Abstract Submitted for the MAR16 Meeting of The American Physical Society

Coulomb Drag Measurements in Bilayer-Bilayer Graphene Device JIA LI, CORY DEAN, Columbia University — We report Coulomb drag measurements on bilayer-bilayer graphene devices assembled using the Van De Waals transfer technique. The two bilayer graphene flakes are encapsulated and separated by hBN. High temperature measurements reveal positive drag response when the carrier types are different in two graphene layers, and negative when carrier types are the same, a result that is similar to previous measurements reported in monolayer graphene devices. However, upon cooling to low temperature, novel drag response is observed in the low density region. We also report a new device set-up which improves measurement quality for Coulomb drag measurements at low temperature.

> Jia Li Columbia University

Date submitted: 06 Nov 2015

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