

Program

Sunday, February 26

Tutorial

13:00 – 14:00 **J. D. Thompson**

14:00 – 15:00 **C. Pfleiderer**

15:00 – 15:30 Coffee

15:30 – 16:30 **J. Spalek**

16:30 – 17:30 **S. Kirchner**

18:00 – 20:00 Welcome

Monday, February 27

Chair: A. Loidl

08:50 – 09:00 **A. P. Mackenzie**

Welcome

09:00 – 09:30 **P. Coleman**

SmB₆: Skyrme insulator at the brink of superconductivity?

09:30 – 10:00 **F. Zhang**

Theory for Spin Selective Andreev Reflection in Vortex Core of Topological Superconductor

10:00 – 10:30 Coffee

Chair: E. D. Bauer

10:30 – 11:00 **C. Krellner**

Ferromagnetic quantum criticality in YbNi₄(P_{1-x}As_x)₂

11:00 – 11:30 **C. Pepin**

Quantum Criticality and emergent symmetries in strongly correlated materials

11:30 – 12:00 **D. Kaczorowski**

Quantum critical superconductivity in Ce₂PdIn₈

12:00 – 13:30 Lunch

13:30 – 15:00 **Poster Session**

Dedicated to Z. Fisk*Chair: J. D. Thompson*

15:00 – 15:30	E. D. Bauer <i>High Magnetic Field Studies of the $Ce_mM_nIn_{3m+2n}$ ($M=Co, Rh, Ir$) Heavy Fermion Superconductors</i>
15:30 – 16:00	M. Kenzelmann <i>Possible magnetic quantum critical point in superconducting Nd-doped $CeCoIn_5$</i>
16:00 – 16:30	D. Feng <i>Cross-Sectional Scanning Tunneling Spectroscopy Study of $Bi_2Sr_2CaCu_2O_{8+\delta}$ and $YBa_2Cu_3O_{7-x}$</i>
16:30 – 17:00	Coffee

Chair: J. Spalek

17:00 – 17:30	S. Paschen <i>Multiple orders and quantum criticality in cubic $Ce_3Pd_{20}Si_6$</i>
17:30 – 18:00	G. G. Lonzarich <i>A Two-Fluid Model of the Kondo Lattice and Reconsideration of the Doniach Phase Diagram</i>
19:00 – 21:00	Conference Dinner
21:00 – 21:30	M. Loewenhaupt <i>tba</i>

Tuesday, February 28*Chair: P. Coleman*

09:00 – 09:30	I. Bloch <i>Controlling and Exploring Quantum Matter Using Ultracold Atoms in Optical Lattices</i>
09:30 – 10:00	Q. Si <i>Quantum criticality and emergent phases in correlated electron systems</i>
10:00 – 10:30	Coffee

Chair: P. Gegenwart

10:30 – 11:00	M. Aronson <i>Orbital-exchange and fractional quantum number excitations in an f-electron metal, Yb_2Pt_2Pb</i>
11:00 – 11:30	P. Sun <i>Field and pressure induced quantum criticalities in frustrated $CePdAl$</i>
11:30 – 12:00	S. Nakatsuji <i>Multipolar Quantum Criticality in $4f$ Electron Systems</i>

12:00 – 13:30	Lunch
13:30 – 15:00	Poster Session
<i>Chair: J. Wosnitza</i>	
15:00 – 15:30	D. Vollhardt <i>Phase instabilities caused by electronic correlations</i>
15:30 – 16:00	N. L. Wang <i>Revealing a two-dimensional Ising-like antiferromagnet on a triangular lattice $CeCd_3As_3$</i>
16:00 – 16:30	J. Kroha <i>Kondo destruction in RKKY-coupled Kondo lattice and multi-impurity systems</i>
16:30 – 17:00	Coffee
<i>Chair: M. Grosche</i>	
17:00 – 17:30	I. Paul <i>Lattice Effects on Nematic Quantum Criticality in Metals</i>
17:30 – 18:00	W. Knafo <i>Field-induced spin-density wave beyond hidden order in URu_2Si_2</i>
Wednesday, March 1	
<i>Chair: Q. Si</i>	
09:00 – 09:30	Y. Matsuda <i>Fully gapped superconductivity with no sign change in prototypical heavy-fermion $CeCu_2Si_2$</i>
09:30 – 10:00	H. Q. Yuan <i>Fully gapped, unconventional superconductivity</i>
10:00 – 10:30	Coffee
<i>Chair: R. Valenti</i>	
10:30 – 11:00	J. Schmalian <i>Strong coupling theory of heavy fermion criticality</i>
11:00 – 11:30	P. Schlottmann <i>Commensurate and incommensurate SDW, non-Fermi liquid behavior and the superconducting dome in heavy electron systems</i>
11:30 – 12:00	C. Varma <i>Quantum-criticality of 2D dissipative XY model: Application to metallic antiferromagnets and ferromagnets</i>
12:00 – 14:00	Lunch

Chair: F. Zhang

14:00 – 14:30

J. Wosnitza

FFLO states in layered organic superconductors

14:30 – 15:00

Y. Maeno

Strong diamagnetism in the Mott insulator Ca_2RuO_4 induced by DC current

15:00 – 15:30

Coffee

Chair: D. Vollhardt

15:30 – 16:00

R. Valenti

Challenges in engineering exotic quantum spin liquid materials

16:00 – 16:30

P. Gegenwart

Quantum criticality and the magnetocaloric effect

16:30 – 17:00

Closing