

Abstract Submitted  
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**Thermal transport and spin-phonon coupling in the one-dimensional antiferromagnetic spin chain compound  $\text{CuSb}_2\text{O}_6$** <sup>1</sup> NARAYAN PRASAI, JOSHUA COHN, ALWYN REBELLO, University of Miami, MICHAEL SMITH, JOHN J. NEUMEIER, Montana State University — We report thermal conductivity ( $\kappa$ ) measurements on single crystals of the  $S = 1/2$  antiferromagnetic spin-chain compound  $\text{CuSb}_2\text{O}_6$  over the temperature range  $5\text{K} \leq T \leq 300\text{K}$ . Similar measurements on the non-magnetic analog compound,  $\text{ZnSb}_2\text{O}_6$ , allow for a comparison of the lattice thermal conductivities. The role of spin-phonon coupling and twinning on the anisotropic thermal transport of  $\text{CuSb}_2\text{O}_6$  will be discussed.

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