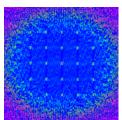
International Workshop

Cold Atoms Meet Condensed Matter

March 27 - 31, 2006



I. Bloch, University of Mainz

Scientific coordination:

Immanuel Bloch Universität Mainz Mainz, Germany Christoph Bruder Universität Basel Basel, Switzerland Wilhelm Zwerger
Technische Universität München
München, Germany

Organisation:

Claudia Pönisch MPI für Physik Komplexer Systeme Dresden, Germany

The last couple of years have witnessed an exciting development: clouds of ultracold atoms have been structured by optical lattices or by magnetic traps generated e.g. in micro-chips to form solid-state-type systems and nanostructures. The resulting confined cold atom configurations exhibit interesting novel behaviour like strong correlation effects or the controlled generation of entangled states. They have attracted a lot of interest on the theoretical and experimental side, both in the condensed-matter and atomic physics communities. A number of recent proposals have considered combinations of cold atoms or ion-trap configurations with solid state devices like single electron Cooper-pair boxes or with nanomechanical resonators. Active cooling techniques adopted from Laser-cooling may be possible for nanostructures. The goal of this workshop is to bring together researchers from the atomic physics and condensed-matter communities to discuss the latest progress in this area.

Invited speakers:

I. Cirac (Garching, Germany), J. Dalibard (Paris, France), T. Esslinger (Zürich, Switzerland),
S.M. Girvin (New Haven, USA), R. Grimm (Innsbruck, Austria), S. Haroche (Paris, France),
A. Imamoglu (Zürich, Switzerland), K. Karrai (München, Germany), W. Ketterle (Cambridge, USA),
M. Lukin (Cambridge, USA), J. Reichel (Paris, France and München, Germany), R. Schoelkopf
(New Haven, USA), K. Schwab (College Park, USA), G. Shlyapnikov (Amsterdam, The Netherlands and Orsay, France), C. Zimmermann (Tübingen, Germany), P. Zoller (Innsbruck, Austria)

Applications for participation and poster contributions are welcome and should be made by using the application form on the workshop web page (see web page below). The number of attendees is limited. The registration fee for the workshop is $100 \in$. Costs for accommodation and meals will be covered by the Max Planck Institute. In exceptional cases, limited funding is available to partially cover travel expenses.

Deadline for applications is December 31, 2005.



For further information please contact:
Visitors Program - Claudia Pönisch
Max-Planck-Institut für Physik komplexer Systeme,
Nöthnitzer Str. 38, D-01187 Dresden
Tel.: +49-351-871-2198 / Fax: +49-351-871-2199
catcom06@mpipks-dresden.mpg.de
http://www.mpipks-dresden.mpg.de/~catcom06

