

Workshop for Quantum Simulations of Open Quantum Systems

13-15 November 2013

A FRIAS Junior Researcher Conference

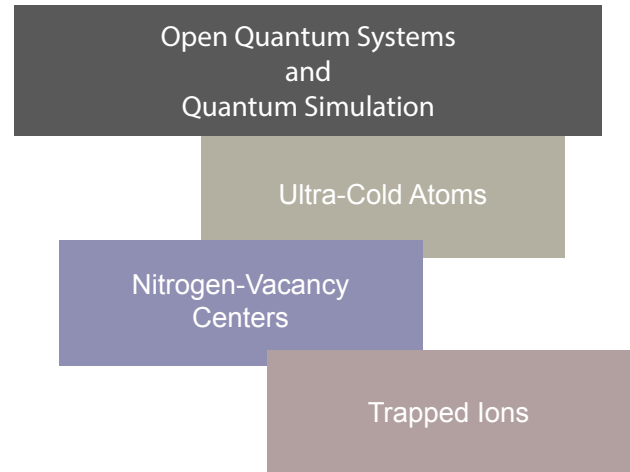
Conference Website:

www.frias.uni-freiburg.de/qsoqs

Conference Venue:

FRIAS, Albertstr. 19, 79104 Freiburg im Breisgau

In the past, spectacular progress has been achieved in controlling the dynamics of isolated quantum systems and the study of quantum systems stimulates new routes toward novel technologies. Proof-of-principle experiments have been performed and first commercial applications have emerged. More recently, the explicit exploitation of quantum coherence has been envisioned also for clean energy technologies such as solar cells or hydrogen splitting. Here, decoherence effects due to coupling of quantum systems to the environment is a major challenge on the path toward desired applications. In our workshop we will explore the potential of quantum simulations of open quantum systems to understand and to control decoherence effects. We invite especially young researchers and students with backgrounds in theory of open quantum systems and quantum simulation as well as experimental quantum simulations.

**Invited Speakers**

Alejandro Bermudas, Ulm
Heinz-Peter Breuer, Freiburg
Joe Britton, Boulder
Jonathan Home, Zürich
Klaus Hornberger, Duisburg-Essen
Akihito Ishizaki, Okazaki, Japan
Michael Johanning, Siegen
Robert Loew, Stuttgart
Johannes Majer, Vienna
Diego Porras, Madrid
Guido Pupillo, Strasbourg
Ulrich Schneider, München
Julian Struck, Hamburg
Thomas Wellens, Freiburg

Your abstract should include: title, author name(s), email address, and a short summary of your presentation. Please email your abstract to qsoqs@frias.uni-freiburg.de.

Deadline for application: August 31, 2013

Local Scientific Coordination**Florian Mintert**

Freiburg Institute for Advanced Studies
Albert-Ludwigs-Universität
florian.mintert@frias.uni-freiburg.de

Ulrich Warring

Physikalisches Institut
Albert-Ludwigs-Universität
ulrich.warring@physik.uni-freiburg.de

Information & Contact:**Silke Trötschel / Kyra Vogt**

Freiburg Institute for Advanced Studies
Albert-Ludwigs-Universität
qsoqs@frias.uni-freiburg.de