

Abstract Submitted
for the MAR13 Meeting of
The American Physical Society

Epitaxial Growth of Topological Insulators on Hexagonal Boron Nitride CHRISTOPHER GUTIERREZ, WOO CHANG CHUNG, CHOCK-ALINGAM SUBBIAH, Columbia University, MATTHEW BRAHLEK, SEONG-SHIK OH, Rutgers University, ABHAY PASUPATHY, Columbia University — Topological insulators (TIs) have attracted much attention for exhibiting exotic, topologically-protected surface states consisting of massless Dirac fermions. Investigations on thin film TIs have primarily relied on those either grown by MBE or by mechanical exfoliation onto suitable target substrates. Taking a cue from the graphene community, hexagonal boron nitride (hBN) has proven to be an excellent insulating substrate since it is atomically flat with no surface dangling bonds. In this talk I will report on recent transport and scanning probe measurements on epitaxial thin films of bismuth selenide TI grown by MBE on hBN/SiO_x.

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Date submitted: 27 Nov 2012

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