

Abstract Submitted  
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**Large linear magnetoresistance and high carrier mobility in a new Dirac semimetal candidate** JOHNPIERRE PAGLIONE, Center for Nanophysics and Advanced Materials, Department of Physics, University of Maryland, KEFENG WANG, Center for Nanophysics and Advanced Materials Department of Physics, University of Maryland, DAVID GRAF, National High Magnetic Field Laboratory, Florida State University, LIMIN WANG, Center for Nanophysics and Advanced Materials Department of Physics, University of Maryland, F. BOSCHINI, A. DAMASCELLI, Department of Physics Astronomy, University of British Columbia — We report experimental results on a new potential Dirac semimetal, the skutterudite material RhSb<sub>3</sub>. Together with a very large magnetoresistance and carrier mobility, the linear dispersion of the electronic band structure suggests properties similar to other recently reported Dirac and Weyl semimetals that deserve further investigation. Together with angle-resolved photoemission data, we present high field transport and quantum oscillations measurements that point to very large Fermi velocity and aspects of Berry's curvature that warrant further investigation.

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