

Session  
Time

First Name

Last Name

Institution

Abstract Title

# Monday

Session Time	First Name	Last Name	Institution	Abstract Title
<b>7:30-8:15 COMPLIMENTARY BREAKFAST</b>				
<b>8:15-8:30 OPENING</b>				
<b>P1: Plenary - Quantum criticality</b>				
8:30-9:10	Piers	Coleman	Dept of Physics and Astronomy, Rutgers University	Mapping the effect of frustration on the Kondo lattice.
9:10-9:40	Hilbert	v. Lohneysen	Karlsruhe Institute of Technology, Germany	Tuning magnetic quantum phase transitions
9:40-10:10	Sven	Friedemann	Max Planck Institute for Chemical Physics of Solids	Quantum criticality and collapsing Fermi surface in YbRh2Si2
<b>10:10-10:40 BREAK</b>				
<b>I1: Invited - URu2Si2 (Session F)</b>				
10:40-11:10	J.C. Seamus	Davis	Cornell/BNL/St Andrews	Imaging the Fano lattice to Hidden order transition in URu2Si2
11:10-11:40	Hisatomo	Harima	Kobe University	Stealth coupling in URu2Si2
11:40-12:00	Peter M.	Oppeneer	Uppsala University, Sweden	Electronic structure theory of the hidden order material URu2Si2
<b>I2: Invited - Spin states (Session A)</b>				
10:40-11:10	Reizo	Kato	RIKEN	Quantum spin liquid state in a Dimer mott system based on the Pd(dmit)2 molecule
11:10-11:40	Cristian D.	Batista	Los Alamos National Laboratory	Spontaneous quantum hall effect in itinerant frustrated magnets
11:40-12:00	Marc	Janoschek	University of California, San Diego	Emergence of helimagnon bands in MnSi
<b>12:00-13:30 LUNCH</b>				
<b>I3: Invited - Electronic properties of correlated oxides (Session F)</b>				
13:30-14:00	Dmitri	Basov	UCSD	Infrared spectroscopy and Nano-imaging of correlated electron matter
14:00-14:20	Jian-Xin	Zhu	Theoretical Division, Los Alamos National Laboratory	Band narrowing and Mott localization in Iron oxychalcogenides La2O2Fe2O(Se,S)2
<b>I4: Invited - Heavy fermions I (Session A)</b>				
13:30-14:00	Chandra	Varma	University of California, Riverside	Phenomenology and fundamental basis for the heavy fermions
14:00-14:20	Meigan	Aronson	Stony Brok University	Frustrated heavy fermions
<b>14:20-14:30 BREAK</b>				
<b>14:30-16:45 POSTER</b>				
<b>P2: Plenary - Fermiology</b>				
16:45-17:25	Prof. A.P.	Mackenzie	University of St Andrews	Entropy and the formation of an electronic Nematic in Sr3Ru2O7
17:25-17:55	Sergey	Borisenko	IFW-Dresden	ARPES of iron pnictides
17:55-18:25	Suchitra E.	Sebastian	University of Cambridge	Complete Fermi surface mapping by quantum oscillation measurements in underdoped YBCO

# Tuesday

7:30-8:30 COMPLIMENTARY BREAKFAST

## P3: Plenary - Strongly correlated fermions

8:30-9:10	Randall G.	Hulet	Rice University	Spin-polarization of a one-dimensional fermi gas
9:10-9:40	Daniel F.	Agterberg	University of Wisconsin - Milwaukee	FFLO and pair density wave phases in strongly correlated materials
9:40-10:10	Corinna	Kollath	Ecole Polytechnique	Quantum simulations with strongly correlated ultracold gases

10:10-10:40 BREAK

## I5: Invited - Correlated superconductors (Session F)

10:40-11:10	Kamran	Behnia	ESPCI	Nernst effect as a probe of quantum criticality in graphite
11:10-11:40	Ernst	Bauer	Vienna University of Technology	Superconductivity in absence of inversion symmetry: Are correlations the ultimate driving power?
11:40-12:00	Philip	Phillips	University of Illinois	Dynamical spectral weight transfer and anomalous transport in the Cuprates

