1015-46-289 **Marius - Junge*** (junge@math.uiuc.edu), 1409 West Green Street, Urbana, IL 61801. *A Rosenthal theorem for noncommutative L_p spaces.* Preliminary report.

We show a noncommutative version of a result of Rosenthal: Reflexive subspaces of noncommutative L_1 spaces embed into a noncommutative L_p space for some $p > 1$. This joint work with J. Parcet starts of from fundamental work of Pisier in 1986 who obtained an interpolation results using an unusual L_2 spaces as endpoint in 1986. We develop new interpolation results related to harmonic analysis of triangular matrices which allow us to identify the interpolations spaces as complemented subspace of a direct sum of L_p spaces. We extend the result to subspaces of L_q not containing ℓ_q using a new differential inequality in $L_{q'}$. (Received February 07, 2006)