Seminarankündigung

Dienstag, 19. Dezember 2017
13:00 Uhr

WSI, Seminarraum S 101

“Charge transport in organic nanoscopic systems: From organic semiconductors to van-der-Waals materials”

Novel organic materials such as organic small molecules or multilayer graphene offer wealth of fascinating new properties – two of which I will highlight in this talk: 1.) Charge transport in organic semiconductors is in part governed by their environment. To access their intrinsic properties, it is imperative to isolate them from their environment. To this end we have firstly realized two-molecule thick, free-hanging and highly crystalline organic semiconducting films that are isolated from their environment that show promising charge transport. 2.) The density of states of bilayer graphene and recently also thicker graphene layers has found to be gapped at charge neutrality due to the exchange interaction. The detailed nature of the prevailing collective state is currently still under debate due to contradicting experimental results of different groups. I will discuss that a possible cause may be the change of the local stacking sequence of multilayer graphene in the cause of sample fabrication.

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