



Glykon - The Fantastic Snake, II-nd century BC, Tomis (Ancient Greek polis), unknown author, National History and Archaeology Museum, Constanta, Romania



Advanced many-body and statistical methods in mesoscopic systems

June 27–July 2, 2011
Constanta, Romania

Organized by:

**Horia Hulubei National Institute of Physics and Nuclear Engineering
Academy of Romanian Scientists + Ovidius University**

Topics

+ Foundations of quantum physics + Equilibrium and non-equilibrium quantum statistics, including fractional statistics + Quantum transport + Phases and phase-transitions in mesoscopic systems, including superfluidity and superconductivity + Quantum electromechanical systems + Nanotubes and quantum dots + Quantum dissipation, dephasing, noise and decoherence + Quantum information-theory and applications + Spin systems and their dynamics + Fundamental symmetries in mesoscopic systems + Phase transitions + Exactly solvable models + Various extensions of the Random Phase Approximation + Open quantum systems + Clustering, decay and fission modes + Systematic versus random behavior of nuclear spectra

Invited Speakers

Yoram Alhassid, *Yale University, USA*
Boris Altshuler, *Columbia University, USA*
Virgil Baran, *University of Bucharest, Romania*
Miles Blencowe, *Dartmouth College, USA*
Victor Ciupina, *Ovidius University, Romania*
Jorge Dukelsky, *Instituto de Estructura de la Materia, CSIC, Spain*
Till von Egidy, *Technische Universität München, Germany*
Yuri Galperin, *University of Oslo, Norway*
Steven M. Girvin, *Yale University, USA*
Pertti Hakonen, *Aalto University, Finland*
Mihai Horoi, *Central Michigan University, USA*
Francesco Iachello, *Yale University, USA*
M. Howard Lee, *University of Georgia, USA*

Roberto Liotta, *KTH Stockholm, Sweden*
Matti Manninen, *University of Jyväskylä, Finland*
Mihai Mirea, *IFIN-HH, Romania*
Jukka Pekola, *Aalto University, Finland*
Roman Schrittwieser, *Leopold-Franzens University, Austria*
Peter Schuck, *IPN Orsay & Laboratoire de Physique et Modélisation des Milieux Condensés, Grenoble, France*
Mika Sillanpää, *Aalto University, Finland*
Tudor Stanescu, *West Virginia University, USA*
Jouni Suhonen, *University of Jyväskylä, Finland*
Andrei Zaikin, *Forschungszentrum Karlsruhe Institut für Nanotechnologie, Germany*
Vladimir Zelevinsky, *Michigan State University, USA*

Directors

Dragos-Victor Anghel, *IFIN-HH, Romania*
Sorin Paraoanu, *Aalto University, Finland*
Doru-Sabin Delion, *IFIN-HH, Romania*

Local Organizers

Victor Ciupina, *Ovidius University, Romania*

International Organizing Committee

Alexandru Aldea, *National Institute of Materials Physics, Romania*
Boris Altshuler, *Columbia University, USA*
Miles Blencowe, *Dartmouth College, USA*
Sergiu Cojocaru, *IFIN-HH, Romania*
Jorge Dukelsky, *Instituto de Estructura de la Materia, CSIC, Spain*
Yuri Galperin, *University of Oslo, Norway*
Aurelian Isar, *IFIN-HH, Romania*
M. Howard Lee, *University of Georgia, USA*
P. Schuck, *Institut de Physique Nucleaire Orsay & Laboratoire de Physique et Modélisation des Milieux Condensés, Grenoble, France*
Ionel Tifrea, *California State University, USA*
Nicolae Victor Zamfir, *IFIN-HH, Romania*

Contact

Dragos-Victor Anghel: dragos@theory.nipne.ro
Doru-Sabin Delion: delion@theory.nipne.ro
Sorin Paraoanu: sorin.paraoanu@aalto.fi

<http://www.theory.nipne.ro/Constanta-Meso2011/>