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Thermomagnetic Transport in the Weyl Semimetal NbP SARAH WATZMAN, The Ohio State University, CHANDRA SHEKHAR, Max Planck Institute for Chemical Physics of Solids, TIMOTHY MCCORMICK, ARATI PRAKASH, The Ohio State University, CLAUDIA FELSER, Max Planck Institute for Chemical Physics of Solids, NANDINI TRIVEDI, JOSEPH HEREMANS, The Ohio State University — Weyl semimetals (WSM) combine both topological and semi-metallic effects in the transport of fermions through both bulk and surface states. The thermal transport properties, magneto-thermal conductivity, magneto-thermopower, and Anomalous Nernst Effect (ANE) of Weyl fermions are predicted[1] to contain interesting topological signatures. So far, one publication[2] reports experiments on the magneto-thermopower and ANE on Cd_3As_2, a Dirac semimetal. An inversion symmetry-breaking group of transition metal monopnictides, including NbP, TaP, NbAs, and TaAs, has been discovered and proven to be WSM. Here, we report on thermal transport in NbP on samples that are proven[3] to have an unsaturated, large magnetoresistance and ultrahigh mobilities. Specifically, we map the magneto-thermopower and ANE thermomagnetic tensor elements of single-crystal NbP in order to determine the effect of Fermi arcs on this transport, and we compare our results to computational models. 1. G. Sharma, et al. *Phys. Rev. B* **93**, 035116 (2016). 2. T. Liang, et al. arXiv:1610.02459 (2016). 3. C. Shekhar, et al. *Nat. Phys.* **11** (2015).

Sarah Watzman
The Ohio State University

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