



量子材料科学中心 International Center for Quantum Materials Seminar

Chirality, causality, and fluctuation-dissipation theorems
in non-equilibrium steady states

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Time: 4:00 pm, Jan 11, 2013 (Monday)

时间: 2013年1月11日 (周五) 下午 4:00

Venue: Conference Room A (607), No. 5 Science Building

地点: 理科五号楼607会议室

Abstract

Edges of some quantum Hall liquids and a number of other systems exhibit chiral transport: excitations can propagate in one direction only, e.g., clockwise. We derive a family of fluctuation-dissipation relations in non-equilibrium steady states of such chiral systems. The theorems connect nonlinear response with fluctuations far from thermal equilibrium and hold only in case of chiral transport. They can be used to test chiral or non-chiral character of the system.

About the Speaker

Bio: Ph.D. from Landau Institute for Theoretical Physics, 1998

Postdoc: Weizmann Institute of Science and Argonne National Laboratory

Since 2003 faculty at Brown University