

**10<sup>th</sup> Annual Retreat of the SFB/TR 49, Alleehotel Europa, Bensheim, September 22 – 23, 2016**

**Programme**

**Thursday, September 22, 2016**

<b>1. Charge-Transfer Salts</b>		Michael Huth
09:30 (5)	Michael Lang	<i>Welcome</i>
09:35 (13+7)	Michaela Altmeyer, Vladislav Borisov (B2)	<i>Ab-initio studies of organic charge transfer salts</i>
09:55 (13+7)	Elena Gati (B6)	<i>Transport and thermodynamic studies of the metal-insulator transition in <math>\kappa</math>-(BEDT-TTF)<sub>2</sub>Hg(SCN)<sub>2</sub>Cl under pressure</i>
10:15 (13+7)	Lukas Keller (B9)	<i>Thin film investigations on ferroelectric organic charge transfer systems – establishing coupling and probing magnetic dot lattices prepared by FEBID</i>
10:35 (25)	<b>Coffee Break</b>	
11:00 (13+7)	Benedikt Hartmann (B11)	<i>Low-frequency charge carrier dynamics of organic charge transfer salts</i>
11:20 (13+7)	Torge Mashoff (B12)	<i>Electronic states in ordered monolayers of charge transfer salts in real and reciprocal space</i>
11:40 (80)	<b>Lunch</b>	

<b>2. Quantum Spin Systems</b>		Michael Lang
13:00 (13+7)	Ulrich Tutsch (B1)	<i>Frustration-induced dimensional reduction in the triangular Heisenberg antiferromagnet <math>Cs_2CuCl_{4-x}Br_x</math></i>
13:20 (13+7)	Sebastian Eggert (B3)	<i>Topological excitations on the anisotropic triangular lattice</i>
13:40 (13+7)	Pascal Puphal (B4)	<i>Single crystal growth of tunable quantum spin systems</i>
14:00 (13+7)	Kira Riedl, Stephen Winter (B13)	<i>Ab-initio studies of frustrated spin systems: beyond Heisenberg exchange</i>
14:20 (10)	<b>Break</b>	

14:30 (45)	<b>Poster Flash Presentations</b>	
15:15 (30)	<b>Coffee Break</b>	

15:45 (90)	<b>Mentoring (1)</b>
17:15 (30)	<b>Break</b>

17:45 (75)	<b>Mitgliederversammlung</b>
19:00 (15)	<b>Break</b>
19:15 (60)	<b>Dinner</b>

20:15	<b>Poster Session</b>
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**Friday, September 23, 2016**

XX:XX – 09:00	<b>Breakfast</b>
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<b>3. Magnon Gases</b>	Burkard Hillebrands
09:00 (13+7)	Oleksandr Serha (A7) <i>Bottleneck accumulation of hybrid magneto-acoustic bosons</i>
09:20 (13+7)	Oleksandr Tsyplyatyev (A8) <i>Many-body theory of magneto-elasticity on one dimesion</i>

<b>4. Ultracold Gases &amp; Cold Ion Crystals</b>	Herwig Ott, Michael Fleischhauer
09:40 (13+7)	Andreas Geißler (A3) <i>Tackling the multitude of bosonic quantum phases in Rydberg-dressed optical lattice systems</i>
10:00 (18+7)	Michael Fleischhauer (A5/A12)
10:25 (30)	<b>Coffee Break</b>
10:55 (13+7)	Herwig Ott (A9) <i>Measuring finite-range correlations in an optical lattice using near-field interferometry</i>
11:15 (13+7)	Ferdinand Schmidt-Kaler (A10) <i>Magnetic gradient interaction with ion crystals and status of hybrid atom-ion trap</i>
11:35 (5)	Michael Lang <i>Concluding remarks</i>
11:40 (80)	<b>Lunch</b>

13:00 (45)	<b>Mentoring (2)</b>
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