1171-35-51 **M. Burak Erdogan** and **William R. Green*** (green@rose-hulman.edu), 5500 Wabash Ave, Terre Haute, IN 47803. *The L^p continuity of wave operators for higher order Schrödinger operators.*

We consider the higher order Schrödinger operator $H = (-\Delta)^m + V(x)$ in n dimensions with real-valued potential V when $n > 2m$, $m \in \mathbb{N}$, $m > 1$. When n is odd, we prove that the wave operators extend to bounded operators on $L^p(\mathbb{R}^n)$ for all $1 \leq p \leq \infty$ under n and m dependent conditions on the potential analogous to the case when $m = 1$. Further, if V is small in certain norms, that depend n and m, the wave operators are bounded on the same range for even n. We further show that if the smallness assumption is removed in even dimensions the wave operators remain bounded in the range $1 < p < \infty$. (Received August 06, 2021)