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Michael Goldberg and **William Green*** (green@rose-hulman.edu), 5500 Wabash Ave, Terre Haute, IN 47803. *On the L^p boundedness of the wave operators for fourth order Schrödinger operators.*

We consider the fourth order Schrödinger operator $H = \Delta^2 + V(x)$ in three dimensions with real-valued potential V . With $H_0 = \Delta^2$, the wave operators are defined by

$$W_{\pm} = s - \lim_{t \rightarrow \pm\infty} e^{itH} e^{-itH_0}$$

The L^p boundedness of the wave operators is of interest in part due to the intertwining identity, which allows one to deduce L^p based estimates for operator-valued functions $f(H)P_{ac}(H)$ based on estimates for the simpler operator $f(\Delta^2)$.

We show that if V decays sufficiently and there are no eigenvalues or resonances in the absolutely continuous spectrum of H then the wave operators extend to bounded operators on $L^p(\mathbb{R}^3)$ for all $1 < p < \infty$. (Received September 04, 2020)