

Transport experiments on topological insulators

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I will review high-field transport results on the topological insulators Bi_2Te_2 and $\text{Bi}_2\text{Te}_2\text{Se}$ (BTS). In the former, we observe via Shubnikov de Haas (SdH) oscillations, surface states with mobility of $10,000 \text{ cm}^2/\text{Vs}$ while in BTS, the surface mobility is $2,800 \text{ cm}^2/\text{Vs}$. Using the SdH oscillations, we have tracked the Landau levels to the high field limit. I will discuss recent high-pressure experiments which clarify the nature of the residual bulk states in BTS.

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