

Abstract Submitted
for the MAR14 Meeting of
The American Physical Society

Effect of magnetic impurity substitution in topological Kondo insulator SmB₆ XIANGFENG WANG, YASUYUKI NAKAJIMA, YEPING JIANG, RICHARD GREENE, JOHNIERRE PAGLIONE, Univ of Maryland-College Park — A topological insulator is a material with topologically protected metallic boundaries and an insulating bulk. The strongly-correlated Kondo system SmB₆ has recently been widely investigated owing to its promise of being the first realized topological Kondo insulator. Many results have confirmed the existence of metallic surface states and provided evidence of their non-trivial topological nature. Here we report a study of the effect of magnetic transition metal impurity substitution in SmB₆ on transport and thermodynamic properties, providing an important insight into the nature of the surface states.

Xiangfeng Wang
Univ of Maryland-College Park

Date submitted: 15 Nov 2013

Electronic form version 1.4