

The 7th International Conference on Chirality, Vorticity and Magnetic Field in Heavy Ion Collisions



Contribution ID: 49

Type: **not specified**

Spin polarization under gravity from Schwinger-Keldysh formalism

We employ the Schwinger-Keldysh (SK) formalism to study the spin polarization in a medium induced by the metric perturbation diagrammatically. The results in the near-equilibrium limit can be used to describe the effects of hydrodynamic gradient on the polarization (e.g. shear-induced polarization). Moreover, the results obtained from SK formalism may apply to far-from-equilibrium situations that are relevant to the early stage of a heavy-ion collisions. We also demonstrate the matching between diagrammatic calculations and quantum kinetic theory.

Primary authors: MO, Zonglin (USTC); YIN, Yi (IMP)

Presenters: MO, Zonglin (USTC); YIN, Yi (IMP)