Séminaire de physique mathématique

Lundi 08/03/2021, 14:00

(voir dans annonce)

Superuniversality of superdiffusion

Enej Ilievski

Ljubljana

The study of anomalous transport properties in interacting many-body systems at finite temperature has attracted a large amount of interest in the past few years, both in the quantum and classical Hamiltonian settings. One of the most prominent examples of that is the unexpected discovery of superdiffusive spin transport in the isotropic Heisenberg quantum spin chain, conjectured to belong to the Kardar-Parisi-Zhang universality class. In this seminar, we will discuss theoretical underpinnings behind the observed anomalous transport and explain superdiffusion the Noether charges is inevitable and occurs as a common feature of all interacting integrable lattice models and QFTs that exhibit global symmetry of simple Lie group G, provided the symmetry is not broken by the underlying equilibrium state.

(The seminar is online only. Internet link to be collected from the Organizer: vincent.pasquier@ipht.fr)