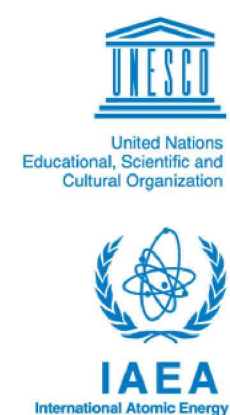




The Abdus Salam
International Centre for Theoretical Physics



Workshop "SUPERSOLID 2008"

18 - 22 August 2008

Miramare, Trieste, Italy

The Abdus Salam International Centre for Theoretical Physics (ICTP), Trieste, Italy, is organizing an **international Workshop on supersolidity** to be held in Trieste from 18 to 22 August 2008.

The discovery of the phenomenon of "supersolidity" in helium, a non-dissipative transport of ^4He -atoms through ^4He -crystals, is an amazing recent achievement in the low-temperature physics. While some of the mechanisms of supersolidity in ^4He , such as superfluid grain boundaries, are now established at the level of first-principle simulations and direct experimental observation, a microscopic interpretation of the phenomenon of non-classical rotational inertia originally observed by Kim and Chan is still lacking, or at least remains highly controversial.

The aim of the Workshop is to bring together researchers actively working on supersolidity of ^4He , as well as on other supersolid systems and models, to promote deeper understanding of the phenomenon and its fundamental implications.

TOPICS

- Non-classical rotation inertia and new experimental designs
- Superfluid grain boundaries
- Phenomenology of supersolids
- Microscopic mechanisms of supersolidity
- First-principle simulations of supersolidity
- Lattice supersolids

SPEAKERS

L. Balents (UCSB, USA)
G. Biroli (CEA, Saclay, France)
E. Blackburn (UCSD, USA)
M. Boninsegni (University of Alberta, Canada)
F. Caupin (ENS, Paris, France)
D. Ceperley (UIUC, USA)
D. Galli (University of Milan, Italy)
R. Hallock (Umass, Amherst, USA)
E. Kim (KAIST, S. Korea)
H. Kojima (Rutgers, USA)
M. Kubota (ISSP, Japan)
A. Kuklov (CUNY, USA)
N. Mulders (Delaware, USA)

A.Y. Parshin (Kapitza Institute, Russia) *
P. Phillips (Urbana, USA)
L. Pollet (ETH, Switzerland)
J. Reppy (Cornell, USA)
E. Rudavskii (ILTP, Ukraine)
S.I. Shevchenko (ILTP, Ukraine)
K. Shirahama (Yokohama, Japan)
J. Sofo (Penn State, USA)
P. Stamp (PITP, UBC, Canada)
S. Wessel (Stuttgart, Germany)
J. West (Penn State, USA)
J. Ye (Penn State, USA)

* to be confirmed

PARTICIPATION

Scientists from all countries that are members of the UN, UNESCO or IAEA can attend the Workshop. The Organizers will select participants upon evaluation of the application forms and of the lists of recent publications. The main purpose of the Centre is to help researchers from developing countries within the framework of international cooperation. However, scientists from developed countries are most welcome to attend. As the Workshop will be conducted in English, participants must have an adequate working knowledge of that language.

As a rule, travel and subsistence expenses of the participants are borne by their home institutions. Limited funds are available for a limited number of applicants who are nationals of, and working in, developing countries. As scarcity of funds allows travel to be granted only in a few exceptional cases, every effort should be made by candidates to secure support for their fare from their home country. Such financial support is available only to those attending the entire Workshop. There is no registration fee to attend this activity.

The closing date for the receipt of requests for participation is
28 March 2008

Interested participants should fill in and submit the **Online Application Form** that can be found at: <http://agenda.ictp.trieste.it/smr.php?1959> and attach a **C.V., research abstract and a list of recent publications (necessary to evaluate the pertinence to the subject of the Workshop)**. Any file attachments should kindly be uploaded on the above site in PDF format.

Secretariat: Supersolid 2008 (SMR.1959)
c/o Ms. N. Ivanissevich
the Abdus Salam International Centre for Theoretical Physics
Strada Costiera 11, I-34014 Trieste, Italy

Telephone: +39-040-2240383

E-mail smr1959@ictp.it

Telefax: +39-040-224163

ICTP Home Page: <http://www.ictp.it>

Trieste, January 2008

ORGANIZERS

Sebastien Balibar (ENS, France)

Moses Chan (Penn State, USA)

Mikhail Kiselev (ICTP, Italy)

Boris Svistunov (UMass, USA)

DEADLINE for applications

28 March 2008

WORKSHOP WEB PAGE:

<http://agenda.ictp.trieste.it/smr.php?1959>