MAX-PLANCK-INSTITUT FÜR PHYSIK KOMPLEXER SYSTEME DRESDEN, GERMANY

International Seminar and Workshop on

Tunneling and Scattering in Complex Systems From Single to Many Particle Physics

September 07 - 25, 2009

Scientific coordination:

Arnd Bäcker Technische Universität Dresden Dresden, Germany Markus Oberthaler Ruprecht-Karls-Universität Heidelberg Heidelberg, Germany **Peter Schlagheck** Universität Regensburg Regensburg, Germany

Organisation:

Mandy Lochar Max-Planck-Institut für Physik komplexer Systeme Dresden, Germany

This conference aims at bringing together experts on tunneling in complex systems from various branches of physics, including atomic and molecular physics, ultracold quantum gases, mesoscopic science, optics, and semiclassics. Key topics to be discussed include the interplay of tunneling with decay and scattering in open configurations, the influence of nonintegrability and classical chaos in multidimensional phase spaces, as well as tunneling processes in coherent many-body systems, where recent experiments pose new challenges.

The workshop (September 14 - 18) will be preceded by a summer school (September 7 - 11) on the semiclassical theory of tunneling and on tunneling in coherent many-body systems, and continued by an informal seminar (September 21 - 25) including a focus meeting on nonlinear dynamics in complex scattering. There will be a number of slots for contributed talks during the workshop.

Invited speakers for the workshop and the summer school:

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J. Ankerhold (Ulm)	S. Fishman (Haifa)	M. Holthaus (Oldenburg)	U. Smilansky (Rehovot)
E. Arimondo (Pisa)	M. Fromhold (Nottingham)	R. Ketzmerick (Dresden)	S. Tomsovic (Pullman)
A. Buchleitner (Freiburg)	I. Guarneri (Como)	U. Kuhl (Marburg)	D. Ullmo (Orsay)
S.C. Creagh (Nottingham)	T. Harayama (Kyoto)	O. Morsch (Pisa)	J. Wiersig (Magdeburg)
R. Dörner (Frankfurt)	E. Heller (Harvard)	A. Shudo (Tokyo)	S. Wimberger (Heidelberg)

Applications for participation and poster or oral contributions are welcome and should be made by using the application form on the seminar and workshop's web page (please see URL below). The number of attendees is limited. The **registration fee** for the workshop is **100** € and should be paid by all participants. Costs for accommodation and meals will be covered by the Max Planck Institute for the Physics of Complex Systems. Limited funding is available to partially cover travel expenses.

Deadline for registration is May 15, 2009.



For further information please contact:

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