



Canadian Association
of Physicists

Association canadienne
des physiciens et physiciennes

Contribution ID: 2606 Type: **Poster not-in-competition (Graduate Student) / Affiche non-compétitive (Étudiant(e) du 2e ou 3e cycle)**

30 - Violation of Ohm's law in a Weyl metal

Tuesday 4 June 2019 16:55 (2 minutes)

Weyl metal is one of the topological non-trivial materials holding Weyl fermions which are massless and have a chirality. The Weyl metal has been described in terms of axion electromagnetism rather than in Maxwell electromagnetism, and has peculiar properties such as chiral anomaly, the presence of magnetic monopole in the reciprocal lattice space and negative longitudinal magneto resistance. In this presentation, by transportation experiment besides negative longitudinal magneto resistance, we observed ohm's law was broken in the Weyl metal and carried experimental and theoretical analysis of the violation of ohm's law [1].

Author: SHIN, Dongwoo (POSTECH)

Co-author: KIM, Jeehoon (Pohang University of Science and Technology)

Presenter: SHIN, Dongwoo (POSTECH)

Session Classification: DCMMP Poster Session & Student Poster Competition Finals (10) | Session d'affiches DPMCM et finales du concours d'affiches étudiantes (10)

Track Classification: Condensed Matter and Materials Physics / Physique de la matière condensée et matériaux (DCMMP-DPMCM)