Meeting: 1000, Albuquerque, New Mexico, SS 12A, Special Session on Regularity in PDEs and Harmonic Analysis

Prabhu Janakiraman* (pjanakir@math.uiuc.edu), 1107 W Green St. Apt 334, Urbana, IL 61801. Limiting weak-type behavior of maximal functions on singular measures. Preliminary report. Let M be the Hardy-Littlewood maximal operator and ν a singular measure supported on an s-set E. The behavior of the weak-type inequality $\lambda m\{x \in R^n : M\nu(x) > \lambda\}$ as $\lambda \to \infty$ depends primarily on the structure of the set E. Some explorations into this question will be discussed. (Received August 21, 2004)