

Abstract Submitted
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Fano Resonance in Single-Walled Carbon Nanotube Devices

GANG LIU, University of California, Riverside, YONG ZHANG, China Southwest University, CHUNNING LAU, University of California, Riverside — We have observed Fano resonance in a short carbon nanotube device. The device's transport spectroscopy exhibits inverse Coulomb blockade structures superimposed on Fabry Perot resonance patterns, indicating the quantum interference between a well-coupled channel and a poorly-coupled channel. Our results have implication on the detection of charges' phase and phase coherence in an electronic interferometer.

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