

Abstract Submitted
for the MAR06 Meeting of
The American Physical Society

Dependence of transport through carbon nanotubes on local Coulomb potential. ALEXEY ZHUKOV, Duke University, Physics Department, ALEXANDER MAKAROVSKI, MATTHEW PRIOR, GLEB FINKELSTEIN, ELECTRONIC NANOSTRUCTURES GROUP TEAM — With home made atomic force microscope we perform scanned probed imaging of single-walled carbon nanotube devices at 4.2 K. We also observe changing of the heights and positions of the conductivity peaks in Coulomb Blockade regime with displacement of the AFM conductive tip. Influence of the Coulomb potential of the AFM tip on single-electron charge states in carbon nanotube is discussed.

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Date submitted: 30 Nov 2005

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