

# Condensed Matter Theory Center Seminar



Thursday, March 3  
11:00 am – 12:30 pm  
2205 Toll Physics Building

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Harvard

**“Exploring universal properties of many-body systems in cold atoms and electron systems”**

**Abstract:** Ultracold atoms provide a new platform for studying fundamental problems of quantum and statistical physics. I will review examples where the insights gained from experiments with ultracold atoms lead to a new understanding of solid state systems. In particular, I will discuss interferometry as a crucial aspect of measurements of topological order with cold atoms in optical lattices and h-map analysis of STM experiments. I will also explain how non-equilibrium quantum dynamics plays a crucial role in recent studies of impurities in atomic Fermi systems and resonant Xray scattering experiments in high  $T_c$  cuprates.

Host: Will Cole

Web: <http://www.physics.umd.edu/cmte/seminars.html>

