

International Seminar and Workshop on  
**Quantum Dynamical Concepts:  
 From Path Integrals to Semiclassics**

Seminar: August 11 - 22, 2008 — Workshop: August 18 - 22, 2008

*Scientific coordination:*

**Frank Grossmann**  
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*Organisation:*

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Spectacular advances in the technology of ultrashort laser pulses down to the attosecond regime have motivated the development of novel time-dependent methods for the description of the quantum dynamics of electrons in atoms and molecules as well as of the molecular backbone. Large successes for field-driven electrons could be achieved, e.g., by using semiclassical methods, which are based on an underlying path integral. Furthermore, dissipative nuclear dynamics is of central importance, e.g., for the interpretation of spectral information. The path integral formalism again serves as the starting point for the nonperturbative analysis of dissipative quantum motion. Therefore, a workshop bringing together researchers from the fields of path integrals as applied to dissipative as well as driven motion on the molecular scale and from the field of semiclassical approximations shall help to create ideas for developments of even better methodology and shall foster the understanding of the underlying physics.

*Invited seminar (\*) and workshop speakers:*

M.A.M. de Aguiar* (Campinas)	M.F. Herman (New Orleans)	E. Pollak (Rehovot)
D. Alonso (La Laguna)	G.-L. Ingold* (Augsburg)	K. Richter* (Regensburg)
J. Ankerhold (Ulm)	A. Inomata (Albany)	M. Roncadelli (Pavia)
W. Becker (Berlin)	K.G. Kay (Ramat-Gan)	J.-M. Rost (Dresden)
P. Brumer (Toronto)	J.B. Keller (Stanford)	M. Sassetti (Genova)
R. Coalson* (Pittsburgh)	H.J. Korsch (Kaiserslautern)	D. Shalashilin (Leeds)
T. Dittrich* (Bogotá)	H. Leschke* (Erlangen)	M. Sieber (Bristol)
R. Egger (Düsseldorf)	R.G. Littlejohn (Berkeley)	U. Smilansky* (Rehovot)
A. Garg (Evanston)	C. Mak (Los Angeles)	F. Steiner (Ulm)
B. Gaveau (Paris)	N. Makri (Urbana)	J. Stockburger (Ulm)
H. Grabert (Freiburg)	D. Marx (Bochum)	K. Takatsuka (Tokyo)
I. Guarneri (Como)	W.H. Miller (Berkeley)	D. Tannor* (Rehovot)
F. Haake (Duisburg)	A. Ozorio de Almeida (Rio de Janeiro)	M. Thoss (Garching)
P. Hänggi (Augsburg)	P. Pechukas (New York)	S. Tomsovic (Pullman)
U. Weiss (Stuttgart)		

Applications for participation and poster contributions are welcome and should be made by using the application form on the workshop 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. Limited funding is available to partially cover travel expenses. Please note that childcare is available upon request.

**Deadline for registration is May 31, 2008.**



For further information please contact:  
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