

**Program of the Workshop on**  
**New Developments in Strongly Correlated Electron Systems**

*September 19 - 21, 2009 at ETH Zurich*

**Saturday, Sept. 19, 2009**

Room: **HIT H42\***

8:50	Opening
	<i>chair: Manfred Sigrist</i>
9:00	<b>Frederic Mila</b> (EPFL) <i>The on-going challenge of the magnetization plateaux of <math>SrCu_2(BO_3)_2</math></i>
9:30	<b>Shin Miyahara</b> (ERATO, JST) <i>Theory of electromagnon in noncollinear magnets</i>
10:00	<b>Mike Zhitomirsky</b> (CEA-Grenoble) <i>Spin Tensor Phases in Frustrated Magnets</i>
10:30	Coffee break
11:00	<b>Kazuo Ueda</b> (ISSP, University of Tokyo) <i>Nonequilibrium Transport through Quantum Dots</i>
11:30	<b>Philipp Werner</b> (ETH Zurich) <i>Monte Carlo approach to quantum transport</i>
12:00	<b>Naokazu Shibata</b> (Tohoku University) <i>Fractional quantum Hall states in graphene</i>
12:30	Lunch break
	<i>chair: René Monnier</i>
14:00	<b>Peter Horsch</b> (MPI FKF Stuttgart) <i>Charge response and Magnetism in 1D Wigner crystals</i>
14:30	<b>Dionsy Baeriswyl</b> (University of Fribourg) <i>Jamming in many-electron systems</i>
15:00	<b>Dieter Vollhardt</b> (University of Augsburg) <i>Isosbestic Points: Fingerprints of Electronic Correlations</i>
15:30	Coffee break
16:00	<b>Frank Steglich</b> (MPI CPS Dresden) <i>Are superconductivity and quantum criticality convoluted in heavy-fermion metals?</i>
16:30	<b>Hans-Ruedi Ott</b> (ETH Zurich) <i>Heavy Electrons and Electronic Instabilities What is (still) under the rug?</i>
17:00	<b>Stephanie Curnoe</b> (Memorial University of Newfoundland) <i>Quantum Spin Configurations in Rare Earth Titanate Pyrochlores</i>

\*: see separate access instruction

Sunday, Sept. 20, 2009

Room: HIT H42\*

	<i>chair: Dima Geshkenbein</i>
8:30	<b>Thomas Dahm</b> (University of Tübingen) <i>A realistic spin fluctuation model for the pairing interaction in YBCO<sub>6.6</sub></i>
9:00	<b>T. Maurice Rice</b> (ETH Zurich) <i>The High-Tc Cuprates viewed in k-space</i>
9:30	<b>Gianni Blatter</b> (ETH Zurich) <i>Strong coupling theory for the Jaynes-Cummings-Hubbard model</i>
10:00	Coffee break
10:25	<b>Carsten Honerkamp</b> (University of Würzburg) <i>Pairing in the iron arsenides studied by the functional renormalization group</i>
11:55	<b>Bertram Batlogg</b> (ETH Zurich) <i>Critical currents and high magnetic field scales in SmFeAs(O,F) single crystals: promising for applications</i>
11:45	Departure for Excursion

Monday, Sept. 21, 2009

Room: HPM C53\*

	<i>chair: Diethelm Würtz</i>
9:00	<b>Hirokazu Tsunetsugu</b> (ISSP, University of Tokyo) <i>Anharmonic lattice dynamics and superconductivity in <math>\beta</math>-pyrochlore KO<sub>s2</sub>O<sub>6</sub></i>
9:30	<b>Christoph Bruder</b> (University of Basel) <i>The single-atom box</i>
10:00	<b>Matthias Troyer</b> (ETH Zurich) <i>Validating a quantum simulator for the Hubbard model: do ultra-cold atomic gases live up to their promise?</i>
10:30	Coffee break
11:00	<b>Masatoshi Imada</b> (University of Tokyo) <i>Unconventional Quantum Criticality</i>
11:30	<b>Fakher Assaad</b> (University of Augsburg) <i>Coherence and Fermi surface topology in models of heavy fermions</i>
12:00	<b>Hiroshi Kontani</b> (Nagoya University) <i>Intrinsic Hall Effects in Transition Metals</i>
12:30	Closing

\*: see separate access instruction