

Quantum oscillations and Hall anomaly of surface states in the topological insulator Bi_2Te_3

*Prof. N. P. Ong,
Princeton University*

Following a brief introduction to topological insulators (TIs), I will describe difficulties with transport experiments, compared with spectroscopic experiments on TIs. Recent progress in identifying the Shubnikov de Haas of the surface state in Bi_2Te_3 will be reported.

The enhanced surface mobility produces a characteristic low-field Hall anomaly. Experiments on gated crystals are also described.

I will close with an overview of other materials and future directions.