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**Joe Lakey\*** (jlakey@nmsu.edu), Department of Mathematical Sciences, New Mexico State University, Las Cruces, NM 88003-8001. *Estimates for partial sums of Walsh expansions*. Preliminary report.

In the 1920's Kolmogorov proved that dyadic partial sums of Fourier series of square integrable functions converge almost everywhere - an important first step that eventually led to Carleson's theorem. More recently, in his thesis Thiele used combinatorial arguments to provide a relatively simple proof of boundedness of the maximal partial sum operator for Walsh series. Here we will present new methods for obtaining fairly explicit bounds for the dyadic partial sum operator - the ultimate goal being to obtain explicit bounds for the full maximal operator and for the Fourier case. This preliminary report represents joint work with John Gilbert, Zioma Rzeszotnik and Adam Sikora. (Received August 30, 2005)