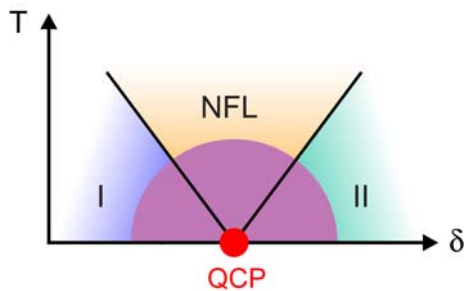


**“Quantum Phase Transitions (FOR 960)”
Workshop - Karlsruhe, February 18/19, 2013**



Program

Monday, February 18, 2013

- | | |
|-----------------|---|
| 13.50h – 14.00h | Welcome |
| 14.00h – 15.00h | <i>Ferromagnetic quantum criticality</i>
Manuel Brando, Dresden |
| | <i>Effect of charge carrier doping in YbRh₂Si₂</i>
Philipp Gegenwart, Göttingen |
| 15.00h – 16.30h | <i>Quantum criticality in the partially geometrically frustrated heavy-fermion system CePd_{1-x}Ni_xAl</i>
Veronika Fritsch, Karlsruhe |
| | <i>Thermal expansion and magnetostriction of CePdAl single crystals</i>
Kai Grube, Karlsruhe |
| | <i>A short update on recent Inelastic Neutron Scattering experiments</i>
Zita Hüsge, Dresden |
| 16.30h – 17.00h | Coffee break |
| 17.00h – 18.00h | <i>Mott criticality on compressible lattices</i>
Markus Garst, Köln |
| | <i>Interplay of quantum critical metamagnetism and crystal elasticity</i>
Mario Zacharias, Köln |
| 18.00h – 19.00h | <i>Giant generic topological Hall resistivity of MnSi under pressure</i>
Robert Ritz, München |
| | <i>Incipient ferromagnetic quantum criticality in the zero-gap semiconductor Fe₂TiSn</i>
Christian Pfleiderer, München |

Dinner – Gastdozentenhaus Heinrich Hertz

20 min. talk, 10 min. discussion – language English

Tuesday, February 19, 2013

- 9.00h – 10.00h *Nuclear Magnetic Resonance at the Quantum Critical Point*
Norbert Büttgen, Augsburg
- From Colossal-Dielectric to Heavy-Fermion Behaviour:
Metal-Insulator Transition in $\text{LaCu}_3\text{Ti}_{4-x}\text{Ru}_x\text{O}_{12}$*
Hans-Albrecht Krug von Nidda, Augsburg
- 10.00h – 11.00h *Quantum phase transitions within exact density functional theories*
Peter Schmitteckert, Karlsruhe
- The Heisenberg-Kitaev model and its relevance for the
honeycomb lattice iridates A_2IrO_3*
Johannes Reuther, Pasadena
- 11.00h – 11.30h **Coffee break**
- 11.30h – 12.00h *Critical scaling behavior of the itinerant ferromagnet $\text{Sr}_{1-x}\text{Ca}_x\text{RuO}_3$*
Dirk Fuchs
- 12.00h – 13.00h *DMFT for multi-impurity systems*
Andrew Mitchell, Oxford
- Superconductivity from local spin fluctuations in Kondo lattices*
Matthias Vojta, Dresden
- 13.00h – 13.30h **Break**
- 13.30h – 15.00h Final discussion
- future projects
- International Workshop Freudenstadt-Lauterbad,
September 15–19, 2013