

Abstract Submitted
for the MAR16 Meeting of
The American Physical Society

Transport measurements in quasi-one dimensional graphene wires VARUN HARBOLA, MENYOUNG LEE, Physics department, Stanford University, DAVID GOLDHABER-GORDON, Physics department, Stanford Univ, TAKASHI TANIGUCHI, KENJI WATANABE, National institute of material science, Japan — ABSTRACT: Recent developments have enabled fabrication of high mobility graphene structures. The elastic mean free path in the 2D bulk of the graphene can be greater than ten microns, whereas the graphene can be patterned to widths of 1 micron or below. Thus, we can make structures for which bulk elastic scattering can be neglected. We experimentally study the role of other length scales, such as electron-electron scattering length, cyclotron length, and the width of the graphene ribbon, on transport properties.

Varun Harbola
Stanford University

Date submitted: 06 Nov 2015

Electronic form version 1.4