

# *Chez Pierre*

Presents ...

**Monday, December 9, 2024**

**12:00 pm - 1:00 pm**

**Duboc Room – 4-331**



## **Chez Pierre Seminar**

**Brian Skinner, Ohio State University**

**“Chiral Wigner crystal phases induced by Berry curvature”.**

A gas of electrons is susceptible to a freezing transition when its density is low enough, due to the long-ranged Coulomb interaction between electrons. This Wigner crystal (WC) state has only very recently been realized and visualized in two dimensional materials without applied magnetic field. Here I discuss new forms of the Wigner crystal state that can arise in materials with Berry curvature. I focus specifically on bilayer graphene, and discuss the phase diagram and the different ordered states of the Wigner crystal.