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**Carbon nanotube quantum dot in a dissipative environment**

HENOK MEBRAHTU, IVAN BORZENETS, YURIY BOMZE, Duke University, ALEX SMIRNOV, North Carolina State University, GLEB FINKELSTEIN, Duke University — We study conductance through a resonant level in a single-walled carbon nanotube quantum dot embedded in a dissipative environment. The dissipation is provided by environmental modes in the nanotube leads and the strength of the dissipation is experimentally controlled in several samples. At base temperature, dissipation suppresses the resonant tunneling peak height while maintaining resonant level width. We also observe a regime where the height and the width of a conductance peak demonstrate qualitatively different energy scaling.

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