TECHNISCHE UNIVERSITÄT CHEMNITZ

PHYSIKALISCHES KOLLOQUIUM

Mittwoch, 24.10.2012, um **17:15 Uhr**

Ort: Reichenhainer Str. 90; Neues Hörsaalgebäude, Raum: 2/N013

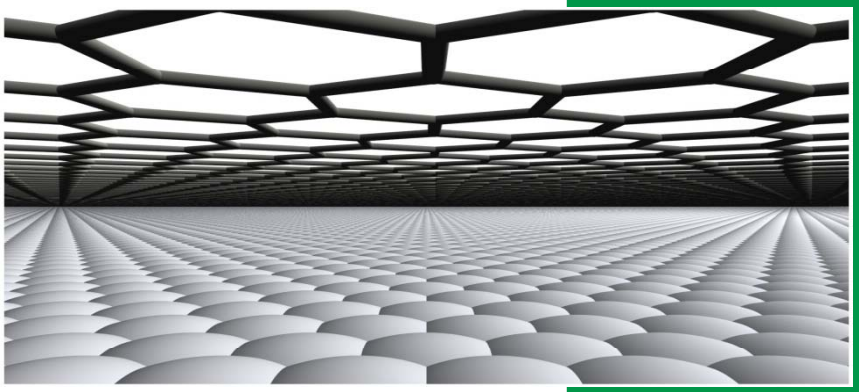
PD Dr.Carsten Busse

II. Physikalisches Institut
Universität zu Köln

Graphene on metal surfaces

Graphene is a sheet of carbon atoms with a thickness of just one atomic layer (Nobel Prize in Physics 2010). In this material, the carbon atoms are arranged in a honeycomb lattice like in graphite (sp^2-hybridisation). This geometric structure gives rise to an unusual electronic structure, where the charge carriers can be described as relativistic Dirac particles.

In this talk, I will present the properties of graphene grown epitaxially on metal surfaces, especially on Ir(111). This preparation leads to a carbon sheet of very high structural quality. In addition, the interaction between graphene and its substrate is rather weak, and therefore the unique electronic structure is preserved. This makes graphene on Ir(111) suitable as a model system to study the properties of this new material using surface science methods.



Alle Zuhörer sind ab 17:00 Uhr zum Kaffee vor dem Hörsaal eingeladen.

Informationen zum Vortrag erteilt Prof. Dr. Thomas Seyller, Tel.: 0371 531 38047