1125-35-1715 Rowan Killip, Satoshi Masaki, Jason Murphy^{*} (murphy@math.berkeley.edu) and Monica Visan. Conditional scattering for the mass-subcritical NLS.

Many recent works on NLS and NLW have proven conditional scattering results for equations that lack a conserved quantity at the level of the critical regularity. Typically, one proves scattering under the assumption of *a priori* bounds in the critical Sobolev space. We prove a an analogous result in the setting of the mass-subcritical NLS, for which the critical regularity s_c is negative. Instead of working with Sobolev norms, we use a scale-invariant weighted norm that is natural in this setting. Our result covers all short-range nonlinearities for which $|s_c| < 1$, in all dimensions $d \ge 1$. Our arguments apply equally well in the defocusing and focusing settings. This is joint work with R. Killip, S. Masaki, and M. Visan. (Received September 19, 2016)