## I6: Invited - Spin excitations and Magnetic Ordering (Session A)

10:40-11:10	Yoshio	Kitaoka	Osaka University	Novel superconducting phases in Copper oxides and Iron-based compounds: NMR studies
11:10-11:40	Robert J	McQueeney	Iowa State University/Ames Laboratory	Systematic evolution of magnetism with doping in AFe <sub>2</sub> As <sub>2</sub> superconductors
11:40-12:00	Beatrice	Grenier	CEA-Grenoble	Novel field-induced magnetic ordering in low dimensional Ising antiferromagnet BaCo <sub>2</sub> V <sub>2</sub> O <sub>8</sub>

12:00-13:30 LUNCH

## I7: Invited - Quantum criticality: Yb systems (Session F)

13:30-14:00	Satoru	Nakatsuji	Institute for Solid State Physics, University of Tokyo	Quantum criticality in the Valence fluctuating $\beta$ -YbAlB <sub>4</sub>
14:00-14:20	Gertrud	Zwicknagl	Techn. Universitaet Braunschweig,	YbRh <sub>2</sub> Si: Field-induced suppression of the Heavy-Fermion state

## I8: Invited - Kondo theory (Session A)

13:30-14:00	Thomas	Pruschke	Theoretical Physics, University of Goettingen	Phonons in the Kondo lattice model - from Heavy Fermion physics to superconductivity
14:00-14:20	Sergio G.	Magalhaes	Universidade Federal de Santa Maria	The van Hemmen-Kondo model for disordered Cerium systems

14:20-14:30 BREAK

14:30-16:45 POSTER

## P4: Plenary - Correlated 4d/5d oxides

16:45-17:25	Hidenori	Takagi	University of Tokyo & RIKEN	Novel interplay of electron correlations and strong spin-orbit coupling in heavy transition metal oxides ( <b>tentative</b> )
17:25-17:55	Michael	Norman	Argonne National Laboratory	The electronic phase diagram of the Cuprates
17:55-18:25	Bumjoon	Kim	Argonne National Laboratory	Kondo-like quasiparticle formation in electron doped Sr <sub>2</sub> IrO <sub>4</sub>

# Wednesday

7:30-8:30 COMPLIMENTARY BREAKFAST

## P5: Plenary - Heavy fermions II

8:30-9:10	Jacques	Flouquet	CEA-Grenoble	Trends in heavy fermion matter : past and future
9:10-9:40	Jon	Lawrence	University of California, Irvine	Heavy Fermion scaling: Uranium versus cerium and ytterbium compounds.
9:40-10:10	Peter	Woelfle	Karlsruhe Institute of Technology, Germany	Quantum critical behavior of heavy fermion compounds: Extended Fermi liquid theory

10:10-10:40 BREAK

## I9: Invited - Heavy fermion superconductivity (Session F)

10:40-11:10	Chris	Stock	NIST Center for Neutron Research	Spin fluctuations in superconducting CeCoIn <sub>5</sub> and CeRhIn <sub>5</sub>
11:10-11:40	Anne	de Visser	University of Amsterdam	Superconducting ferromagnets: the test case system UCoGe
11:40-12:00	Rebecca	Flint	Rutgers University	Tandem pairing in heavy fermion superconductors

## I10: Invited - SCES in reduced dimensions (Session A)

10:40-11:10	Yuji	Matsuda	Kyoto University	Confining heavy fermions to two dimension
11:10-11:40	E.V.	Sampathkumaran	Tata Institute of Fundamental Research	Magnetism of nano particles of Kondo lattices, obtained by high-energy ball-milling
11:40-12:00	Leonardo	Degiori	ETH Zurich	The charge-density-wave state in the two-dimensional layered rare-earth tri-tellurides

12:00-13:00 LUNCH

13:00-17:30 EXCURSION

18:30-21:30 BANQUET

# Thursday

7:30-8:30 COMPLIMENTARY BREAKFAST

## P6: Plenary - Magnetism and superconductivity

8:30-9:10	Douglas J.	Scalapino	University of California, Santa Barbara, CA	A common thread Nodal gap in the iron-pnictide superconductors revealed by low temperature STM tunneling spectrum and angle resolved specific heat
9:10-9:40	Hai-Hu	Wen	Institute of Physics, CAS	Spin excitations as driving force for superconductivity in CeCu <sub>2</sub> Si <sub>2</sub>
9:40-10:10	Oliver	Stockert	Max-Planck-Institut CPfS, Dresden, Germany	

