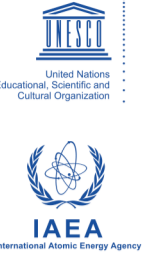




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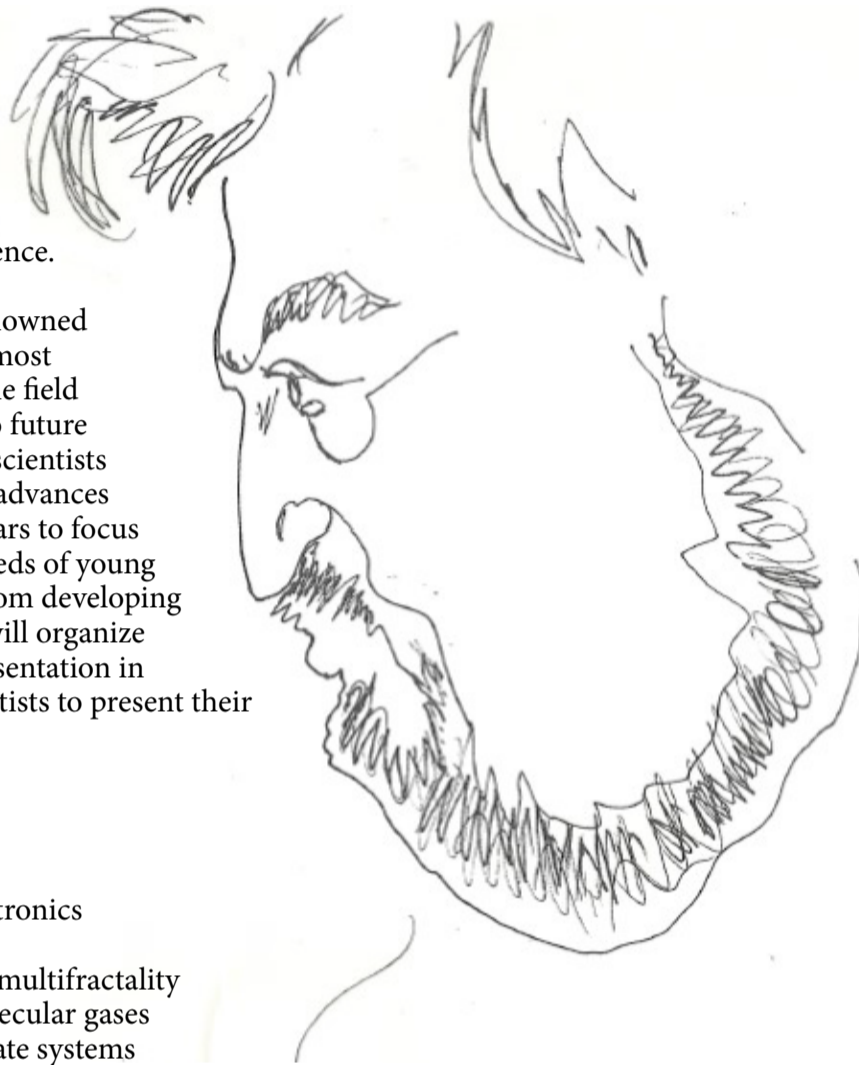


Conference on Frontiers of Nanoscience

24 August – 1 September 2015
 (Miramare - Trieste, Italy)

Investigating fundamental properties of condensed matter at nanoscales is absolutely necessary for future technological advances in micro- and nano- electronics. The conference we propose here would be a central event in 2015 for spreading the knowledge and intensifying the research efforts in most promising directions of nanoscience.

Our goal is to bring together internationally renowned experts and most active researchers to address most topical experimental and theoretical issues in the field of nanoelectronics. As this field holds the key to future electronic technologies, it is important to keep scientists from developing countries on top of the recent advances in the field. To this end, we plan lectures/seminars to focus mostly on educational purposes, serving the needs of young scientists (PhD students, postdocs, lecturers) from developing countries. Alongside with regular lectures, we will organize several poster sessions, including short oral presentation in advance, to give an opportunity for young scientists to present their recent findings.



Topics

- quantum transport in nanostructures
- graphene and graphene-based nanoelectronics
- topological states of matter
- many-body localization, ergodicity and multifractality
- new phases in quantum atomic and molecular gases
- quantum control of multi-qubit solid-state systems
- non-equilibrium phenomena and noise
- disorder and single-impurity effects in low-dimensional nanostructures
- metal-insulator and superconductor-insulator transitions in low- dimensional electron systems

Speakers and Session Convenors

Oded Agam
 Igor Aleiner
 Alexander Altland
 Anton Andreev
 Denis M. Basko
 Richard Berkovits
 Natalia Berloff
 Norman O. Birge
 Eugene Bogomolnyi
 Serguei Brazovskii
 John T. Chalker
 Vadim Cheianov
 Andrey V. Chubukov
 Nigel Cooper
 Konstantin B. Efetov
 Alexei Efros
 Giuseppe Falci
 Lara Faoro
 Sergej Flach
 Peter Fulde
 Yuri M. Galperin
 Yuval Gefen
 Michael Gershenson
 Thierry Giamarchi
 Leonid I. Glazman
 Mike Gunn

Lev Ioffe
 Mats Jonson
 Alex Kamenev
 Aharon Kapitulnik
 Alexey Kavokin
 Natasha Kirova
 Steven Kivelson



Leo Kouwenhoven
 Leonid Levitov
 Peter Littlewood
 Daniel Loss
 Dmitrii L. Maslov
 Konstantin Matveev

Andrew Millis
 Alberto Morpurgo
 Viatcheslav Mukhanov
 Alexander Nersesyan
 Miguel Ortuño
 Zvi Ovadyahu
 Elisabetta Paladino
 Alexander Palevski
 Yuri Pashkin
 Michael Pepper
 Natalia Perkins
 Valery Pokrovsky
 Alexander Polyakov
 Yuriy G. Rubo
 Dan Shahar
 Robert Shekhter
 Georgy Shlyapnikov
 Ady Stern
 Jaw-Shen Tsai
 Alexei Tselik
 Andrey A. Varlamov
 Hans-Arwed Weidenmüller
 Amir Yacoby
 Vladimir Yudson
 Emil Yuzbashyan
 Anvar Zakhidov



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 IN THE CITY OF NEW YORK



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 (University of Copenhagen, Denmark)

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 (Cambridge University, UK)

J. von Delft
 (Ludwig-Maximilians-University, Munich, Germany)

Local Organizers

V. Kravtsov
 (ICTP, Trieste, Italy)

A. Scardicchio
 (ICTP, Trieste, Italy)

Dedicated to Boris Altshuler's 60th birthday