

Discussion Meeting on Non-equilibrium Correlated Systems

Venue: Main Auditorium, HRI

Monday, July 24

10 – 10:35	Soumya Bera	Distinguishing dynamical quantum criticality through local quantum distances
10:35 – 11:10	Arnab Das	Dynamical Freezing and Emergent Conservation in Interacting Systems
11:10-11:40	Coffee Break	
11:40 – 12:15	Subhro Bhattacharjee	Many-body chaos in classical spin systems
12:15 – 12:50	Adhip Agarwala	Spectral Form Factors of Topological Phases

14:30 – 15:05	Rajdeep Sensarma	Entanglement entropy of interacting fermions
15:05 – 15:40	Sumilan Banerjee	Dynamical mean-field theory for Renyi entanglement entropy and mutual Information in the Hubbard Model
15:40 – 16:15	Diptarka Das	Quench memories in operator mixing.
16:15-16:45	Coffee Break	
16:45 – 18:15	Everyone	Future Directions of the field
18:15-19:30	Poster Session	

Tuesday, July 25

10 – 10:35	Krishnendu Sengupta	Aspects of Hilbert space fragmentation
10:35 – 11:10	Arnab Sen	Strong Hilbert space fragmentation in two dimensions
11:10-11:40	Coffee Break	
11:40 – 12:15	Arijit Kundu	Steady state properties of non-interacting periodically driven fermionic systems weakly coupled to environment
12:15 – 12:50	Uma Divakaran	Quantum critical engines

14:30 – 15:05	Arnab Kundu	Operator growth and Krylov complexity in 2d CFT
15:05 – 15:40	Bobby Ezhuthachan	Driven CFTs and their holographic duals
15:40 – 16:15	Ajit Balram	Designing quenches to excite collective modes in fractional quantum Hall fluids
16:15-16:45	Coffee Break	
16:45 – 17:20	Pinaki Majumdar	"Energy landscapes" in the prethermal state of pumped correlated systems
17:20 – 17:55	Anamitra Mukherjee	Few-body excitations from recursion in the many-body Fock-space
18:00-19:30	Poster Session	

Wednesday, July 26

10 – 10:35	Sayan Choudhury	Prethermalization in aperiodically driven spin chains
10:35 – 11:10	Auditya Sharma	Quasi-periodically driven quantum systems
11:10-11:40	Coffee Break	
11:40 – 12:15	Augustine Kshetrimayum	Tensor network simulation of non-equilibrium systems
12:15 – 12:50	Victor Mukherjee	Many-body effects in quantum technologies

Posters

Name	Poster Title
Ishita Modak	Fock-space participation entropy: a measure of an inherent time scale for disordered Floquet systems
Indrajit Sau	Quantum scars in a U(1) lattice gauge theory with weak and strong disorder
Somnath Porey	A categorical study of different Out of Time Order Correlators
Baishali Roy	Study of Chaos in Quenched Systems
Somsubhra Ghosh	Drive-Induced Fragmentation in a Periodically Driven Fermionic Chain
Mainak Pal	Dynamical phase transitions in the classical XY model
Tista Banerjee	Dynamical signatures and steady state behaviour of driven non-Hermitian Ising chain
Ritwika Majumder	Monte-Carlo exploration of generalized Kitaev model on a square lattice
Noufal Jaseem	Collective-effects enhanced multi-qubit information engines
Vatsana Tiwari	Dynamical localization and slow dynamics in quasiperiodically driven quantum systems
Bidyut Dey	Symmetry restoration in non-equilibrium scenario
Anirban Das	Suppression of thermalization under ultra strong coupling in interacting quantum matter
Mrinal Sarkar	Scaling of angular momentum resolved entanglement entropy for scalar fields in $d>1$
Anurag Sarkar	Spectral Form Factors of Topological Phases
Mursalin Islam	Non-equilibrium dynamics of bosons with dipole symmetry: Emergence of new symmetry-broken steady states
Suman Das	Synthetic Fuzzballs: A Linear Ramp from Black hole normal modes
Jayashish Das	Constructing the dual geometry of a driven 2d CFT
Surajit Bera	Study of entanglement dynamics and its steady state scaling in free fermionic non-Hermitian system using path integral formalism
Sashikanta Mohapatra	Unraveling quantum many-body scars with Krylov complexity
Debabrata Mondal	Emergence of classicality in quantum ergodicity and scars in two component Bose-Josephson junction