

Abstract Submitted
for the MAR07 Meeting of
The American Physical Society

Zero Bias Anomaly Out of Thermal Equilibrium DMITRI GUTMAN, University of Florida, YUVAL GEFEN, Weizmann Institute of Science, ALEXANDER MIRLIN, University and Forschungszentrum of Karlsruhe — We consider the out-of-equilibrium tunneling density-of-states for a two-dimensional diffusive film. Starting from a Keldysh *sigma*-model formalism we have obtained an effective action capable of accounting for both real and virtual processes. The ensuing zero bias anomaly, obtained non-perturbatively in the interaction, exhibits a two-dip structure, whose singularity is rounded off by the electron-electron inelastic rate.

Dmitri Gutman
University of Florida

Date submitted: 19 Nov 2006

Electronic form version 1.4