

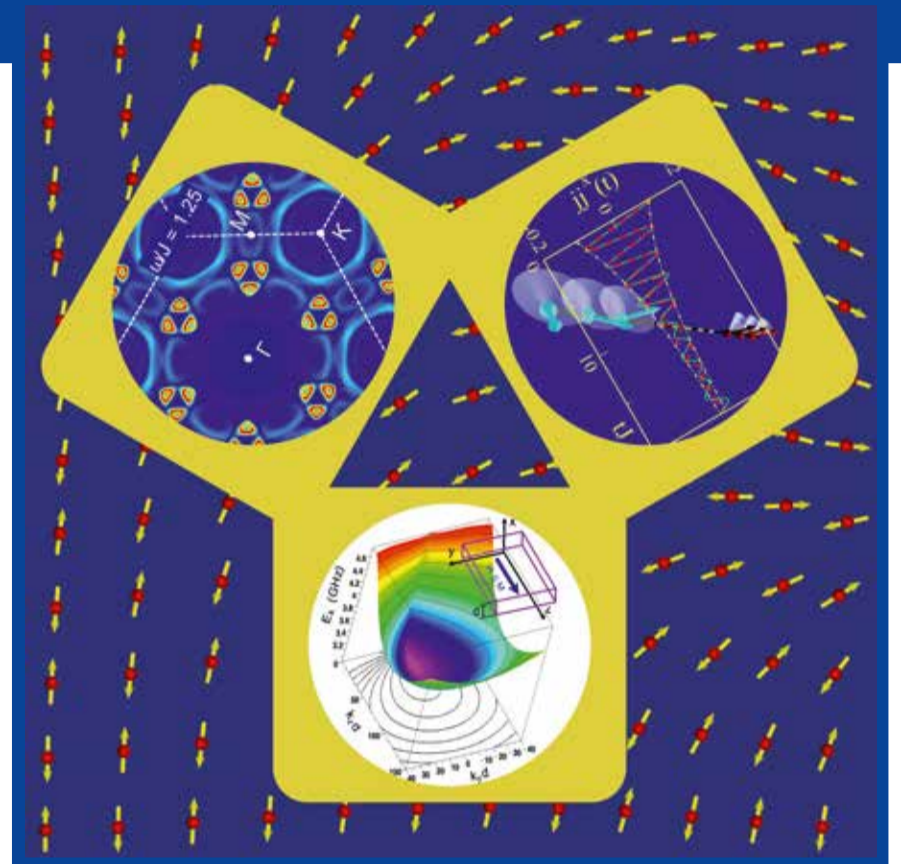


MAX-PLANCK-GESELLSCHAFT

Quantum Spin Dynamics: From Exotic Excitations to Novel Transport and Non-Equilibrium Phenomena

International Workshop & Seminar 01 - 12 September 2014

The focus of this event is on the physics of unconventional excitations and their impact on transport and non-equilibrium properties in spin systems and novel magnetic materials. It will bring together theorists and experimentalists working on quantum magnetism, magnetic transport and dynamics, as well as on spin systems far from equilibrium in order to share and emerge insights on a broad range of timely common topics and challenges.



Topics include

- Excitations in frustrated magnets and spin liquids
- Emergent particle transport in frustrated magnets and topological matter
- Magnetic transport in one-dimensional spin systems
- Quantum quenches in spin systems
- Dissipation, relaxation and thermalization in quantum magnets
- Magnonics, magnon and soliton transport
- Spin-Hall effect and novel off-diagonal transport phenomena
- Spin caloritronics
- Spin-ice out of equilibrium
- Dynamics of topological defects
- Skyrmion transport and dynamics
- Driven magnetic systems

Invited speakers

I. Affleck (CA)
L. Balents (USA)
C.D. Batista (USA)
F. Becca (IT)
A. Chubukov (USA)
R. Coldea (UK)
S. Demokritov (DE)
M. Enderle (FR)
F. Essler (UK)
F. Heidrich-Meisner (DE)
C. Heß (DE)
S. Kehrein (DE)
B. Keimer (DE)
B.J. Kim (DE)
P. Kopietz (DE)
T. Lorenz (DE)
Y. Matsuda (JP)
R. Moessner (DE)
S. Murakami (JP)

F. Pollmann (DE)
P. Prelovsek (SI)
T. Prosen (SI)
M. Rigol (USA)
H.M. Rønnow (CH)
O. Tchernyshyov (USA)
H. Tsunetsugu (JP)
J. van den Brink (DE)
M. Vojta (DE)
A. Zheludev (CH)

Scientific coordinators

Wolfram Brenig
Braunschweig, Germany
Alexander Chernyshev
Irvine, USA
Mike Zhitomirsky
Grenoble, France

Organisation

Katrin Lantsch, MPIPKS

Applications received before 16 May 2014 are considered preferentially.

Applications are welcome and should be made by using the application form on the conference web page (please see URL below). The number of attendees is limited. The registration fee for the international workshop is 120 Euro 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.

For further information please contact:

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