

**THIRD STIG LUNDQVIST CONFERENCE on
ADVANCING FRONTIERS of CONDENSED MATTER PHYSICS:**

**FUNDAMENTAL INTERACTIONS and
EXCITATIONS in CONFINED SYSTEMS**

11 - 15 August 2003
(Miramare - Trieste, Italy)

The Abdus Salam International Centre for Theoretical Physics (ICTP), Trieste, Italy, will organize the third in the series of Stig Lundqvist Conferences on the Advancing Frontiers of Condensed Matter Physics, to be held in Trieste from 11 to 15 August 2003. The theme this year will be on: Fundamental Interactions and Excitations in Confined Systems.

The study of material systems in confined geometries comprises major areas of the nanoscales sciences, of the research of quantum fluids and solids, of the exploration of physical phenomena in biological systems, the development of advanced fabrication and measurement methods at the nanoscale and single molecule levels, etc. Research of highly confined structures, a class of material systems that includes a diverse group of structures, are among the most active branches of fundamental and applied science and are driving forces of contemporary engines for economic growth, such as microelectronics and optoelectronics. These studies create breakthroughs that expand the frontiers of fundamental sciences and revolutionize the state-of-the-art of leading technologies.

This Conference will bring together scientists who are playing key roles in these studies, with the goal of debating the most recent developments in expanding areas of fundamental and applied research.

Key topics to be debated are recent developments in:

Nanomagnetism
Novel Molecular Systems
Biological Systems
Quantum Fluids
Optical and Mechanical Responses at the Nanoscale

Scientists and students from all countries that are members of the UN, UNESCO or IAEA can attend the Conference. As this activity will be conducted in English, participants should have an adequate working knowledge of that language.

As a rule, travel and subsistence expenses of the participants should be borne by the home institutions. However, limited funds are available for some scientists from developing countries, to be selected by the Organizers. 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 (or at least half the fare) from their home country. Such financial support is available only to those attending the entire Conference. There is no registration fee for this activity.

The Application Form is obtainable from the ICTP WWW server:
<http://agenda.ictp.trieste.it/agenda/current/fullAgenda.php?email=0&ida=a0276>
(which will be constantly up-dated) or from the activity Secretariat.
It should be completed and returned before **15 APRIL 2003** to:

the Abdus Salam ICTP
(smr1511)
Strada Costiera 11
I-34014 Trieste, Italy

or

smr1511@ictp.trieste.it
(please save and send file attachments in RTF format)

The decision of the Organizers will be communicated to all candidates as soon as possible.

DIRECTORS:

A. PINCZUK
(Columbia University, NY, U.S.A.)

G. SCOLES
(Princeton University, NJ, U.S.A.)

LOCAL ORGANIZER:

V. KRAVTSOV
(the Abdus Salam ICTP, Trieste, Italy)

PARTIAL LIST OF INVITED SPEAKERS:

F. BELTRAM (SNS - Pisa)
F. BISCARINI (Bologna)
C. BUSTAMANTE (UC Berkeley)
C. CALLEGARI (Graz)
P. CHAIKIN (Princeton)
M.L. COHEN (Berkeley)
M. DEVORET (Yale)
J. FERNANDEZ (Columbia)
D. GATTESCHI (Firenze)
A. HEEGER (UC Santa Barbara)
J. IMRY (Weizmann)
J.K. JAIN (Penn. State)
P. KIM (Columbia)
M. KLEIN (Univ. Penn)
J.P. KOTTHAUS (Munich)
A. LAIO (CSCS, Lugano)
U. LANDMAN (Georgia Tech.)
U. LEVY (Grenoble)
S. LINDSAY (ASU, Phoenix)
D. L. MILLS (UC Irvine)
W.R. SALANECK (Linkoping)
M. SARACHIK (CUNY, New York)
S. SCANDOLO (ICTP, Trieste)
U. SIVAN (Technion)
H. STÖRMER (Columbia)
C. TEJEDOR (UA Madrid)
Ch. WOELL (Bochum)

DEADLINE:

15 APRIL 2003

