Workshop on **Fundamentals on** Quantum Transport



7 - 11 August 2017 **Trieste, Italy**

The study of quantum effects on transport properties has been a precious tool to unveil fundamental properties of quantum matter, as well as key to design the new nano-devices with specific functionalities. Important advances on the experimental side, also outside quantum transport traditional arena, have further stimulated a flurry of theoretical activity of unprecedented intensity.

Topics:

- The Superconductor-Insulator Transition;
- Transport In Graphene;
- The Metal-Insulator Transition In Quantum Systems;
- Transport And Entanglement;
- Topological Insulators And Superconductors;
- Mesoscopic Effects;
- Thermoelectric Effects;
- Heat Transport;
- · Quantum Pumping;
- Photon And Polariton Transport;
- Quantum Transport In Cold Atoms, Quantum Hall Systems.

Phd students and young post-docs may consider also attending the School on Fundamentals on Quantum Transport that will be organized the week before the Workshop to introduce the topic and provide the necessary background for a successful attendance of this Workshop.

(see School webpage: http://indico.ictp.it/event/7980/)

How to apply:

Online application: http://indico.ictp.it/event/8140/

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.



Directors:

Further information:

E-mail: smr3136@ictp.it

B. ALTSHULER, Columbia University, New York

Activity URL: http://indico.ictp.it/event/8140/

I. BLOCH, LMU and MPQ Munich

I. LERNER, University of Birmingham

R. FAZIO, ICTP

Speakers*:

I.L. ALEINER, Columbia University

E. ALTMAN, Weizmann Institute of Science

G. BENENTI, University of Como

E. BERG, Weizmann Institute of Science

J. CHALKER, University of Oxford

R. CITRO, University of Salerno C. CIUTI, Université Paris 7

S. FLACH, Massey Univ. Auckland, & Inst. for Basic Science Daejeon

D. GANGARDT, University of Birmingham

Y. GEFEN, Weizmann Institute of Science

A. GEORGES, Ecole Polytechnique Palaiseau

C. GROSS, MPQ Garching

M. HAFEZI, University of Maryland

M. HEIBLUM, Weizmann Institute of Science F. HEIDRICH-MEISNER, LMU Munich

L. IOFFE, Rutgers University

A. KAPITULNIK, Standford University

P. KIM, Columbia University

A. KITAEV, Caltech

L. LEVITOV, MIT

D. LOSS, University of Basel **G. MODUGNO, LENS Firenze**

J. PEKOLA, Aalto University

Y. RUBO, UNAM Temixco

U. SCHNEIDER, University of Cambridge

C. SCHÖNENBERGER, University of Basel

D. SHAHAR, Weizmann Institute of Science G. SHLYAPNIKOV, Univ. XI Paris Sud

A. STERN, Weizmann Institute of Science F. TADDEI, SNS Pisa

* (preliminary list)

Deadlines:

24 April 2017

if needing financial support and/or visa, otherwise:

1 May 2017



