

## Fuzzy Sphere Meets Entanglement Bootstrap

vendredi 6 juin 2025 15:30 (1 heure)

I will introduce the entanglement bootstrap, a program to understand and extract the universal data of quantum many body states from local entanglement information. Since this universal data is usually encoded in a quantum field theory, the program can teach us about QFT. The program proceeds by identifying conditions satisfied by the reduced density matrix of a ball for a given class of fixed-point states. So far it has been successful for states with liquid topological order, and for CFT in 1+1 dimensions. The current frontier is 2+1d conformal field theory, where the fuzzy sphere is very useful.

**Orateur:** MCGREEVY, John (University of California, San Diego)