Contribution ID : **27** Type : **Poster Presentation**

Operator expectation values in a rigidly rotating system at fixed fermion density

Tuesday, 2 December 2025 18:45 (0:10)

Content

Experiments with non-central relativistic heavy ions collisions produces a Quark-gluon plasma with the higher vorticity ever observed in nature. This leads us to want to find the physical phenomena hidden in the behavior of this system. For that, some expectation values are calculated by effect of the rotating fermionic gas, with a rigid rotating model and a fixed particle number thinking in a freeze-out context. Considering this effective model at finite temperature, the chemical potential, the chiral condensate, the chiral condensate polarization and the axial current are calculated as a function of fermionic number density, temperature and angular momenta. It is intended to extend with magnetic fields.

Primary author(s) : Mr. GONZÁLEZ, Camilo (Universidad del Bio-Bio)

Co-author(s) : Dr. VILLAVICENCIO, Cristian (Universidad del Bio-Bio)

Presenter(s) : Mr. GONZÁLEZ, Camilo (Universidad del Bio-Bio)

Session Classification : Poster session