

MCAW 2023 Program

Friday, November 3 (GCIS Atrium)

- 3:40 pm Checking in
4:00-4:45 Tutorial 1: Charles Clark (UMaryland)
Quantum Resistance and the Internet of Things
4:45-5:30 Tutorial 2: Chen-Lung Hung (Purdue)
Probing Dynamics in Ultracold Gases
6:00 Dinner @ Atrium
7:00 Lab tour 1, 2, 3

Saturday, November 4 (KPTC106)

- 8:30 am Checking in
- Session 1 (session chair: Chen-Lung Hung)**
- 8:55 Welcome
9:00-9:30 Jacob Scott (Saffman group, UW Madison) *"Towards an optical clock based on magic trapping of Cs atoms"*
9:30-10:00 Gloria Jia (Covey group, UIUC) *"Optical atomic clocks and the 'omg' architecture for ytterbium atom arrays"*
10:00-10:30 Zoe Yan (UChicago) *"Quantum correlations in a many-body system of polar molecules"*
Coffee break (KPTC106)
- Session 2 (session chair: Zoe Yan)**
- 10:45-11:15 Xing Wu (Michigan State) *"Advancing EDM searches with ultracold radioactive molecules at FRIB"*
11:15-11:45 Botao Du (Ma group, Purdue) *"Driven-dissipative dynamics in superconducting circuit lattice coupled to tunable baths"*
11:45-12:15 pm Chenxi Huang (Gadway group, UIUC) *"Synthetic gauge field for Rydberg atoms"*

Lunch + Poster session 1 (ERC Atrium) + Lab tour 4, 5, 6

Session 3 (session chair: Xing Wu)

- 1:45-2:15 Xinchao Zhou (Hung group, Purdue) *"Nanophotonic cavity QED with cold atoms"*
2:15-2:45 Alisher Duspayev (Raithel group, UMichigan) *"Electric field sensing with cold and hot Rydberg atoms"*
2:45-3:15 Imran Mirza (Miami Univ) *"Chirality-assisted entanglement enhancement in multi-emitter waveguide quantum electrodynamics"*
Coffee break (KPTC106)

Session 4 (session chair: Imran Mirza)

- 3:30-4:00 Alex Burgers (UMichigan) *"Long-wavelength Transitions in Yb Atom Arrays for Quantum Science"*
4:00-4:30 Wenhui Xu (Zhou Group, Purdue) *"multipolar condensates and multipolar Josephson effects"*
4:30-5:00 Jaideep Singh (Michigan State) *"The Search for Time-Reversal Violation Using Pear-Shaped Nuclei in the FRIB-Era"*
5:00-6:00 Poster session 2 (ERC Atrium) + Lab tour 7, 8, 9, 10
6:00 Departure