

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	Frederic Mila (EPFL) <i>The on-going challenge of the magnetization plateaux of $\text{SrCu}_2(\text{BO}_3)_2$</i>
9:30	Shin Miyahara (ERATO, JST) <i>Theory of electromagnon in noncollinear magnets</i>
10:00	Mike Zhitomirsky (CEA-Grenoble) <i>Spin Tensor Phases in Frustrated Magnets</i>
10:30	Coffee break
11:00	Kazuo Ueda (ISSP, University of Tokyo) <i>Nonequilibrium Transport through Quantum Dots</i>
11:30	Philipp Werner (ETH Zurich) <i>Monte Carlo approach to quantum transport</i>
12:00	Naokazu Shibata (Tohoku University) <i>Fractional quantum Hall states in graphene</i>
12:30	Lunch break
	<i>chair: René Monnier</i>
14:00	Peter Horsch (MPI FKF Stuttgart) <i>Charge response and Magnetism in 1D Wigner crystals</i>
14:30	Dionsy Baeriswyl (University of Fribourg) <i>Jamming in many-electron systems</i>
15:00	Dieter Vollhardt (University of Augsburg) <i>Isosbestic Points: Fingerprints of Electronic Correlations</i>
15:30	Coffee break
16:00	Frank Steglich (MPI CPS Dresden) <i>Are superconductivity and quantum criticality convoluted in heavy-fermion metals?</i>
16:30	Hans-Ruedi Ott (ETH Zurich) <i>Heavy Electrons and Electronic Instabilities What is (still) under the rug?</i>
17:00	Stephanie Curnoe (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	Thomas Dahm (University of Tübingen) <i>A realistic spin fluctuation model for the pairing interaction in $YBCO_{6.6}$</i>
9:00	T. Maurice Rice (ETH Zurich) <i>The High-Tc Cuprates viewed in k-space</i>
9:30	Gianni Blatter (ETH Zurich) <i>Strong coupling theory for the Jaynes-Cummings-Hubbard model</i>
10:00	Coffee break
10:25	Carsten Honerkamp (University of Würzburg) <i>Pairing in the iron arsenides studied by the functional renormalization group</i>
11:55	Bertram Batlogg (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	Hirokazu Tsunetsugu (ISSP, University of Tokyo) <i>Anharmonic lattice dynamics and superconductivity in β-pyrochlore KOs_2O_6</i>
9:30	Christoph Bruder (University of Basel) <i>The single-atom box</i>
10:00	Matthias Troyer (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	Masatoshi Imada (University of Tokyo) <i>Unconventional Quantum Criticality</i>
11:30	Fakher Assaad (University of Augsburg) <i>Coherence and Fermi surface topology in models of heavy fermions</i>
12:00	Hiroshi Kontani (Nagoya University) <i>Intrinsic Hall Effects in Transition Metals</i>
12:30	Closing

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