



Invitation to Seminar Talk

Many-body localization in the XY spin chain

Günter Stolz

University of Alabama, Birmingham

Host: Christian Sadel

The phenomenon of many-body localization in interacting quantum systems has recently attracted considerable interest in condensed matter physics and in quantum information theory. Many questions and even a consensus of what constitutes the many-body localized phase are still far from being settled.

Currently, the XY spin chain is one of few models where some of the accepted criteria for many-body localization can be rigorously verified.

Specifically, we will discuss dynamical localization (or absence of information propagation) in the sense of a zero-velocity Lieb-Robinson bound, as well as eigenstate localization in form of an area law for the bipartite entanglement entropy, uniform at all energies.

This reports on joint work with E. Hamza, R. Sims and H. Abdul-Rahman.

Tuesday, 26 May, 4:00pm

Mondi 2, Central Building, 1st floor



This invitation is valid as a ticket for the IST Shuttle from and to Heiligenstadt Station. Please find a schedule of the IST Shuttle on our webpage (note that the IST Shuttle times are highlighted in dark green):

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2015-05-26