

# *Chez Pierre*

Presents ...

**Friday, April 14, 2023**

**11:00 am -12:00 pm**

**Duboc Room – 4-331**



## **Special Chez Pierre Seminar**

Ady Stern, Weizmann Institute

### **“On the interplay of localization, topology and symmetry”.**

In topological states of matter, topology imposes constraints on the localization properties of electrons. For example, in the quantum Hall effect a quantized value of the Hall resistivity requires localization at the Fermi energy, while a transition between two quantized values requires delocalization. In this talk I will discuss topological states of a weaker type, those in which the topological protection relies on the preservation of a symmetry. I will examine how – and when - their topological nature affects their localization properties when they are subjected to a disordered potential that satisfies the symmetry only on average. The talk is not technical, and a broad introduction will be given.