



The Abdus Salam  
International Centre for Theoretical Physics

**FOURTH STIG LUNDQVIST CONFERENCE on  
ADVANCING FRONTIERS of CONDENSED MATTER PHYSICS**

**3 - 7 July 2006**  
(Miramare - Trieste, Italy)

The Abdus Salam International Centre for Theoretical Physics (ICTP), Trieste, Italy, will organize the fourth in the series of Stig Lundqvist Conferences on Advancing Frontiers of Condensed Matter Physics, to be held in Trieste from 3 to 7 July 2006.

The breadth of topics and authoritative line-up of speakers has been a distinctive trait of this series, since its conception 1999. In the last years the field of condensed matter physics has experienced a tremendous expansion towards adjacent fields like soft matter, biology and chemistry. Methods, concepts, and ideas, traditionally developed within condensed matter physics, are increasingly applied and extended to these novel promising fields. At the same time, new quantum phenomena are emerging and being discovered, thanks to the capability to manipulate matter at the nanoscale. The Fourth Stig Lundqvist Conference addresses this interdisciplinary trend by considering remarkable recent developments. The Conference will consist of invited talks and poster presentations, which will focus on contributions of condensed matter physics concepts and ideas to the following areas:

*Quantum bits, dots;  
Quantum condensates;  
Supersolids;  
Soft Matter;  
Nanobiophysics;  
Surfaces;  
New trends in transport.*

**PARTICIPATION**

Scientists and students from all countries which are members of the United Nations, UNESCO or IAEA may attend the Conference. As it will be conducted in English, participants should have an adequate working knowledge of this language.

As a rule, travel and subsistence expenses of the participants should be borne by the home institution. 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. Such support is available only for those who attend the entire activity. There is no registration fee for this Conference.

The **Application Form** is obtainable from the Activity Web page:  
<http://agenda.ictp.it/smr.php?1759> (which will be constantly up-dated)  
or from the Activity Secretariat: ([smr1759@ictp.it](mailto:smr1759@ictp.it))

It should be completed, signed and returned before **1 MARCH 2006** to:

the Abdus Salam International Centre for Theoretical Physics  
**smr.1759**  
(c/o Ms. Doreen Sauleek)  
Strada Costiera 11, I-34014 Trieste, Italy

or via email: [smr1759@ictp.it](mailto:smr1759@ictp.it)  
(please save and send file attachments in RTF format)

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**DIRECTORS:**

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(SISSA, Trieste, Italy, &  
Princeton University, NJ, U.S.A.)

**LOCAL ORGANIZER:**

**E. TOSATTI**  
(SISSA & ICTP, Trieste, Italy)

**PARTIAL LIST OF INVITED SPEAKERS:**  
(updated as of 19.1.2006)

**B. ALTSHULER** (Columbia)  
**N. ASHCROFT** (Cornell)  
**D. CEPERLEY** (UIUC)  
**P. CHAIKIN** (Princeton)  
**M. CHAN** (Penn State)  
**P. CREMER** (Texas A&M)  
**S. DAS SARMA** (Maryland)  
**S. De FRANCESCHI** (TASC, Trieste)  
**G. DIETLER** (EPFL)  
**G. GALLI** (Livermore)  
**J.T. GROVES** (Berkeley)  
**U. HEIZ** (Ulm, Germany)  
**K. KERN** (MPI, Stuttgart)  
**P. KIM** (Columbia)  
**M. KLEIN** (Univ. Penn)  
**P. LOUBEYRE** (Paris)  
**A.P. MacDONALD** (Texas)  
**N. PROKOF'EV** (Massachusetts)  
**D. QUERE'** (Paris)  
**J. RAEDLER** (LMU, Germany)  
**L. REATTO** (Milano)  
**J. REPP** (IBM Zürich)  
**A. SOOD** (Bangalore)  
**M. THORPE** (Univ. Arizona)  
**E. WILLIAMS** (Maryland)

**DEADLINE:**  
for requesting participation

**1 MARCH 2006**