

Generalised hydrodynamics for quantum fluids at low-temperature: anomalous transport and quantum ripples

jeudi 8 février 2024 16:30 (45 minutes)

I will show some applications and extensions of the theory of generalised hydrodynamics to quantum systems at low temperature. Taking the paradigmatic model of the Lieb-Liniger for interacting bosons, I will show how non-integrable fluids can display super-diffusive charge fluctuations at low temperature and low coupling, and how to correctly describe non-equilibrium quantum fluctuations beyond the Luttinger liquid paradigm.

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