

Abstract Submitted  
for the MAR16 Meeting of  
The American Physical Society

**Effect of Magnetic Substitution on Topological Kondo Insulator SmB6** TRISTIN METZ, YASUYUKI NAKAJIMA, XIANGFENG WANG, JOHN-PIERRE PAGLIONE, University of Maryland, College Park — The Kondo topological insulator SmB6 is an ideal candidate to realize protected metallic surface states driven by strong electron correlations. Recent experiments [1] provide evidence for one-dimensional electron transport on the surface of SmB6, associated with the existence of topologically nontrivial chiral edge states at the boundaries of intrinsic surface ferromagnetic domains. If these surface states are indeed topologically nontrivial they will be destroyed by the introduction of time reversal symmetry breaking magnetic impurities. We investigate the effect of magnetic impurities on SmB6 through transport measurements in Fe and Ni substituted SmB6 at very low temperatures. [1]Nakajima et. al., arXiv:1312.6132

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Date submitted: 06 Nov 2015

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