



The Abdus Salam  
International Centre  
for Theoretical Physics



# Joint ICTP-IAEA School on Data for Modelling Atomic and Molecular Processes in Plasmas

## Description:

This joint IAEA-ICTP School is a 5-day series of lectures and computing practical exercises to help early-career plasma physicists develop an understanding of the techniques used to model and simulate the radiative and collisional properties of plasmas at the atomic level.

## MORE DETAILS:

- Fundamental principles of spectroscopic diagnostics
- Advances in experimental plasma diagnostic techniques
- Calculations of atomic and molecular structure and properties
- Fusion plasmas
- Collisional-radiative modelling
- Online codes for the calculation of ionization distributions and spectra
- Spectroscopic characteristics of non-Maxwellian and highly transient plasmas
- Spectral line broadening
- Astrophysical spectroscopy
- Plasma opacity
- Principles of evaluation and uncertainty quantification of atomic and molecular data
- Data management and dissemination

## SPEAKERS:

S. BREZINSEK, Forschungszentrum Jülich, Germany  
A. CALISTI, France  
J. GORFINKIEL, Open University, UK  
M. GOTO, NIFS, Japan  
C. HILL, IAEA, Austria  
R. PIRON, CEA/CAM/DIF, France  
Y. RALCHENKO, NIST, USA



**18 - 22 March 2024**



**Trieste, Italy**



**Deadline:  
15 December 2023**

## DIRECTORS:

S. BREZINSEK, Forschungszentrum Jülich, Germany  
DIPTI, IAEA, Austria  
C. HILL, IAEA, Austria  
Y. RALCHENKO, NIST, USA

## LOCAL ORGANISER:

S. SCANDOLO, ICTP, Italy

## 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.

## FURTHER INFORMATION:



E-mail: [smr3924@ictp.it](mailto:smr3924@ictp.it)

Web: <http://indico.ictp.it/event/10462/>

Female scientists are encouraged to apply.

