

Abstract Submitted  
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**Thermoelectricity of the Compensated Semimetal NbSb<sub>2</sub>** IAN LEAHY, University of Colorado at Boulder, Department of Physics, PETER SIEGFRIED, George Mason University, ANDREW TREGLIA, Colorado State University, MINH YEA LEE, University of Colorado at Boulder, Department of Physics — With growing interest in the magnetothermoelectric properties of semimetals, it becomes pertinent to develop and analyze methods for classifying and modeling thermoelectric responses. We study the temperature and magnetic field dependence of the Seebeck and Nernst coefficients in the compensated semimetal NbSb<sub>2</sub>. At low temperatures and high fields we find that the Seebeck coefficient increases quadratically and the Nernst coefficient increases linearly as a function of field without signs of saturation up to 14T. We present a new analysis of thermoelectricity in highly compensated semimetals which shows that the nonsaturating magnetothermoelectric effects are related to the degree of compensation in the material.

Ian Leahy  
University of Colorado at Boulder, Department of Physics

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