

Abstract Submitted
for the MAR12 Meeting of
The American Physical Society

Thermal Transport in CuSb_2O_6 single crystals¹ NARAYAN PRA-SAI, JOSHUA L. COHN, University of Miami, MICHAEL G. SMITH, ALWYN REBELLO, JOHN J. NEUMEIER, Montana State University — CuSb_2O_6 behaves as a uniform, one-dimensional (1D) $S = 1/2$ Heisenberg spin chain with long-range, antiferromagnetic ordering below $T_N \simeq 8.5$ K.² Unusual for cuprates, the Cu^{2+} ions lie within quite regular CuO_6 octahedra and 1D magnetism appears to arise from orbital ordering driven by correlation effects.³ We will report the results of thermal conductivity measurements on single crystals over the temperature range $5\text{K} \leq T \leq 330\text{K}$.

¹This material is based upon work supported by an award from Research Corporation (Univ. Miami) and the National Science Foundation under grant DMR-0907036 (Mont. St. Univ.).

²A. Nakua *et al.*, J. Solid State Chem. **91**, 105 (1991); B. J. Gibson *et al.*, J. Magn. Mater. **272-276**, 927 (2004).

³Deepa Kasinathan, Klaus Koepernik, and Helge Rosner, Phys. Rev. Lett. **100**, 237202 (2008).

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Date submitted: 08 Dec 2011

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