Chez Pierre

Presents ... Monday, March 10, 2014 12:00pm MIT Room 4-331



Chez Pierre Seminar

David Huse Princeton University

"Many-body Anderson localization"

I will review some aspects of many-body Anderson localization. Many-body localized systems have a type of integrable Hamiltonian, with an extensive set of operators that are localized in real-space and that each commute with the Hamiltonian and with each other Thus these localized operators might be used as stable local quantum memories. The eigenstates of the Hamiltonian within the localized phase may exhibit localization-protected long-range order (or topological order), even in low dimensions and at high "temperature", where such order can not occur at thermal equilibrium.