



ICTS Condensed Matter Seminar (HYBRID)

Title : The Heating Conundrum in Driven Critical Systems

Speaker : R. Chitra (ETH Zurich)

Date : Monday, 11th September, 2023

Time : 02:30 AM (IST)

Abstract : While driven interacting quantum matter is generically subject to heating, certain classes of systems evade this paradigm. In this talk, I will discuss one such class: periodically driven critical (1 + 1)-dimensional systems with spatially modulated couplings. Such systems exhibit both nonheating and heating phases. Heating is signaled by the emergence of Schwarzschild horizons an effective curved space-time. This phenomenology is deeply linked to the notion of parametric resonance. The Hawking temperature serves as an order parameter which distinguishes between heating and non-heating phases. I will briefly discuss the case of quasiperiodic driving and the role of dissipation.

Venue : **Offline:** Madhava Lecture Hall (ICTS)

Online: Please click the below link to join the seminar

<https://icts-res-in.zoom.us/j/88676096468?pwd=dmsvTit5MjR0NzZCRmVrS1RvMVIUT09>