

7th Annual Retreat of the SFB/TR 49, Bensheim, September 19 – 20, 2013

Programme

Thursday, September 19, 2013

1. Ultracold Gases & Cold Ion Crystals		A. Widera / H. Ott
09:15 (5)	Michael Lang	<i>Welcome</i>
09:20 (12+8)	Ivana Vidanovic (A3)	<i>Dissipation induced bosonic dynamics an hybrid quantum simulations</i>
09:40 (12+8)	Michael Fleischhauer (A5)	<i>Adiabatic preparation of Wigner crystals of photons in Rydberg gases</i>
10:00 (12+8)	Elena Gorelik (A6)	<i>Quantum magnetism of ultracold fermions on optical lattices with novel geometries</i>
10:20 (12+8)	Herwig Ott (A9)	<i>Strong interactions in mesoscopic Rydberg gases</i>
10:40 (20)	Coffee Break	
11:00 (12+8)	René Gerritsma (A10)	<i>Quantum simulations with atoms and ions</i>
11:20 (12+8)	Nicholas Sedlmayr (A11)	<i>When is a bath a bath? Relaxation dynamics and thermalization in a fermionic chain</i>
11:40 (12+8)	Artur Widera (A12)	<i>Polarons in cold bosonic gases</i>
12:00 (60)	Lunch	

2. Quantum Spin Systems		J. Sirker / S. Eggert
13:00 (12+8)	Ulrich Tutsch (B1)	<i>Field-induced Berezinskii-Kosterlitz-Thouless scenario in a 2-dimensional spin-dimer system</i>
13:20 (12+8)	Harald Jeschke (B2)	<i>Spin liquid systems herbertsmithite and $\text{EtMe}_3\text{Sb}[\text{Pd}(\text{dmit})_2]_2$: Detailed investigation of the underlying Hamiltonians</i>
13:40 (12+8)	Sebastian Eggert (B3)	<i>Spin liquid versus dimer phases in an anisotropic J_1-J_2 frustrated square antiferromagnet</i>
14:00 (12+8)	Natalija van Well (B4)	<i>Single crystal growth of tunable quantum critical materials</i>
14:20 (9+6)	Prince Ravat (B5)	<i>Tuning the Magnetic Exchange Interaction in Antiferromagnetically Coupled Biradicals</i>
14:35 (10)	Break	

14:45 (60)	Poster Flash Presentations
15:45 (30)	Coffee Break

16:15 (90)	Mentoring (1) & Posters
17:45 (15)	Break

18:00 (75)	Mitgliederversammlung (bis 19:15)
19:00 (60)	Dinner

20:00	Poster Session
-------	-----------------------

Friday, September 20, 2012

XX:XX – 09:00	Breakfast
---------------	------------------

3. Magnon Gases	B. Hillebrands	
09:00 (12+8)	Oleksandr Serha (A7)	<i>Bose-condensation of mixed phonon-magnon states</i>
09:20 (12+8)	Simon Streib (A8)	<i>Majorana spin liquid and dimensional reduction in Cs₂CuCl₄</i>

4. Charge-Transfer Salts	J. Müller / M. Lang	
09:40 (12+8)	Rudra Sekhar Manna (B6)	<i>Lattice effects in the quasi-two-dimensional valence-bond-solid Mott insulator EtMe₃P[Pd(dmit)₂]₂</i>
10:00 (12+8)	Claudius Gros (B7)	<i>Charge ordered metals on doped triangular lattices</i>
10:20 (20)	Coffee Break	
10:40 (12+8)	Alisa Chernenkaya (B8)	<i>Pressure induced transition from AFM insulator to SC ground state in (DOEO)₄HgBr₄*TCE</i>
11:00 (12+8)	Michael Huth (B9)	<i>Tuning the neutral-ionic phase transition in mixed stack organic charge transfer systems</i>
11:20 (12+8)	Florian Schlütter (B10)	<i>New Materials and Crystals</i>

11:40 (10)	Break	
11:50 (12+8)	Benedikt Hartmann (B11)	<i>Low-frequency charge-carrier dynamics at the Mott transition in κ-(ET)₂X</i>
12:10 (12+8)	Torsten Methfessel (B12)	<i>Tuning the hole injection barrier in the intermolecular charge-transfer compound DTBDT-F4TCNQ codeposited on metals</i>
12:30 (60)	Lunch	

13:30 (45)	Mentoring (2)	
------------	----------------------	--