Interaction phenomena and Coulomb drag in graphene-based heterostructures

ANDRE GEIM, University of Manchester

Double-layer graphene heterostructures with boron nitride as a thin insulating barrier allow us to achieve a strongly interacting regime such that the two Dirac liquids effectively nest within the same plane but can be tuned and measured independently. The experiment reveals many unexpected features that are related to strong excitonic effects and mutual polarization of the graphene layers, which will be discussed in this talk.

In collaboration with Dr. Leonid Ponomarenko and Dr. Roman Gorbachev.