

Abstract Submitted
for the MAR07 Meeting of
The American Physical Society

Nonequilibrium Voltage Fluctuations in Aluminum Wires M. REZNIKOV, A. FRYDMAN, M. REESE, D. PROBER, Technion, Israel Institute of Technology — We present measurements of the nonequilibrium voltage fluctuations across current biased superconductive aluminum wires in the vicinity of T_c . Above T_c these voltage fluctuations are due to superconductive fluctuations which persist on the time scale of the Ginzburg time. Below T_c we believe they are due to the thermal activated phase slips. The frequency dependence of the fluctuations suggests the observation of the ac Josephson effect above T_c .

Michael Reznikov
Technion, Israel Institute of Technology

Date submitted: 01 Dec 2006

Electronic form version 1.4