OpenQMBP2023: New perspectives in the out-of-equilibrium dynamics of open many-body quantum systems



ID de Contribution: 12 Type: Non spécifié

Entanglement dynamics with non-local measurements: Theoretical framework for Gaussian systems.

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I will present the theory needed to apply a Gaussian-preserving operator to a fermionic Gaussian state. Then I will use this formalism to derive the equations of motions of a fermionic Kitaev chain following two different dynamic protocols, induced by the presence of the monitoring apparatus: a quantum-jump evolution with string operators and a quantum diffusion dynamics with long-range operators decaying as a power-law with the distance.

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Classification de Session: Quantum Trajectories and Measurement Induced Phase Transitions