## Abstract Submitted for the MAR10 Meeting of The American Physical Society

Zero-bias anomaly in resonant tunneling: the role of contact asymmetry HENOK MEBRAHTU, YURIY BOMZE, IVAN BORZENETS, GLEB FINKELSTEIN, Duke University — We study the zero-bias anomaly in resonant tunneling through a carbon nanotube quantum dot caused by dissipative environment. At the base temperature, we find a qualitative difference between the cases of symmetric and asymmetric barriers defining the quantum dot. The observed behavior is compared to the theoretical predictions for a physically similar picture of resonant tunneling in Luttinger liquid.

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