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Moire bands in twisted double layer graphene separated by a hBN monolayer LUIS BREY, ICMM-CSIC — We consider double layer graphene separated by a hBN monolayer. The three layers have a relative twist between them. We obtain that although a single monolayer graphene is only slightly perturbed by a hBN layer, in this sandwich structure the two monolayers graphene become strongly coupled. At small twist angle, the Fermi velocity is significantly reduced with respect the isolated single layer value. We study the velocity renormalization as function of the band gap of hBN and the band offset with respect the graphene Dirac point. The coupling between the graphene monolayers is reduced when they are separated by two hBN layers.

Luis Brey ICMM-CSIC

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