1099-28-288 G. Knese, J. E. McCarthy and K. Moen* (kabe.moen@ua.edu). Unions of L^p spaces and A_1 majorants.

We show that unions of Lebesgue spaces are intimately related to the Hardy-Littlewood maximal function and the theory of weighted Lebesgue spaces. A key idea is the notion of an A_1 majorant. We give several simple characterizations of when a function belongs the union Lebesgue spaces on both local and global settings. This presentation will be based on a joint work with Greg Knese and John McCarthy. (Received February 10, 2014)