Massachusetts Institute of Technology Department of Physics

Condensed Matter Theory Seminar

"Time-reversal and reflection symmetry in (2+1)-dimensional topological phases"

Meng Cheng, Yale University

Abstract: There has been immense progress recently in the understanding of interacting topological phases of matter in the presence of symmetry. I will discuss recent developments for the case of time-reversal / reflection symmetry-enriched topological (SET) phases. I will derive a simple formula for the ground state degeneracy of such SETs on non-orientable manifold. I then use these results to develop an understanding of anomalies associated with time-reversal / reflection SETs. If time permits, I will discuss explicit constructions of time-reversal/reflection SETs, including anomalous ones.

12:00pm Tuesday, April 4, 2017 Duboc Room (4-331)

Host: Liang Fu