

**11th Annual Retreat of the SFB/TR 49, Leonardo Hotel, Heidelberg-Walldorf,
September 21 – 22, 2017**

Programme

Thursday, September 21, 2017

| 1. Charge-Transfer Salts | | | M. Lang / M. Huth |
|---------------------------------|---------------------------|---|---------------------|
| 09:45 (5) | Michael Lang | Welcome | |
| 09:50 (13+7) | Kira Riedl/Ying Li (B2) | <i>Ab initio determination of spin Hamiltonians beyond Heisenberg: The kappa-(ET)₂X family / Nature of optical excitations in the frustrated Kagome compound Herbertsmithite</i> | |
| 10:10 (13+7) | Elena Gati (B6) | <i>Electronically-driven ferroelectricity in the quasi-two dimensional organic charge-transfer salt κ-(BEDT-TTF)₂Hg(SCN)₂Cl</i> | |
| 10:30 (13+7) | Sergey Babenkov (B8) | <i>Perspectives for 3D band mapping of organic semiconductor thin films</i> | |
| 10:50 (20) | | | Coffee Break |
| 11:10 (13+7) | Lukas Keller (B9) | <i>Controlled magnetic frustration in 3D nanostructures</i> | |
| 11:30 (13+7) | Jens Müller (B11) | <i>Charge carrier dynamics in organic charge-transfer salts studied by fluctuation spectroscopy</i> | |
| 11:50 (13+7) | Hans-Joachim Elmers (B12) | <i>Spectromicroscopy of in-situ cleaved κ-(BEDT-TTF)₂X organic superconductors</i> | |
| 12:10 (65) | | | Lunch |

| 2. Quantum Spin Systems | | | C. Krellner |
|--------------------------------|------------------------|---|--------------|
| 13:15 (13+7) | Lars Postulka (B1) | <i>Field-induced ordering in a weakly coupled spin-dimer system consisting of imino-nitroxide stable radicals</i> | |
| 13:35 (13+7) | Sebastian Eggert (B3) | <i>The dynamic structure factor in impurity doped spin chains</i> | |
| 13:55 (13+7) | Pascal Puphal (B4) | <i>Single crystal growth of Cu based quantum spin systems</i> | |
| 14:15 (13+7) | Martin Baumgarten (B5) | <i>Organic biradical networks</i> | |
| 14:35 (13+7) | Stephen Winter (B13) | <i>Breakdown of magnons in α-RuCl₃</i> | |
| 14:55 (15) | | | Break |

| | |
|------------|-----------------------------------|
| 15:10 (35) | Poster Flash Presentations |
| 15:45 (30) | Coffee Break |

| | |
|------------|------------------------|
| 16:15 (90) | Mentoring (1+2) |
| 17:45 (30) | Break |

| | |
|------------|------------------------------|
| 18:15 (75) | Mitgliederversammlung |
| 19:30 (45) | Dinner |

| | |
|-------|---|
| 20:15 | Poster Session & Mentoring (3) |
|-------|---|

Friday, September 22, 2017

| | |
|-------------|------------------|
| until 09:00 | Breakfast |
|-------------|------------------|

| 3. Magnon Gases | | A. Widera |
|------------------------|----------------------|--|
| 09:00 (13+7) | Oleksandr Serha (A7) | <i>Non-local measurements of a supercurrent spin transport in a room temperature Bose-Einstein magnon condensate</i> |
| 09:20 (13+7) | Peter Kopietz (A8) | <i>Magnon condensation and quantum spins in low dimensions</i> |

| 4. Ultracold Gases & Cold Ion Crystals | | F. Schmidt-Kaler / S. Eggert |
|---|-------------------------------|---|
| 09:40 (13+7) | Arya Dhar (A3) | <i>Quench dynamics of interacting bosonic systems</i> |
| 10:00 (13+7) | Sebastian Eggert (A5) | <i>Large scale numerical simulations for the dimensional crossover</i> |
| 10:20 (30) | | Coffee Break |
| 10:50 (13+7) | Herwig Ott (A9) | <i>An optical Feshbach resonance with Rydberg molecules</i> |
| 11:10 (13+7) | Ferdinand Schmidt-Kaler (A10) | <i>Spin-motion coupling in planar ion crystals</i> |
| 11:30 (13+7) | Artur Widera (A12) | <i>Spin dynamics of individual neutral impurities coupled to a Bose-Einstein condensate</i> |
| 11:50 (5) | Michael Lang | <i>Concluding remarks</i> |
| 11:55 (65) | | Lunch |

| | |
|------------|----------------------|
| 13:00 (45) | Mentoring (4) |
|------------|----------------------|