

**Workshop on
“Heavy Fermions and Quantum Phase Transitions”**

November 10, 2012, Saturday, M236, IOP		
8:30-9:00	Registration	
Chair: Yi-feng Yang		
9:00-9:10	Nan-Lin Wang	Welcome & Researches at IOP
Ce-115		
9:10-9:50	James Allen	University of Michigan
9:50-10:30	Filip Ronning	Los Alamos National Lab
Tea break		
Chair: Filip Ronning		
10:50-11:30	Tuson Park	Sungkyunkwan University
11:30-12:10	Lei Shu	Fudan University
Lunch		
Quantum Criticality		
Chair: Nan-Lin Wang		
13:30-14:10	Silke Bühler-Paschen	Vienna University of Technology
14:10-14:50	Shiyan Li	Fudan University
14:50-15:30	Andre Strydom	University of Johannesburg
Tea break		
Chair: Catherine Pepin		
16:00-16:40	Yi-feng Yang	Institute of Physics, Chinese Academy of Sciences
16:40-17:20	Sven Friedemann	University of Cambridge
Banquet		

November 11, 2012, Sunday, M236, IOP		
Spectroscopy		
Chair: Malte Grosche		
8:30-9:10	Collin Broholm	Johns Hopkins University
9:10-9:50	Guo-qing Zheng	Institute of Physics, Chinese Academy of Sciences
Tea break		
Chair: Peijie Sun		
10:20-11:00	Pegor Aynajian	Princeton University
11:00-11:40	Kenji Ishida	Kyoto University
Lunch		
Theory		
Chair: Lu Yu		
13:30-14:10	Kazuo Ueda	University of Tokyo
14:10-14:50	Guang-Ming Zhang	Tsinghua University
14:50-15:30	Catherine Pepin	CEA-Scalay
Tea break		
Quantum Phase Transition		
Chair: Tuson Park		
16:00-16:40	Malte Grosche	University of Cambridge
16:40-17:20	Vladimir Sidorov	Institute for High Pressure Physics Of Russian Academy of Sciences
17:20-18:00	Hong Xiao	Institute of Physics, Chinese Academy of Sciences
Dinner		

November 12, 2012, Monday, M236, IOP		
Novel Materials/Phenomena		
Chair: Qimiao Si		
8:30-9:10	Pengcheng Dai	Institute of Physics, Chinese Academy of Sciences
9:10-9:50	Zhu'an Xu	Zhejiang University
9:50-10:30	Cedomir Petrovic	Brookhaven National Lab
10:30-11:10	Summary & Discussions	
Lunch		
12:30-17:30	Excursion (Forbidden city)	

November 10, Morning	
Ce-115	
James Allen	Heavy Fermion ARPES: Fermi Surface and High T Heaviness
Filip Ronning	Electronic tuning in CeCoIn ₅ : A dirty job
Tuson Park	Inhomogeneous Superconducting Phase in the Heavy-Fermion Compound CeRhIn ₅
Lei Shu	Evolution of the superconducting critical temperature in Yb-substituted CeCoIn ₅
November 10, Afternoon	
Quantum Criticality	
Silke Bühler-Paschen	Kondo breakdown in the cubic heavy fermion compound Ce ₃ Pd ₂₀ Si ₆
Shiyan Li	Unveiling the quantum critical point of an Ising chain
Andre Strydom	YFe ₂ Al ₁₀ : unravelling the source of quantum criticality
Yi-feng Yang	Two-fluid model for heavy fermions and cuprates
Sven Friedemann	Electronic Structure investigations in Yb-based heavy fermion materials
November 11, Morning	
Spectroscopy	
Collin Broholm	From incommensurate correlations to mesoscopic spin resonance in YbRh ₂ Si ₂
Guo-qing Zheng	Microscopic coexistence of states and quantum criticality in heavy fermion compounds and Fe-pnictides
Pegor Aynajian	Visualizing heavy fermions emerging in a quantum critical Kondo lattice
Kenji Ishida	Spin-Triplet Superconductivity Induced by Longitudinal Ferromagnetic Fluctuations in UCoGe
November 11, Afternoon	
Theory	
Kazuo Ueda	Dimensional reduction and odd-frequency pairing of the checkerboard lattice Hubbard model
Guang-Ming Zhang	D-wave superconductivity induced by short-range antiferromagnetic correlations in the Kondo lattice systems
Catherine Pepin	Quantum criticality in two dimensions: the case of the antiferromagnet
Quantum Phase Transition	
Malte Grosche	Spin and charge quantum phase transitions in narrow-band metals
Vladimir Sidorov	Pressure induced quantum phase transitions in d- and f-electron systems
Hong Xiao	Quantum phase transition inside superconducting dome
November 12, Morning	
Novel Materials/Phenomena	
Pengcheng Dai	Spin dynamics in electron and hole-doped iron pnictide superconductors
Zhu'an Xu	Pressure driven quantum critical point and f-electron delocalization in CeNiAsO
Cedomir Petrovic	Heavy Fermions and Electronic Correlations in FeSb ₂