

MCAW 2016 @ University of Chicago

Contact: Cheng Chin <cchin@uchicago.edu>

TUTORIALS: Friday, 10/28/2016, Center for Integrated Science, 929 E. 57th St.
1:00 pm Check-in W301/303
1:30 ~ 2:15 pm *“Laser cooling and Bose-Einstein condensation”* Brian DeSalvo
2:15 ~ 3:00 pm *“Ultracold collisions and Feshbach resonance”* Cheng Chin
Break
3:30 ~ 4:15 pm *“Quantum gas microscopy”* Jonathan Simon
4:15 ~ 5:00 pm *“Photonic quantum materials”* Jonathan Simon
5:00 ~ 6:30 pm Lab tour + happy hour

INVITED TALKS: Saturday, 10/29/2016, Biological Sciences Learning Center, 924 E. 57th St.

8:00 am Check-in and Breakfast BSLC 109
Section 1 **Quantum gas** (Chair: Cheng Chin) BSLC 109
8:30~9:00am Fangzhao Alex An (Gadway group, UIUC)
“Studying disorder and topology using atomic momentum states”
9:00~09:30am Jiaming Li (Luo group, IUPUI)
“Parity-time symmetry breaking and nonequilibrium thermodynamics in a dissipative ultracold Fermi gas”
9:30~10:00am Qi Zhou (Purdue)
“Contact: from a scalar to a matrix”
Section 2 **Hybrid system and quantum optics** (Chair: Le Luo)
10:20~10:50am Christian Cortes (Jacob group, Purdue)
“Super-Coulombic Dipole-Dipole interactions”
10:50~11:20am Mack Kira (UMichigan)
“Semiconductor facet of strongly interacting Bose gas”
11:20~11:50pm Nick Brewer (Yavuz group, UWMadison)
“Rabi flopping of a magnetic-dipole transition in the optical region of the spectrum”
Lunch + poster session + lab tour Atrium, GCIS 3F
Section 3 **Exotic atoms and molecules** (Chair: Brian Odom) BSLC 109
1:30 ~ 2:00pm Abhishek Mohapatra (Braaten group, Ohio State)
“Effect of Oscillating Magnetic field in the BCS-BEC crossover”
2:00 ~ 2:30pm Matt Eiles (Greene group, Purdue)
“New prospects in Rydberg molecules”
2:30 ~ 3:00pm Jacob Johansen (Chin group, UChicago)
“New results on Efimov resonances in Li-Cs mixtures”
Section 4 **Precision Measurements and Quantum Control** (Chair: Bryce Gadway)
3:20 ~ 3:50pm Jake Zappala (Mueller group, Argonne)
“Applications and Developments in Atom Trap Trace Analysis”
3:50 ~ 4:20pm Donald Booth (Saffman group, UWMadison)
“Towards an atom-superconductor hybrid quantum interface”
4:20 ~ 4:50pm Patrick Stollenwerk (Odom group, Northwestern)
“Optical branching ratios of SiO⁺ and new tools for evaluating prospects for laser control of molecular ions”
4:50~6:30pm Poster session + reception dinner (SAES Getters) Atrium, GCIS 3F

Sponsors: James Franck institute, UChicago MRSEC and PSD, and SAES Getters