

Abstract Submitted  
for the MAR10 Meeting of  
The American Physical Society

**Nanotube-graphene interfaces** MITSUhide TAKEKOSHI, Department of Electrical Engineering, Columbia University, VIKRAM DESHPANDE, Department of Physics, Columbia University, TONY HEINZ, Department of Physics, Electrical Engineering, Columbia University, JAMES HONE, Department of Mechanical Engineering, Columbia University, PHILIP KIM, Department of Physics, Columbia University — It is advantageous for carbon nanoelectronics to develop nanotube-graphene hybrid circuits to fully utilize the individual strengths of both materials. In particular, their similarity of lattice parameters and electronic work-function suggests the formation of seamless electrical interfaces between these materials, which is an appealing prospect for this field. Here, we study electrical transport across such interfaces for both exfoliated and CVD-grown graphene. We will present our device fabrication and latest results.

Mitsuhide Takekoshi  
Columbia University

Date submitted: 01 Dec 2009

Electronic form version 1.4