

Abstract Submitted
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Ambipolar transport in the field-suppressed superconducting state of quasi-one-dimensional $\text{Li}_{0.9}\text{Mo}_6\text{O}_{17}$ ¹ JOSHUA L. COHN, University of Miami, CARLOS A. M. DOS SANTOS, Escola de Engenharia de Lorena - USP, Brazil, JOHN J. NEUMEIER, Montana State University — We present resistivity, Hall, Seebeck, and Nernst coefficient measurements in the range $0.4 \text{ K} \leq T \leq 20 \text{ K}$ on single crystals of the quasi-one-dimensional (Q1D) metal, $\text{Li}_{0.9}\text{Mo}_6\text{O}_{17}$ with current along the Q1D metallic chains. At temperatures below the nominal superconducting transition temperature ($T_c = 2 \text{ K}$), a transition from hole-like ($\mu_0 H < 1 \text{ T}$) to electron-like ($\mu_0 H \geq 2 \text{ T}$) behavior is evidenced in the magnetotransport coefficients. Possible insights from these results into the nature of the mysterious density-wave order^{a,b} responsible for the upturn in resistivity below $\sim 25 \text{ K}$ will be discussed.

^a C. A. M. dos Santos *et al.*, Phys. Rev. Lett. **98**, 266405 (2007).

^b X. Xu *et al.*, Phys. Rev. Lett. **102**, 206602 (2009).

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