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Oleksandra V Beznosova* (beznosik@math.unm.edu), 10400 Universe blvd NW apt. 632, Albuquerque, NM 87114, and **Maria Cristina Pereyra**. *Bounds on the norm of the dyadic paraproduct on weighted Lebesgue spaces*. Preliminary report.

It is a well known fact that if $w \in A_p^d$ then the dyadic paraproduct $\pi_b f$ is bounded in $L^p(w)$. However the sharp dependence of the norm of paraproduct on the A_p^d characteristic of the weight is not known even in the simplest $L^2(w)$ case. Using Bellman function techniques we obtain new bounds on the norm of dyadic paraproduct in $L^2(w)$ and then extend our bounds to the $L^p(w)$ case. (Received August 21, 2007)