

Abstract Submitted
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Quantum Hall Effect in Two-Terminal Graphene Devices. JAMES WILLIAMS, Harvard University, DIMA ABANIN¹, Massachusetts Institute of Technology, LEONARDO DICARLO², Harvard University, LEONID LEVITOV, Massachusetts Institute of Technology, CHARLES MARCUS, Harvard University — We report on transport measurements in the quantum Hall regime of two-terminal single and bilayer graphene devices. The mixture of the longitudinal and transverse conductivities in the two-terminal geometry results in departures from the expected conductance values on the Hall plateaus and are found to be device-geometry dependent. The experimental results are compared to theory and discrepancies are discussed. Research supported in part by INDEX, an NRI Center, and by the Harvard NSEC.

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