

Abstract Submitted  
for the MAR17 Meeting of  
The American Physical Society

**Semiclassical Boltzmann transport theory for multi-Weyl semimetals**<sup>1</sup> HONGKI MIN, SANGHYUN PARK, SEUNGCHAN WOO, Seoul National University, E. J. MELE, University of Pennsylvania — Multi-Weyl semimetals are a new type of Weyl semimetals which have linear dispersion along one symmetry direction and anisotropic non-linear dispersion along the remaining two directions with a topological charge larger than one. Using the semiclassical Boltzmann transport theory fully incorporating the anisotropy of the system, we calculate DC conductivity as a function of density and temperature, and obtain its characteristic density and temperature dependence derived from the topological band structure of the system.

<sup>1</sup>This research was supported by the NRF under Grant No. 2015R1D1A1A01058071 (HM, SP and SW) and the DOE under Grant No. DE-FG02-ER45118 (EJM). HM acknowledges travel support provided by the University Research Foundation at the University of Pennsylvania.

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Date submitted: 08 Nov 2016

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