How do we make predictions made for free standing films useful?

Priya Mahadevan
Department of Condensed Matter Physics and Material Science
S N Bose National Centre for Basic Sciences
Email: priya@bose.res.in

Abstract

While a lot of useful predictions of the electronic structure exist for free standing films, the presence of a substrate usually leads to substantial deviations. In this talk I will present a route that we have adopted [1] to make predictions of a topological insulator for free standing films of Bismuth in the graphitic structure realizeable, even when grown on a substrate. The ideas presented are general enough and should provide a route to allow realization of findings made for free standing films.

This is work done in collaboration with Poonam Kumari.

[1]. Poonam Kumari and Priya Mahadevan (submitted).