

São Paulo International Schools on Theoretical Physics



School on Electronic Structure and Quantum Transport Methods

October 13 - 24, 2014

Instituto de Física Teórica - UNESP - São Paulo, Brazil

This South American School on Electronic Structure and Quantum Transport Methods aims at bringing together graduate students and young researchers to interact with some of the leading experts in the field. The school will involve a combination of minicourses, hands on tutorials and research seminars that will explain the power of simulation in condensed matter and materials design. The research seminars will also discuss the state of the art in dealing with current limitations of the standard methodologies.

The school is intended for graduate students and young researchers in the fields of theoretical condensed matter physics and computational chemistry. A basic knowledge of condensed matter and/or atomic and molecular physics is preferred.

Organizers:

A. Fazio (IF-USP), **A. R. Rocha** (IFT-UNESP), **S. Scandolo** (ICTP - Trieste)

Minicourse Lecturers:

R. Gebauer (ICTP - Trieste) - Time-Dependent Density Functional Theory

C. Lewenkopf (UFF) - Electronic Transport Theory: Equilibrium and Out-of-Equilibrium

C. R. Miranda (UFABC) - Integrated Multi-Scale Methods for Materials

M. Rossi (Oxford University) - Quantum Nuclei: (ab initio) Path Integral Molecular

Dynamics for Static and Dynamic Observables

S. Sanvito (Trinity College Dublin) - Non-Equilibrium Transport and Density Functional Theory

Seminar Speakers:

A. Antonelli (UNICAMP)

M. Scheffler (Fritz Haber Institute)*

B. Koiller (UFRJ)

K. S. Thygesen (Technical University of Denmark)*

A. J. Roque da Silva (LNLS)

A. Zunger (University of Colorado at Bolder)*

* to be confirmed

There is no registration fee and limited funds are available for local and travel support of participants.

The online application form and more information can be found at:

<http://www.ictp-saifr.org/qtm>

The application deadline is **August 18, 2014**



ICTP-SAIFR Steering Committee:

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UNESP rector

Carlos Brito Cruz

FAPESP scientific director

Jacob Palis

Brasil Acad. of Sci. president

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Representing South America

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IAS, Princeton

S. Randjbar-Daemi (coord.)

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