

Abstract Submitted  
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**Low-temperature magnetotransport in topological Kondo insulator  $\text{SmB}_6$**  YASUYUKI NAKAJIMA, PAUL SYERS, XIANGFENG WANG, RENXIONG WANG, JOHNPIERRE PAGLIONE, Univ of Maryland-College Park — The Kondo insulator  $\text{SmB}_6$  is a promising candidate for realizing a topological Kondo insulator, where topologically non-trivial surface states can be realized in the Kondo hybridization gap driven by strong correlation. Although recent experimental studies have revealed the existence of metallic surface states in  $\text{SmB}_6$ , the non-trivial nature of the surface states remains to be conclusively verified. We report a detailed study of the magnetoresistance of  $\text{SmB}_6$  at milliKelvin temperatures, reporting strong indications of the topological nature of the surface states in  $\text{SmB}_6$ .

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