

**12th Annual Retreat of the SFB/TR 49, Michel Hotel Frankfurt Maintal,
September 20 – 21, 2018**

Programme

Thursday, September 20, 2018

1. Charge-Transfer Salts		M. Lang / J. Müller
10:00 (5)	Michael Lang	<i>Welcome</i>
10:05 (13+7)	Vladislav Borisov (B2)	<i>Ab initio simulations of correlated materials under pressure</i>
10:25 (13+7)	Steffi Hartmann (B6)	<i>Comparative thermal expansion study on organic quantum spin-liquid candidate systems</i>
10:45 (13+7)	Gerd Schönhense (B8)	<i>Towards k-microscopy with bulk sensitivity</i>
11:05 (25)	Coffee Break	
11:30 (13+7)	Michael Huth (B9)	<i>Charge tunneling and magnetic coupling effects in the organic ferroelectric TTF-QCl₄</i>
11:50 (13+7)	Tatjana Thomas (B11)	<i>Low-frequency electron dynamics of organic charge-transfer salts studied by fluctuation spectroscopy</i>
12:10 (13+7)	Hans-Joachim Elmers (B12)	<i>Microscopic study of charge transfer states in the novel "SFB TR49" system DTBDT-TCNQ in three- and two-dimensional crystals</i>
12:30 (60)	Lunch	

2. Quantum Spin Systems		R. Valentí
13:30 (13+7)	Ulrich Tutsch (B1)	<i>From 1D to 2D behavior: The anisotropic triangular Heisenberg antiferromagnet Cs₂CuCl_{4-x}Br_x</i>
13:50 (13+7)	Sebastian Eggert (B3)	<i>Floquet induced superfluidity</i>
14:10 (13+7)	Cornelius Krellner (B4)	<i>Kagome quantum spin systems in the atacamite family</i>
14:30 (13+7)	Kubandiran Kolanji (B5)	<i>Organic radicals for magnetic materials</i>
14:50 (13+7)	Stephen Winter (B13)	<i>Role of disorder in some quantum magnets</i>
15:10 (10)	Break	

15:20 (40)	Poster Flash Presentations	
16:00 (30)	Coffee Break	

16:30 (90)	Mentoring (1+2)
18:00 (15)	Break

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

20:15	Poster Session & Mentoring (3)
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Friday, September 21, 2018

until 09:00	Breakfast
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3. Magnon Gases	H. Ott
09:00 (13+7) Burkard Hillebrands (A7)	<i>Spin transport by condensed magnons and spontaneously accumulated magneto-elastic quasiparticles</i>
09:20 (13+7) Peter Kopietz (A8)	<i>Exact renormalization group for quantum spin systems</i>

4. Ultracold Gases	H. Ott / M. Fleischhauer
09:40 (13+7) Walter Hofstetter (A3)	<i>Inhomogeneous quantum phases and dynamics in ultracold gases and hybrid atom-ion systems</i>
10:00 (13+7) Michael Fleischhauer (A5)	<i>Dynamics of Bose polarons at finite temperature</i>
10:20 (30)	Coffee Break
10:50 (13+7) Herwig Ott (A9)	<i>Coherent perfect absorption of nonlinear matter waves</i>
11:10 (13+7) Artur Widera (A12)	<i>Quantum spin dynamics of individual impurities in an ultracold gas</i>
11:30 (5) Michael Lang	<i>Concluding remarks</i>
11:35 (10)	Break
11:45	Lunch