

GLOBAL WELLPOSEDNESS AND SCATTERING FOR SEMILINEAR WAVE EQUATIONS WITH POWER-TYPE NONLINEARITIES

ABSTRACT. I will outline a proof for global wellposedness for $\square u = |u|^{p-1}u$ in $(1+3)$ -dimensions with initial data in the energy space for $3 < p \leq 5$ as well as scattering for the critical case $p = 5$. I will then discuss global wellposedness and scattering for $\square_g u = u^5$ for certain small asymptotically flat perturbations of the Minkowski metric.