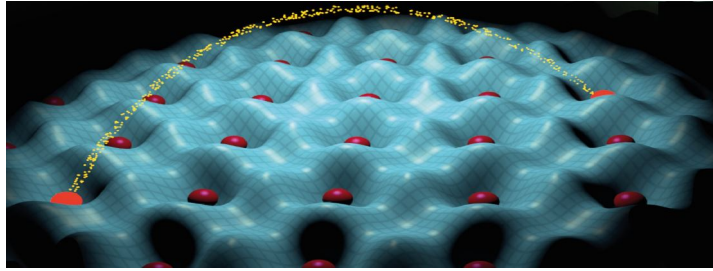


Challenges and perspectives in resonator-mediated quantum many-body physics: From atoms to solid state



Contribution ID: 11

Type: not specified

”Ergodicity breaking and quantum trajectories in multimode cavities”

Tuesday 18 June 2024 09:00 (1 hour)

I will briefly review why a spin-glass phase can form in a multimode cavity. I will discuss how monitoring the light emitted from the cavity (or more generally, the radiation from an open quantum system) can yield signatures of ergodicity breaking. As a specific example I will discuss the distribution of overlaps between low-energy states in a spin glass. If time permits I will also discuss how cavities can be used to sequentially generate highly entangled states.

Presenter: GOPALAKRISHNAN, Sarang (Princeton University)