Chez Pierre

Presents ...

Monday, November 25, 2024 12:00 pm - 1:00 pm Duboc Room - 4-331



Chez Pierre Seminar

Dima Pesin, University of Virginia

"Linear and nonlinear magnetotransport on a quantum spin Hall edge".

Transport and magnetotransport on a helical edge of a quantum spin Hall insulator have always been considered some of the main tests for the identification of this phase. In this talk, I will describe our efforts to explain observed singular linear and nonlinear magnetotransport on the helical edge of monolayer tungsten ditelluride. I will discuss a model of bulk midgap states "sidecoupled" to the edge which appears to account for many experimental features, particularly the dependence of various transport coefficients on the direction of the external magnetic field, as well as their singular dependence on its magnitude.