Workshop on Spectroscopy and **Dynamics** of Photoinduced **Electronic Excitations** 

8 - 12 May 2017 **Trieste - Italy** 

Leading experts on both theoretical and experimental research of dynamics of photoinduced electronic excitations will discuss developments and future directions in understanding such dynamics, and its dependence on the materials properties.

### **Description:**

In the last years there has been a tremendous progress in the investigation of dynamics of photoinduced electronic excitation in real materials, mainly thanks to developments in experimental techniques, like ultrafast spectroscopy, and in theoretical methods, like many-body perturbation theory and timedependent density functional theory. Processes of interest include photoabsorption, exciton dynamics, and charge transfer. These issues are of interest for fundamental research, but are also relevant for applications in photovoltaics, optoelectronics, and photocatalysis. Active researchers are invited to apply online and present the results of their research in the form of a poster, and submission of relevant short abstract is mandatory.

### **Topics:**

- · Exciton generation, dissociation and
- recombination
- Charge separation and transfer
- Carrier relaxation
- Redox processes at solid-liquid interfaces
- Spectroscopic characterization of excited states
- Ultrafast spectroscopy for excitation dynamics
- Many-body perturbation theory
- Time-dependent density functional theory

**ICTP** 

**Further information:** Activity URL: http://indico.ictp.it/event/7961/ E-mail: smr3116@ictp.it

### **Directors:**

R. GEBAUER. ICTP A. RUBIO, Max Planck Institute for the Structure of Dynamics of Matter, and Universidad del Pais Vasco UPV/EHU N. SERIANI, ICTP

### **Workshop Speakers:**

V. BARONE, SNS M. BEARD, NREL J. BLUMBERGER, University College London G. CERULLO, Politecnico di Milano E. COLLINI, University of Padova C. DRAXL, Humboldt University V. DYAKONOV, University of Wuerzburg **R. ERNSTORFER, Fritz Haber Institute** F. GIUSTINO, Oxford University E.K.U. GROSS, MPI for Microstructure Physics L. KRONIK, Weizmann Institute of Science J. LISCHNER, Imperial College S. LOUIE, UC Berkeley E. MOLINARI, University of Modena O. PREZHDO, University of Southern California L. REINING, Ecole Polytechnique S. SARICIFTCI, Johannes Kepler University Linz **R. SCHOLZ, TU Dresden** K. SIVULA, EPFL M. STRANO, MIT

# How to apply:

### Grants:

**Online application:** http://indico.ictp.it/event/7961/

Female scientists are encouraged to apply.

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.

## **Deadlines:** 31 January 2017

if needing financial support and/or visa, otherwise:

31 March 2017







**International Centre** for Theoretical Physics



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