Massachusetts Institute of Technology Department of Physics

Condensed Matter Theory Seminar

"Lattice Model for Bosonic Integer Quantum Hall Effect and Beyond"

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Abstract: A lattice model of hardcore bosons with correlated hopping will be discussed. I shall discuss our recent DMRG results that show the ground state for this model exhibits integer quantum Hall effect for bosons, a topological phase protected by U(1) symmetry corresponding to the boson number. I shall then use these results to understand certain chiral spin liquid phases recently seen on Kagome lattice.

12:00pm Tuesday, August 11, 2015 Duboc Room (4-331)

Host: Senthil Todadri