THEORETICAL PHYSICS SEMINAR

Title: Instabilities in chiral hydrodynamics

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Date/Time/Venue: 23rd July (Thursday)/11:00 AM/ Room No. 469

ABSTRACT

Parity violating effects arises from quantum anomalies, play an important role in wide range of areas in physics, from quantum Hall system to cosmology. Chiral magnetic effect(CME) is one of such phenomena arises in the presence of a magnetic field, due to the asymmetry between left-handed and right-handed particle, parameterized by chiral chemical potential μ_5 ≡μ_R − μ_L. The production of huge magnetic field (~10^18 G) in the off central heavy-ion collisions set up an experimental platform for the observation of CME. Recently kinetic theory and hydrodynamics are appropriately modified to describe these quantum anomalies and CME. In this talk I shall briefly discuss about the chiral kinetic theory and linear analysis of chiral hydrodynamics.

All are welcome to attend