

Physics Seminar: John McGreevy
Tuesday, March 25 · 1:00 – 2:00pm

Title: Entanglement Bootstrap as a perspective on quantum field theory

Abstract: Entanglement Bootstrap is a program to extract and understand the universal information characterizing a phase of matter starting from the local density matrix of a single representative state. This universal information is usually packaged in the form of a quantum field theory; the program therefore provides a surprising new perspective on quantum field theory. I will discuss what we can learn about gapped topological phases and their associated topological field theories, and about quantum critical points and their associated conformal field theories.