1108-46-211 **Daniel Freeman*** (dfreema7@slu.edu). *An unconditional FDD of translations of a single function in L_p for $p > 2$.* Preliminary report.

Wavelet coordinate systems are constructed by translating and dilating a single function in L_2 to form a basis or a frame for L_2. We are interested in what possible coordinate systems can be formed by just translations of a single function. It has previously been shown that for all $1 \leq p < \infty$, L_p does not have an unconditional basis of translations of a single function. In contrast to this, we prove that for all $2 < p < \infty$ there exists a sequence of translations of a single function in L_p which may be blocked to be an unconditional FDD for L_p. That is, there exists a function $F \in L_p$, a sequence of real numbers $(\lambda_j)_{j=1}^{\infty}$, and an increasing sequence of natural numbers $(n_j)_{j=1}^{\infty}$ with $n_1 = 1$ such that $(span_{n_j \leq i < n_{j+1}} T_{\lambda_i} F)_{j=1}^{\infty}$ is an unconditional FDD for L_p. In particular, for all $f \in L_p$ there exists a unique sequence of scalars $(a_i)_{i=1}^{\infty}$ such that

$$f = \sum_{j=1}^{\infty} \sum_{i=n_j}^{n_{j+1}-1} a_i T_{\lambda_i} F,$$

and the outside sum converges unconditionally. (Received January 13, 2015)