

Condensed Matter Theory Center Seminar



Monday, January 28
10:00 – 11:30 am, Physics Building 2205

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“Application of conditional independence to gapped quantum many-body systems”

It is widely known in the quantum information community that the states that satisfy strong subadditivity of entropy with equality have the form of quantum Markov chain. Based on a recent strengthening of strong subadditivity of entropy, I will describe how such structure can be exploited in the studies of gapped quantum many-body system. In particular, I will describe a diagrammatic trick to i) give a quantitative statement about the locality of entanglement spectrum ii) perturbatively bound changes of topological entanglement entropy under generic perturbation.

(All are welcome to attend)

