Abstract Submitted
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Moiré pattern for graphene on a graphite surface and its scanning tunneling spectroscopy[1] ADINA LUICAN, GUOHONG LI, EVA ANDREI, Department of Physics and Astronomy, Rutgers University — We report low temperature high magnetic field scanning tunneling microscopy and spectroscopy on a graphene layer rotated with respect to the orientation of a graphite substrate, which produces distinct Moiré patterns. Scanning tunneling spectroscopy in the rotated area reveals that the tunneling conductivity has two pronounced peaks flanking the Dirac point. Comparison to a theoretical model [1] shows that the two peaks are the signature of rotated layers and their separation reflects the angle of rotation. We will discuss spatial variations of the tunneling spectra within the Moiré pattern and their dependence on magnetic field. [1] J. *M. B. Lopes dos Santos, N. M. R. Peres, and A. H. Castro Neto, Phys. Rev. Lett. 99, 256802 (2007)*

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