Abstract Submitted for the MAR08 Meeting of The American Physical Society

Flux-Flow noise in YBCO thin films in the normal region, transition and superconducting state. PAULA GIRALDO, HECTOR CASTRO — The dynamic of vortexes inside type II superconductor thin films in the mixed state, that is, under their critical temperature and immersed in a DC magnetic field below its critical value, can be studied by means of the measurement of flux-flow noise, before the transition, during it and in the superconducting state. We measure the fluctuation in the voltage signal in the pseudogap region for an YCaBaCuO thin film, and compare it with the response in the other two regions. The response for overdoped and underdoped samples is compared with the response of optimaldoped samples.

Paula Giraldo

Date submitted: 27 Nov 2007

Electronic form version 1.4