

# ESTIMATES FOR MULTILINEAR SINGULAR INTEGRALS ASSOCIATED WITH BOREL MEASURES

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ABSTRACT. We prove a multilinear generalization of a result of Duoandikoetxea and Rubio de Francia which states that if  $\mu$  is a compactly supported finite Borel measure such that  $|\widehat{\mu}(\xi)| \leq \min\{|\xi|^b, |\xi|^{-b}\}$  for some  $b > 0$  and all  $\xi \neq 0$  and  $\mu_j$  is defined by  $\widehat{\mu}_j(\xi) = \widehat{\mu}(2^{-j}\xi)$ , then  $f \rightarrow \sum_j f * \mu_j$  is bounded on  $L^p$  for all  $1 < p < \infty$ .

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*Date:* October 23, 2007.

1991 *Mathematics Subject Classification.* Primary 42B20, 42B25. Secondary 46B70, 47B38.

*Key words and phrases.* multilinear operators, bilinear operators, bilinear multipliers.