

CONDENSED MATTER SEMINAR

Thursday 21 November at 2.15pm

“Activating many-body localization in solids”

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Due to the presence of phonons, many body localization (MBL) does not occur in disordered solids, even if disorder is strong. Local conservation laws characterizing an underlying MBL phase decay due to the coupling to phonons.

We show theoretically that this decay can be compensated when the system is driven out of equilibrium.

The resulting variations of the local temperature can be used as an order parameter for the MBL phase transition and provide fingerprints of the singular dynamics close to the phase transition.

*Host: Sid Parameswaran
Simpkins Lee Room, Beecroft Building*