

# *Chez Pierre*

Presents ...

**Monday, March 2, 2026**  
**12:00 pm - 1:00 pm**  
**Duboc room – 4-331**



## **Chez Pierre Seminar**

**Chunli Huang, University of Kentucky**

### **“ Microscopic Origin of Orbital Magnetization in Chiral Superconductors and Intervalley Coherent States.”**

Abstract: Recent experiments in rhombohedral multilayer graphene have shown that this seemingly simple collection of carbon atoms can host a remarkable variety of electronic phases that previously appeared only across many different materials. These include spin and orbital ferromagnetism, electronic crystals phases, and both spin-singlet and spin-triplet superconductivity. More recently, entirely new states have been realized, including intervalley coherent states, fractional Chern insulators and chiral superconductors. The chiral superconductor has many unusual magnetic properties, such as field-induced chirality reversal, setting it apart from all previously known superconductors. In this talk, I will first describe a transport signature of intervalley coherence, in which a static magnetic field induces GHz oscillations of the orbital magnetization. I will then present a microscopic theory of orbital magnetization in chiral superconductors, highlighting the key theoretical steps that close a longstanding gap in computing orbital magnetization in superconductors.