10:10-10:40 BREAK

## I11: Invited - FFLO (Session F)

10:40-11:10	Michel	Kenzelmann	Paul Scherrer Institute	Coupled superconducting and magnetic order in CeCoIn <sub>5</sub>
11:10-11:40	Youichi	Yanase	Niigata University	Antiferromagnetic order in the Fulde-Ferrell-Larkin-Ovchinnikov state
11:40-12:00	Andrew M	Berridge	University of Birmingham	A magnetic analogue of the superconducting Fulde-Ferrell-Larkin-Ovchinnikov state in Sr <sub>3</sub> Ru <sub>2</sub> O <sub>7</sub>

## I12: Invited - Pnictides (Session A)

10:40-11:10	Anton	Vorontsov	Montana State University	Superconductivity and magnetism in Pnictides
11:10-11:40	Athena S.	Sefat	Oak Ridge National Laboratory	Unconventional superconductivity in the simple BaFe <sub>2</sub> As <sub>2</sub> & the complex structures
11:40-12:00	Gregory B.	Teitelbaum	E.K. Zavoiskii Institute for Technical Physics, Russian Academy of Science	On the formation of the soliton phase in iron pnictides

12:00-13:30 LUNCH

## I13: Invited - STM studies (Session F)

13:30-14:00	Ali	Yazdani	Princeton University	Visualizing the formation of the Kondo Lattice and the hidden order in URu <sub>2</sub> Si <sub>2</sub>
14:00-14:20	Tien-Ming	Chuang	Cornell & National High Magnetic Field Lab	Nematic electronic structure in the "Parent" State of the iron-based superconductor Ca(Fe <sub>1-x</sub> Co <sub>x</sub> ) <sub>2</sub> As <sub>2</sub>

## I14: Invited - Valence fluctuations (Session A)

13:30-14:00	Kazumasa	Miyake	Osaka University	Roles of critical valence fluctuations in Ce- and Yb-based heavy fermion metals
14:00-14:20	Andrea	Severing	University of Cologne	Crystal-field and Kondo scale investigation of CeMIn <sub>5</sub> (M=Co, Ir, and Rh): a combined x-ray absorption and inelastic neutron study.

14:20-14:30 BREAK

14:30-16:45 POSTER

## P7: Plenary - Correlated 4f/5f materials

16:45-17:25	Yuri	Grin	Max-Planck-Institut	Chemical bonding and SCES in intermetallic compounds
17:25-17:55	Silke	Paschen	Institute of Solid State Physics, Vienna University of Technology	Anisotropic transport in the Kondo insulator CeRu <sub>4</sub> Sn <sub>6</sub>
17:55-18:25	Yoshinori	Haga	Japan Atomic Energy Agency	Unconventional magnetism and superconductivity in the ternary actinide compounds AnPd <sub>5</sub> Al <sub>2</sub>

# Friday

7:30-8:30 COMPLIMENTARY BREAKFAST

## P8: Plenary - 115's

8:30-9:10	Tuson	Park	Sungkyunkwan University	Quantum criticality in Ce115 compounds
9:10-9:40	Pascoal	Pagliuso	IFGW-UNICAMP	Hybridization and low-dimensionality: Key ingredients to find new intermetallic superconductors ( <b>tentative</b> )
9:40-10:10	Steffen	Wirth	MPI for Chemical Physics of Solids, Dresden, Germany	Magnetotransport and tunneling in heavy fermion metals CeMIn5

10:10-10:40 BREAK

## I15: Invited - Quantum criticality: theory

10:40-11:10	Pinaki	Sengupta	Nanyang Technological University, Singapore	The supersolid phase in quantum magnets
11:10-11:40	Hong	Liu	Massachusetts Institute of Technology	From black holes to strange metals

## I16: Invited - Closing Comments

11:40-11:10	Zachary	Fisk	U.C. Irvine	Experimental
11:55-12:10	Qimiao	Si	Rice University	Theoretical