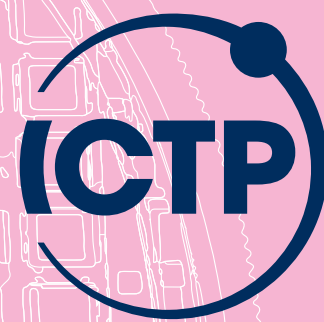


21st International Workshop on Computational Physics and Materials Science: Total Energy and Force Methods



11 - 13 January 2023
An ICTP Meeting
Trieste, Italy

Further information:
<http://indico.ictp.it/event/10056/>
smr3814@ictp.it

This workshop is held in Trieste every two years and is devoted to recent advances in condensed matter physics and materials science, based on realistic calculations of the electronic structure of complex systems.

Directors:

S. BIERMANN, Ecole Polytechnique, France
F. MAURI, Università La Sapienza, Italy
T. SAHA-DASGUPTA, S. N. Bose Centre for Basic Sciences, India
N. SERIANI, ICTP, Italy

Local Organiser:

N. SERIANI, ICTP, Italy

Speakers:

N. ARTHUR, Utrecht University, The Netherlands
T. AYRAL, Atos Quantum Lab, France
F. BRUNEAU, CEA, France
M. CASULA, Sorbonne University, France
C. E. DREYER, Stony Brook University, USA
M. R. FILIP, University of Oxford, UK
A. FERRETTI, CNR, Italy
A. HALDER, Trinity College Dublin, Ireland
E. INACK, Perimeter Institute, Canada
S. G. LOUIE, University of California, USA
Z. LI, ICTP, Italy
J. LISCHNER, Imperial College London, UK
A. MARRAZZO, University of Trieste, Italy
F. MACHEDA, Istituto Italiano di Tecnologia (IIT), Italy
S. MANDAL, West Virginia University, USA
L. MONACELLI, The University of Rome, Sapienza, Italy
E. PETERSON, Los Alamos National Laboratory Physics of Condensed Matter and Complex Systems, USA
S. PITTALIS, CNR, Italy
L. RATCLIFF, University of Bristol, UK
M. SIMONCELLI, TCM Group, Cavendish Laboratory, University of Cambridge, UK
Y.W. SON, Korea Institute for Advanced Study, Republic of Korea
I. TIMROV, Ecole Polytechnique Federale de Lausanne (EPFL), Switzerland
S. WEBER, ETH Zürich, Switzerland

Description:

The aim is a critical discussion of methods and challenging applications. It has become one of the most popular regular events of the international ab-initio electronic structure community. This event also has the ambition to reach out to countries where the electronic structure community is not traditionally as strong as in Europe, the USA and Japan, in coherence with the mission of its host institution, the ICTP.

The workshop will also include the award ceremony for the "Walter Kohn Prize for quantum mechanical material modeling" co-funded by ICTP and the Quantum ESPRESSO Foundation.

Topics:

- Spectroscopy
- Strong electronic correlations
- Electron-phonon coupling
- Superconductivity
- Novel functionals
- Transport
- Advanced Materials
- Materials Discovery
- Machine Learning
- Quantum Computing

How to apply:

Online application:
<http://indico.ictp.it/event/10056/>

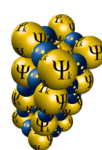
Female scientists are encouraged to apply.

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:

21 October 2022



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

