Abstract Submitted
for the MAR12 Meeting of
The American Physical Society

Graphene Tunneling Heterostructures BENJAMIN HUNT, JAVIER SANCHEZ-YAMAGISHI, PABLO JARILLO-HERRERO, R. C. ASHOORI, MIT — We have fabricated tunneling heterostructures comprising graphene on boron nitride (BN) substrates and tunnel barriers constructed of exfoliated BN or MoS_2. We present measurements of the low-temperature tunneling spectrum as a function of the tunneling energy and the carrier density in the graphene, with the latter controlled by a back-gate voltage. We observe a series of tunneling resonances, reminiscent of those seen in STM and planar tunneling experiments on graphene, whose energies disperse with the back-gate voltage.

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Date submitted: 11 Nov 2011 Electronic form version 1.4