

Seminar and Workshop on
Quantum Information Concepts for Condensed Matter Problems

June 14 - 25, 2010

Scientific coordination:

Ian Affleck

University of British Columbia
Vancouver, Canada

Masud Haque

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

Ulrich Schollwöck

Ludwig-Maximilians-Universität
München, Germany

Organisation:

Mandy Lochar, MPI für Physik komplexer Systeme, Dresden, Germany

The last few years have seen an explosion of activity at the interface of quantum information theory and condensed matter physics. This program aims to bring together condensed matter physicists interested in the application of concepts borrowed from quantum information theory, such as measures and classifications of *entanglement*.

The meeting will provide the opportunity for a critical evaluation of interdisciplinary results, with a view toward using quantum information concepts to construct new tools and techniques for condensed matter theory.

Invited participants (* to be confirmed)

F. Alet (France)	P. Fendley (USA)	L. Levitov (USA)	R. Santachiara (France)
F. C. Alcaraz (Brazil)	E. Fradkin (USA)	M. Lewenstein (Spain)	K. Schoutens (Netherlands)
T. Barthel (Germany)	S. Haas (USA)	E. Miranda (Brazil)	G. Sierra (Spain)
N. Bonesteel (USA)	F. D. M. Haldane (USA)	G. Misguich (France)	P. Sodano (Italy)
N. Bray-Ali (USA)	F. Heidrich-Meisner	J. Moore (USA)	E. Sorensen (Canada)
S. Bose (UK)	(Germany)	V. Pasquier * (France)	F. Verstraete (Austria)
P. Calabrese (Italy)	H. Johannesson (Sweden)	I. Peschel (Germany)	J. Vidal (France)
K. Capelle (Brazil)	N. Laflorencie (France)	F. Pollmann (USA)	G. Vidal * (Australia)
J. Cardy (UK)	J. I. Latorre (Spain)	G. Refael * (USA)	H. Weinfurter * (Germany)
C. Chamon (USA)	A. Läuchli (Germany)	N. Regnault (France)	X.-G. Wen (USA)
J. I. Cirac (Germany)	K. Le Hur (USA)	H. Saleur (France)	K. Yang (USA)

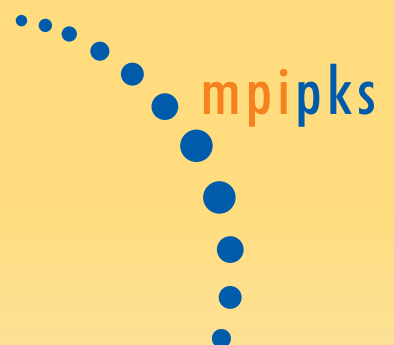
Applications for participation and poster or oral contributions are welcome and should be made by using the application form on the seminar and workshop's web page (please see URL below). The number of attendees is limited. The **registration fee** for the workshop is **100 €** and should be paid by 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. Please note that childcare is available upon request.

Deadline for registration is February 28, 2010.



For further information please contact:

Visitors Program - Mandy Lochar
Max-Planck-Institut für Physik komplexer Systeme,
Nöthnitzer Str. 38, D-01187 Dresden
Tel.: +49-351-871-2107 / Fax: +49-351-871-2199
qiccmp10@pks.mpg.de
<http://www.pks.mpg.de/~qiccmp10>



MPIPKS also encourages applications for individual fellowships (phd, postdoc, sabbatical). We offer an exciting and stimulating environment for pursuing cutting-edge research, with about 120 researchers in residence at any time. With four deadlines per year, we accept applications continuously. For details, please check <http://www.pks.mpg.de/visitors>