ICTP − The Abdus Salam International Centre for Theoretical Physics, Trieste, Italy

smr1318/Announcement

THE SECOND STIG LUNDQVIST
RESEARCH CONFERENCE
ON
THE ADVANCING FRONTIERS OF
CONDENSED MATTER PHYSICS:
"NON−CONVENTIONAL SYSTEMS
AND NEW DIRECTIONS"

2 − 6 July 2001
Miramare − Trieste, Italy

The Abdus Salam International Centre for Theoretical Physics (ICTP), Trieste, Italy, with the co−sponsorship of the Office of Naval Research (ONR), Arlington, USA and the Scuola Internazionale Superiore di Studi Avanzati (SISSA), Trieste, Italy, will organize the second in the series of Stig Lundqvist Research Conferences on the Advancing Frontiers of Condensed Matter Physics, to be held in Trieste from 2 to 6 July 2001, and which will have as the theme: Non−Conventional Systems and New Directions.

KEY PARTICIPANTS AND TOPICS

P. Alivisatos* (UC Berkeley):
Self assembly of quantum dots and biomolecules
B. Batlogg (ETH Zurich):
Molecular organic crystals: A new playground for many−body physics
A. Belcher (UT Austin):
Interfaces between organic and semiconductor media
J. Golovchenko (Harvard):
Ion beam sculpting on the nanoscale with applications to single molecule detection and characterization
J. Heath (UCLA):
Biomolecular electronics
W. Ho (UC Irvine):
Spectroscopy and molecular control at the spatial limit
J. Joannopoulis* (MIT):
Nonlinear optical phenomena in photonic crystals
U. Landman (GeorgiaTech):
Computational studies of cluster production and properties
G.−Y. Liu (Wayne State):
Nanomanipulation of molecules and biomolecules by AFM
D. Loss (University of Basel):
Electron spins in quantum dots for quantum computing
H. Manoharan (Stanford):
Quantum mirages and phantom magnetism
E. J. Mele (U Penn):
Coherent control of electronic excitations in carbon and boron nitride nanotubes
J. Mooij* (Delft U):
Quantum behaviour of mesoscopic junction circuits
B. Noheda (Brookhaven):

High piezoelectric response of complex ferroelectric oxides
H. Ohno (Tohoko U):
Ferromagnetic/nonmagnetic III−V semiconductor structures
M. Parrinello (MPI Stuttgart):
Ab initio simulation of chemical and, in particular, catalytic reactions
P. Pincus (UC Santa Barbara):
Coulombic effects in soft condensed matter
A. Pinczuk (Columbia U):
Giant piezolectricity and soft modes in relaxor ferroelectrics
M.L. Roukes (CalTech):
Nano−microelectromechanical systems (Nano−MEMS)
G. Salis (UC Santa Barbara):
All optical NMR in nanostructures
M.B. Salmeron (LBL Berkeley):
On the microscopic mechanisms of friction
H. Schoen (Bell Labs Lucent):
Lasing in molecular organic single crystals
E. Tosatti (SISSA/ICTP):
Recent advances in the theory of the atomic structure of nanowires
D.H. Vanderbilt (Rutgers U):
Role of compositional order and disorder in complex perovskites
S. Weiss (UC Berkeley):
Probing biomolecules by resonance fluorescence energy transfer
A. Yodh (U Penn):
Entropic forces and self−assembly of microstructures in suspensions

*To be confirmed

The focus of this Conference is on major developments in "soft" and "hard" condensed matter science and in the overlap of condensed matter science with biology. The goal is to bring together scientists who are playing key roles in these areas, to discuss their ongoing research and to assess the progress that is being made in their respective fields. The Conference is aimed at the exploration of new opportunities in condensed matter, ranging from manipulating matter at the atomic scale to bridging the interface between inorganic and organic systems.

Scientists and students from all countries that are members of the UN, UNESCO or IAEA can attend the Conference. As it 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 are borne by their home institutions. However, limited funds are available for some applicants 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−fare) from their home country. Such financial support is available only to those attending the entire Conference. There is no registration fee for attending the Conference.

The closing date for the RECEIPT of requests for participation is:
31 March 2001.
Candidates not requesting financial support may apply up to 15 May 2001.

Applicants should complete and sign the "Request for Participation" form (also obtainable via e−mail: smr1318@ictp.trieste.it, using as subject "get index", or via WWW Server: http://www.ictp.trieste.it/), and send it to:

the Abdus Salam International Centre for Theoretical Physics
The Second Stig Lundqvist Research Conference on:
"Non−Conventional Systems and New Directions"
c/o Ms. Nicoletta Ivanissevich
Strada Costiera 11
I−34014 Trieste, Italy

Telephone: +39−040−2240383
Telex: 460392 ICTP I
Telefax: +39−040−224163
E−mail: smr1318@ictp.trieste.it

VERY IMPORTANT:

If you have obtained the following form via e−mail or gopher, please follow these instructions:

1) ABSOLUTELY do NOT modify the form at all!;
2) PRINT it in portrait mode (A4 lengthwise);
3) Fill in the HARD copy of the form, sign it and post it as indicated above.

No forms via e−mail are accepted!

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THE SECOND STIG LUNDQVIST RESEARCH CONFERENCE ON
THE ADVANCING FRONTIERS IN CONDENSED MATTER PHYSICS:
"NON−CONVENTIONAL SYSTEMS AND NEW DIRECTIONS"

(2 − 6 July 2001)

REQUEST FOR PARTICIPATION

(Please note that unless all requested personal data are provided, the Abdus Salam ICTP cannot process any visa request).

To be completed (typed or in block letters) and returned to: the Abdus Salam International Centre for Theoretical Physics, The Second Stig Lundqvist Research Conference on: Non−Conventional Systems and New Directions (c/o Ms. N. Ivanissevich), Strada Costiera 11, I−34014, Trieste, Italy, to arrive no later than 31 March 2001 (for applicants not requesting financial support: 15 May 2001).

Name:
_____
(Surname/family name) (First names)

SURNAME and NAME on passport, if different from above:

_____

Nationality: _____ Sex: _____ Date of birth: _____

(year − month − day)

Highest university degree: _____ Year: _____ From: _____

Permanent Institution (full name address):

_____

_____

_____

_____

Telephone No. _____ Telefax No. _____

Telex No. _____

Electronic Mail*: _____

_____

Present Institution (full name address) − if different from permanent:

_____

_____

until date: _____

Telephone No. _____ Telefax No. _____

Telex No. _____

Electronic Mail*: _____

_____

Mailing address − please indicate whether:

Permanent address ___ or Present address ___

*I agree that my e−mail address(es) may be made public on the ICTP WWW page:

YES ___ NO ___

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Research interests:

Kindly supply (strictly within indicated lengths) a keyword description
of your current scientific activities as follows:

1) Area of research (e.g. low−dimensional systems): |_____|
(no more than 15 characters)

2) Specific topic of interest (e.g. Quantum Hall Effect):

|_____|
(no more than 30 characters)

− Sketch your current research work with full reference to published

papers on the subject relevant to the Conference.

_____

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Recommendation letters from supervisors are requested for junior scientists

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(Important: Please note that very few financial grants are available, and preference in selecting participants will be given to eligible candidates who can guarantee travel coverage by their own local sources)

Please tick as appropriate:

- I can definitely find complete travel funds from local sources __

or

- I can definitely not find travel funds from local sources __

(specify in US$ the funds needed) US$ = _____

- I am requesting financial support from the ICTP for:
  - Living allowance __

- I am NOT requesting financial support from the ICTP __

_____ _____

Signature of candidate Date

BACK to ICTP smr1318