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Fractality and transport in boundary-driven (quasi) disordered chains

In this talk we report on the response of (quasi)disordered spin-chains to boundary driving through reservoirs at its ends. In the nonequilibrium current-carrying states, anomalous transport rates of spins are shown to be harbored in noninteracting quasidisordered systems at criticality, and far from criticality in the interacting system; in addition, these steady states exhibit spatial fractality in many of its expectation values, opening an alternative route to experimentally probe a system's fractal properties in contrast to measuring quantum wavefunctions.

Monday
October 16, 2017
Starts at 12:15 PM
Coffee at 12:00 PM
Physics Conference Room, SB B326