Title: Magneto-Transport of a Chiral Fluid in a system with weakly broken symmetries

Abstract:
By definition, anomaly is a broken symmetry at quantum level and naturally manifest itself in a microscopic level. However, we can see the anomaly related phenomena even in the macroscopic level, i.e. in condensed matter laboratories. One of the important consequences of anomaly at macroscopic level, is the appearance of non-dissipative transport coefficients such as Chiral Magnetic effect (CME) and Chiral Vortical Effect (CVE). The former is the induction of electrical current along the external magnetic field, while the latter is the induction of electrical current along the external vorticity. In this talk, we want to discuss about the dissipative transport coefficients, such as electrical conductivity, thermal conductivity and thermo-electrical conductivity in a relativistic chiral fluid with weakly broken symmetries. We will show that thermodynamics requirements as well as microscopic symmetries are satisfied in our calculations.