Contribution ID: **211** Type: **Poster**

Relaxation time of the fermions in the magnetic field (I) - the case for relativistic fermions -

Tuesday, July 26, 2016 8:00 PM (1 hour)

The chiral magnetic effect (CME) is the quantum anomaly related electric charge transport phenomenon along the external magnetic field, which appears in various systems possessing chiral fermions, such as the quark-gluon plasma, condensed matter physics and astrophysics.

The magnetic field dependence of the relaxation time is needed to compare the theory and experiments quantitatively. However, the model calculation of the relaxation time has been made by Argyres and Adams only for the non-relativisitic fermion with the strong magnetic field limit.
In this poster, we extend the work by Argyres and Adams and compute the relaxation time for the relativistic fermions in the magnetic field.

Primary authors: Ms KAGIMURA, Aya (Osaka University); Prof. ONOGI, Tetsuya (Osaka University)

Presenter: Ms KAGIMURA, Aya (Osaka University)

Session Classification: Poster

Track Classification: Nonzero Temperature and Density