



TECHNISCHE UNIVERSITÄT
CHEMNITZ

Institut für Physik Physikalisches Kolloquium



Mittwoch, 19.12.2018, um 16:00 Uhr

Ort: Reichenhainer Str. 90;
Zentrales Hörsaal- und Seminargebäude,
Raum 2/N013

Prof. Dr. Philip Hofmann

Department of Physics and Astronomy
University of Aarhus, Denmark

ELECTRONIC STRUCTURE AND ELECTRON DYNAMICS IN TWO-DIMENSIONAL DIRAC MATERIALS

Artificial two-dimensional (2D) materials, such as graphene or single-layer transition metal dichalcogenides, permit the realization of massless and massive Dirac fermions. A special feature of the 2D materials is that their electronic properties, for instance their band gap, can be strongly influenced by either their dielectric environment or by the excited carrier density in the material.

Here we exploit this to achieve a static and dynamic change in the electronic properties of 2D materials such as graphene and single layer WS_2 . We also make use of the electronic structure's tunability in order to address some fundamental questions concerning the electronic self-energy in solids.

Alle Zuhörer sind ab 15:45 zu Kaffee und Tee vor dem Hörsaal eingeladen.



Informationen zum Vortrag erteilt:
Prof. Dr. Thomas Seyller, Tel. 0371 531 32898

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