

Theoriekolloquium

Am **21. Juni 2018** um **14.15 Uhr** in **W2 1-143** hält

Herr Prof. Dr. Thomas Dahm (Bielefeld)

einen Vortrag mit dem Titel

Combining Topological Insulators and Ferromagnets

The combination of topological insulators and ferromagnets promises interesting new applications for spintronic devices. This talk will first give an elementary introduction into topological insulators. The topological protection of surface states and their spin-momentum locking will be discussed. We will then study the influence of ferromagnetism on the properties of a topological insulator. Hybrid devices consisting of topological insulators and ferromagnets will be presented. Quantum transport calculations demonstrate that such devices can generate, detect, and steer pure spin currents as a possible application for spintronics.

Interessierte sind herzlich eingeladen.

gez. Prof. Dr. Martin Holthaus