use of spectroscopic measurement in plasmas has been demonstrated to provide a powerful diagnostic technique, giving information on properties such as temperature, density, local plasma fields, electron energy distribution and so on, which is hard to obtain accurately by other means.

The purpose of this School is to provide training for plasma physicists, plasma spectroscopists and astrophysicists for fusion and other applications by bringing together experts in experimental and theoretical plasma spectroscopy within the unique atmosphere and facilities of the ICTP. There is a particular focus on knowledge transfer between researchers from developed and developing countries.

Topics:

- Experimental plasma spectroscopy
- Atomic structure and radiation
- Collisional physics in plasmas
- Spectral line broadening
- Line intensities and collisional-radiative modelling
- Astrophysical spectroscopy
- Plasma opacity and radiative transfer
- Spectroscopy of magnetic confinement fusion plasmas
- Spectroscopy of laser-produced plasmas
- Molecular structure and spectroscopy

Directors:

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Speakers:

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How to apply:

Online application:
http://indico.ictp.it/event/8660/

Female scientists are encouraged to apply.

Grants:

A limited number of grants are available to support the attendance of selected participants, with priority given to participants from developing countries. There is no registration fee.

Deadline:

1 January 2019

IAEA International Atomic Energy Agency

The Abdus Salam International Centre for Theoretical Physics
www.ictp.it
Trieste, Italy