

Hydrodynamics for integrable systems

Monday, September 2, 2019 11:45 AM (45 minutes)

Hydrodynamics is a powerful framework for large-wavelength phenomena in many-body systems. It was extended recently to include integrable models, giving “generalised hydrodynamics”. In this talk, I will review fundamental aspects of the hydrodynamic of integrable systems, with the simple examples of the quantum Lieb-Liniger and the classical Toda models. I will then show some of the exact results that can be obtained with this formalism, such as exact nonequilibrium steady states and exact asymptotic of correlation functions at large space-time separations in Gibbs and generalised Gibbs states

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