



Conference on "Quantum Phenomena in Confined Dimensions"

4 - 8 June 2007
(Miramare - Trieste, Italy)

The Abdus Salam International Centre for Theoretical Physics (ICTP), Trieste, Italy, is organizing a **Conference on "Quantum Phenomena in Confined Dimensions to take place from 4 to 8 June 2007."**

The aim of the Conference will be to address the fundamental physics of quantum transport in novel materials (such as graphene and carbon nanotubes) and of dynamics and electronic correlation in various types of quantum nanostructures.

TOPICS:

Electronic properties and quantum transport in graphene; transport and correlation effects in carbon nanotubes; quantum dots; Kondo effect.

Quantum dynamics, including quantum condensates and excitons in quantum dots.

Spin dynamics and spin coherence in quantum dots; development of solid state devices for quantum information processing.

PARTICIPATION

Scientists and students from all countries that are members of the United Nations, UNESCO or IAEA may attend the activity. As it will be conducted in English, participants must have an adequate working knowledge of this language. Although the main purpose of the Centre is to help researchers from developing countries through a programme of training activities within a framework of international cooperation, a limited number of students and post-doctoral scientists from developed countries are also welcome to attend.

As a rule, travel and subsistence expenses of the participants are borne by their home institutions. Every effort should be made by candidates to secure support for their fare (or at least half-fare). However, limited funds are available for some participants, who are nationals of, and working in, a developing country, and who are not more than 45 years old. Such support is available only to those attending the entire activity. There is no registration fee.

The **Application Form** is obtainable from the ICTP WWW server: <http://agenda.ictp.it/smr.php?1844> (which will be constantly up-dated) or from the activity Secretariat (smr1844@ictp.it). It should be completed, signed and returned **before 15 March 2007 to:**

Conference on Quantum Phenomena in Confined Dimensions (smr.1844)
c/o Ms. Marina de Comelli
the Abdus Salam International Centre for Theoretical Physics
Strada Costiera 11, I-34014 Trieste, Italy

or

<mailto:smr1844@ictp.it> (please send file attachments in one of the following formats:
PDF (preferably), RTF zipped or DOC)
(Recent photograph & signature of the candidate are compulsory)

Telefax: +39-040-224163 [E-mail: smr1844@ictp.it](mailto:smr1844@ictp.it) Telephone: +39-040-2240305

<http://agenda.ictp.it/smr.php?1844>

(Trieste, Jan./ II March 2007)



Co-sponsored by:

**NEC LABORATORIES AMERICA
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LOCAL ORGANIZER

Boris NAROZHNY
(ICTP, Trieste, Italy)

INVITED SPEAKERS

B. ALTSHULER (Columbia, NY, USA)
E. ANDREI (Rutgers, USA)
L. BALENTS (UCSB, USA)
V. CHEIANOV (Lancaster, UK)
K. ENSSLIN (ETH, Switzerland)
K. FLENSBERG (Copenhagen, Denmark)
Y. GEFEN (Weizmann Inst., Israel)
A. GREILICH (Dortmund, Germany)
F. GUINEA LOPEZ (Madrid, Spain)
R. HAUG (Hannover, Germany)
P. KIM (Columbia Univ., NY, USA)
K. LE HUR (Yale, USA)
A. LICHTENSTEIN (Hamburg, Germany)
D. LOSS (Basel, Switzerland)
N. MASON (Urbana-Champaign, USA)
A. MORPURGO (TU Delft, Netherlands)
K. NOVOSELOV (Manchester, UK)
A. PINCZUK (Columbia U., NY, USA)
E. ROTENBERG (Berkeley, USA)
M. SKOLNICK (Sheffield, UK)
S. TARUCHA (Tokyo, Japan)
R. YOUNG (Toshiba Cambridge, UK)
E. YUZBASHYAN (Rutgers, USA)

DEADLINE
for requesting participation:

15 March 2007