1063-43-172 **Maria Carmen Reguera*** (mreguera@math.gatech.edu). *On Muckenhoupt-Wheeden conjecture.*

Let M denote the dyadic Maximal Function. We show that there is a weight w, and Haar multiplier T for which the following weak-type inequality fails.

$$\sup_{t>0} tw\left\{x \in \mathbb{R} \mid |Tf(x)| > t\right\} \leq C \int_{\mathbb{R}} |f| Mw(x) dx.$$

This shows that a dyadic version of the so-called Muckenhoupt-Wheeden Conjecture is false. (Received August 15, 2010)