

Workshop Schedule

Friday, November 20, 2015

8:15am	Shuttle leaves the DoubleTree
8:35am	Registration and Light Breakfast – Duncan Hall, 1st floor Foyer
8:55-9:00am	Opening Remarks – McMurtry Auditorium

Session 1 - Spectroscopy Chair: Pengcheng Dai

9:00-9:30am	Collin Broholm (Johns Hopkins) - “Neutron scattering as a probe of hybridized bands in Kondo insulators”
9:30-10:00am	Young-June Kim (University of Toronto) - “Resonant Inelastic X-ray Scattering (RIXS) study of strongly correlated materials”
10:00-10:30am	Ming Yi (Berkeley) - “Strong correlation effects in iron chalcogenide superconductors”
10:30-11:00am	Coffee Break

Session 2 - Unconventional Superconductivity Chair: Dunghai Lee

11:00-11:30am	Yu Song (Rice) - “Correlation induced insulating behavior and antiferromagnetic order in $\text{NaFe}_{1-x}\text{Cu}_x\text{As}$ ”
11:30am-12:00pm	Philip Phillips (UIUC) - “Optical conductivity in the cuprates from holography and unparticles”
12:00-12:15pm	Blitz Poster Preview (1 minute per poster)
12:15-2:00pm	Lunch and Poster Session, Duncan Hall 1st Floor Foyer

Session 3 - Iron-based Superconductors Chair: Andriy Nevidomskyy

2:00-2:30pm	Dunghai Lee (UC-Berkeley) - “A novel nematic quantum paramagnet in iron-based superconductor FeSe”
2:30-3:00pm	Qimiao Si* (Rice University) - “Antiferroquadrupolar and Ising-nematic orders of a frustrated bilinear-biquadratic Heisenberg model and implications for the magnetism of FeSe” *speaking on behalf of Rong Yu (Renmin University)
3:00-3:30pm	Anna Boehmer (Iowa State) - “Nematicity and magnetism in iron-based superconductors”
3:30-4:00pm	Coffee Break

Session 4 - High Tc Superconductors Chair: Meigan Aronson

4:00-4:30pm	Tomo Uemura (Columbia) - “BEC-BCS crossover picture for unconventional superconductors and pairing via comparable spin-charge energy scales: Message from muons and neutrons”
4:30-5:00pm	Amalia Coldea (Oxford) - “The evolution of the electronic structure of FeSe with chemical pressure”
5:00-5:30pm	Satoru Nakatsuji (U. Tokyo) - “Exotic topological states near a quantum metal insulator transition in pyrochlore iridates”
5:30pm	Shuttle pick up outside Duncan Hall

Workshop Schedule

Saturday, November 21, 2015

- 8:35am Shuttle leaves the DoubleTree
8:45am Registration and Light Breakfast – Duncan Hall, 1st floor Foyer

Session 5 - Theory Chair: Tomo Uemura

- 9:00-9:30am Adriana Moreo (Tennessee) – “Robust nematic state in electron-doped pnictides”
9:30-10:00am Jianxin Zhu (Los Alamos) - “LDA+DMFT approach to electronic correlation and magnetism in rare-earth free ferromagnets”
10:00-10:30am Andriy Nevidomskyy (Rice University) - “Crystallization of Magnetic Vortex Strings in Frustrated Quantum Magnets”
10:30-11:00am Coffee Break

Session 6 - Quantum Criticality Chair: Qimiao Si

- 11:00-11:30am Meigan Aronson (Texas A&M) - “Orbital exchange and fractional quantum number excitations in $\text{Yb}_2\text{Pt}_2\text{Pb}$ ”
11:30am-12:00pm Huiqiu Yuan (Zhejiang University) - “Fermi surface reconstruction and multiple quantum phase transition in CeRhIn_5 ”
12:00-12:15pm Blitz Poster Preview (1 minute per poster)
12:15-2:00pm Lunch and Poster Session, Duncan Hall 1st Floor Foyer

Session 7 - Strongly Correlated Electrons Chair: Doug Natelson

- 2:00-2:30pm Cristian Batista (LANL) - “Exotic orderings in frustrated itinerant magnets”
2:30-3:00pm Filip Ronning (LANL) - “The possibility of an orbitally selective Kondo effect in $\text{SrFe}_{2-x}\text{Ni}_x\text{As}_2$.”
3:00-3:30pm Coffee Break

Session 8 - Heavy Fermions Chair: Collin Broholm

- 3:30-4:00pm Shuheng H. Pan (University of Houston) - “Quantum phase transition in $\text{Fe}_{1+x}(\text{Te},\text{Se})$ induced by Single-atomic Impurities studied by STM/S”
4:00-4:30pm Onur Erten (Rutgers) - “Kondo breakdown in topological Kondo insulators”
4:30-5:30pm Reception, Brockman Portico (Weather Permitting) or BRK 101
Refreshments served
5:15pm Shuttle departs for remaining speakers