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Electrical transport in graphene-carbon nanotube hybrid junctions JHAO-WUN HUANG, CHENG PAN, University of California, Riverside, HANG ZHANG, California Institute of Technology, FENGLIN WANG, SON TRAN, LEI JING, MARC BOCKRATH, JEANIE LAU, University of California, Riverside — We performed transport experiments in 1D-2D hybrid systems consisting of graphene and single-walled carbon nanotube junctions. We fabricated suspended graphene-carbon nanotube junctions by transferring monolayer graphene sheets onto single-walled carbon nanotubes and etching the SiO2/Si substrates in hydrofluoric acid. We measured the transport properties as a function of magnetic field and gate voltage and electric field. Coulomb blockade feature at 260mK was observed. More of our latest data will be presented with theoretical models.

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