

Abstract Submitted  
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**Impurity-limited carrier transport  
in graphene nanoribbons**<sup>1</sup> C.W. SMITH, MASAHIRO ISHIGAMI,  
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of Central Florida, Orlando, FL 32816 — We have measured the trans-  
port property of graphene nanoribbons as a function of impurity density  
in ultra high vacuum. Specifically, the impact of Coulomb and van der  
Waals impurities on the transport and source-drain gap of nanoribbons  
is investigated. Our results have direct consequences on fundamental  
science using graphene constrictions and graphene-based devices.

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