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

smr1349/Announcement

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                        CONFERENCE ON:
        "ANDERSON LOCALIZATION, QUANTUM CHAOS AND RANDOM MATRICES:
                  RIGOROUS METHODS VS PHYSICAL INTUITION"


                      24 – 28 September 2001


                    Miramare – Trieste, Italy
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An international conference on Anderson localization, quantum chaos and random matrices, will be held at the Abdus Salam International Centre for Theoretical Physics (ICTP), Trieste, Italy, with the co-sponsorship of the Sonderforschungsbereich 237 of the Deutsche Forschungsgemeinschaft, from 24 to 28 September 2001.

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DIRECTORS:   Fritz HAAKE –  Universität Essen, Germany
             Werner KIRSCH  – Ruhr Universität, Bochum, Germany

LOCAL ORGANIZER:   Vladimir E. KRAVTSOV –  The Abdus Salam ICTP, Trieste,
Italy
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During the last ten years mathematicians and mathematical physicists have developed proofs and understanding of various aspects of Anderson localization, both in the one-dimensional and in the multi-dimensional case. However, there remain fundamental questions not at all understood on the mathematical level of rigor.
The research areas of quantum chaos and mesoscopic systems have developed an important and mutually fruitful overlap. Random-matrix theory has been boosted by work on mesoscopic systems and, in particular, by the superanalytic approach. Semiclassical methods based on Gutzwiller's work and the supersymmetry method have begun an interesting competition.
Despite such impressive progress, many questions remain open from the mathematical point of view here as well.
The Workshop will provide opportunities to exchange ideas between mathematicians and physicists. Special attention will be paid to talks aimed at providing mutual enlightment in a language understandable to both groups. Prestructured discussion sessions will be devoted to topics of current interest.

TOPICS TO BE COVERED

– Anderson Localization.
– Quantum Chaos.
– Random Matrices (New Symmetry Classes).
– Multi-Scale Analysis.
– Spectral Averaging.
– Disordered Mesoscopic Systems.
– Semiclassical Approximation.
– Mixed Phase Space.
– Rieman Zeta Function.

PARTIAL LIST OF INVITED SPEAKERS AND WORKSESSION LEADERS

B.L. ALTSHULER – N.E.C. Research Institute, Princeton
J. BELLISSARD – Université Paul Sabatier, Toulouse
E. BOGOMOLNY – Université de Paris XI, IPN, Orsay
G. CASATI – Università degli Studi di Milano, Como
J.-M. COMBES – Centre National de la Recherche Scientifique, CPT, Marseille
P. CVITANOVIC' – Georgia Institute of Technology, Atlanta
B. ECKHARDT– Philipps-Universität Marburg
I. GOLDSCHEID – Queen Mary and Westfield College, London
R.R.F. GRAHAM – Universität Essen
I. GUARNERI – Università degli Studi di Milano, Como
P. HISLOP – University of Kentucky, Lexington
V. JAKSIC – University of Ottawa
J.P. KEATING – University of Bristol
B. KHORUZHENKO – Queen Mary and Westfield College, London
F. KLOPP – Université de Paris XIII
A. KNAUF – Universität Erlangen-Nürnberg
M. KUS – Institute for Theoretical Physics, Warsaw
H. LESCHKE – Universität Erlangen-Nürnberg
L. PASTUR – Centre National de la Recherche Scientifique, CPT, Marseille
M. ROBNIK – University of Maribor
H. SCHOMERUS – Max Planck Institut für Physik Komplexer Systeme, Dresden
P. SEBA – University of Hradec Kralove
D. SHEPELYANKSY – Université Paul Sabatier, Toulouse
M. SIEBER – University of Bristol
U. SMILANSKY – The Weizmann Institute of Science, Rehovot
P. STOLLMANN – Technische Universität Chemnitz
G. STOLZ – University of Alabama at Birmingham
M. ZIRNBAUER – Universität zu Köln

Scientists and students from all countries that are members of the UN,
UNESCO or IAEA can attend the Conference. The main purpose of the Centre
is to help researchers from developing countries through a programme of
training activities within a framework of international co-operation.
However, students and post-doctoral scientists from developed countries are
also encouraged to apply. As the Conference 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, very limited funds are available for
some applicants from developing countries, to be selected by the
organizers. There is no registration fee for attending the Conference.

The closing date for the RECEIPT of requests for participation is 15 June 2001.

Applicants should complete and sign the "Request for Participation" form
(also obtainable via e-mail: smr1349@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
Conference on: "Anderson Localization, Quantum Chaos and Random Matrices"
Strada Costiera 11
I-34014 Trieste, Italy

Phone:+39-040-2240540 Telefax:+39-040-224163   E-mail: smr1349@ictp.trieste.it

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    |               Conference on:              |
    | "Anderson localization, quantum chaos and |
    |    random matrices: Rigorous methods vs   |
    |    physical intuition"                    |
    |         (24 - 28 September 2001)          |
    |                                           |
    |               Venue:                      |
    |        ICTP Adriatico Guest House         |
    | Phone no.:      +39-040-2240540           |
    |  Fax no.:       +39-040-224163            |
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