

Chez Pierre

Presents ...

Monday, October 21, 2024

12:00pm - 1:00 pm

Duboc Room – 4-331



Chez Pierre Seminar

Jiaqi Cai, MIT

”Progress of fractional quantum anomalous Hall effect in twisted MoTe₂”.

Fractional quantum anomalous Hall effect (FQAHE) can emerge in a fractionally filled topological flat band at zero magnetic field and relatively high temperatures. In this talk, we will explore that how rationally designed two-dimensional materials, twisted MoTe₂, provide a platform for these exotic physics to manifest. Our recently experimental progress reveals twist-angle dependent phase diagram and unusual nature of the $\nu = -1/2$ state, the proposed composite Fermi liquid state.