

Sunday, October 7		
6:00 - 8:00pm	Welcome Reception	
Monday, October 8		
8:00 - 8:45am	Registration	
8:45 - 9:00am	Welcome Remarks	
Session 1 - Unifying Themes (Chair: Zhuan Xu)		
9:00 - 9:30am	Silke Paschen	New frontiers in heavy fermion quantum criticality
9:30 - 10:00am	Gabriel Aeppli	
10:00 - 10:30am	Fuchun Zhang	Majorana zero modes in some of superconducting topological systems
10:30 - 11am	Tea Break	
Session 2 - Spin Liquid Physics (Chair: Shiyao Li)		
11:00 - 11:30am	Rajiv Singh	The quest for quantum spin-liquid phases of matter
11:30 - 12noon	Jinsheng Wen	Exotic Spin Excitations of Quantum Magnets
12noon - 2:00pm	Lunch + Poster	
Session 3 - Ultracold Atoms (Chair: Gentaro Watanabe)		
2:00 - 2:30pm	Han Pu	Strongly interacting quantum spinor gases in one dimension
2:30 - 3:00pm	Qijin Chen	Ultra high temperature superfluidity in atomic Fermi gases using mixed dimensionality
3:00 - 3:30pm	Wei Yi	Emergent topological phenomena in non-unitary quench dynamics
3:30 - 4:00pm	Tea Break	
Session 4 - Superconductivity and Correlations (Chair: Guanghan Cao)		
4:00 - 4:30pm	Pengcheng Dai	Local orthorhombic lattice distortions in the paramagnetic tetragonal phase of superconducting $\text{NaFe}_{1-x}\text{Ni}_x\text{As}$
4:30 - 5:00pm	Rong Yu	Orbital selectivity and nematicity in iron selenide
5:00 - 5:30pm	Xingjiang Zhou	Laser-ARPES on Orbital Origin of Extremely Anisotropic Superconducting Gap in Nematic Phase of FeSe Superconductor
5:30 - 6:00pm	Yuan Li	Spin-orbit coupling and "preferred" magnetic excitations in iron-based superconductors
Tuesday, October 9		
Session 5 - Topology and Correlations (Chair: Hae-Young Kee)		
8:45 - 9:15am	Xiongjun Liu	Quench the Haldane-Hubbard model
9:15 - 9:45am	Hsin-Hua Lai	Weyl-Kondo Semimetal in Heavy-Fermion Systems
9:45 - 10:15pm	Huiqiu Yuan	Topological Kondo semimetals
10:15 - 10:45am	Tea Break	
Session 6 - Quantum Criticality and Superconductivity (Chair: Hilbert von Lohneysen)		
10:45 - 11:15am	Frank Steglich	On the quantum critical paradigm in antiferromagnetic heavy fermions
11:15 - 11:45am	Qimiao Si	Kondo destruction, quantum criticality and superconductivity
11:45 - 12:15pm	Lei Shu	Renormalizations in unconventional superconducting states of $\text{Ce}_{1-x}\text{Yb}_x\text{CoIn}_5$
12:15 - 1:30pm	Lunch	
Session 7 - Heavy Fermion STM/ARPES Symposium (Chair: Stefan Kirchner)		
1:30 - 2:00pm	Qiuyun Chen	Electronic structure study of the heavy-fermion compound $\text{CeRhIn}_5$ and its parent compound $\text{CeIn}_3$
2:00 - 2:30pm	Pegor Aynajian	Visualizing the emergence of heavy fermions in f-electron materials using scanning tunneling spectroscopy
2:30 - 3:00pm	Tea Break	
3:00 - 3:30pm	Yuji Matsuda	In situ STM observation of the electronic structure in $\text{Ce}_{115}$ thin films grown by MBE

3:30 – 4:00pm	Steffen Wirth	Kondo lattice formation and non-Fermi liquid excitations in the heavy-fermion metal YbRh <sub>2</sub> Si <sub>2</sub>
4:00 – 4:45pm	Symposium discussion	
6:30pm	Banquet	
Wednesday, October 10		
<b>Session 8 - New Quantum Frontier (Chair: Yi Yin)</b>		
8:45 – 9:15am	Rui-Rui Du	Topological Excitonic Insulator
9:15 – 9:45am	Hae-Young Kee	Kitaev spin liquids and nearby phases in honeycomb materials
9:45 – 10:15am	Xiangang Wan	Efficient Topological Materials Discovery Using Symmetry Indicators
10:15 – 10:45am	Tea Break	
<b>Session 9 – Heavy Fermion Systems (Chair: Frank Steglich)</b>		
10:45 – 11:15am	Shiyong Tan	ARPES and STM/STS studies on typical uranium based heavy electron materials
11:15 – 11:45am	Yang Liu	Probing the band topology and correlation effect in CeBi and related systems
11:45 – 12:15pm	Hisamoto Harima	The hybrid multipole ordering indicated in URu <sub>2</sub> Si <sub>2</sub>
12:15 – 1:30pm	Lunch	
<b>Session 10 - Quantum Criticality and Strange Metals (Chair: Rajiv Singh)</b>		
1:30 – 2:00pm	Hilbert von Lohneysen	Multidimensional entropy landscape of quantum criticality
2:00 – 2:30pm	Nigel Hussey	Anomalous Hall number in the strange metal phase of overdoped cuprates
2:30 – 3:00pm	Tea break	
<b>Session 11 - Quantum Magnetism and Correlated Electrons (Chair: Qimiao Si)</b>		
3:00 – 3:30pm	Alois Loidl	Optical and thermodynamic evidence of fractionalized excitations in the Kitaev spin-liquid candidate $\alpha$ -RuCl <sub>3</sub>
3:30 – 4:00pm	Tao Xiang	Finite-temperature charge dynamics and the melting of the Mott insulator
4:00 – 4:30pm	Qingming Zhang	Quantum spin-frustrated compound YbMgGaO <sub>4</sub>