1125-35-3148 **Andrew Lawrie*** (`alawrie@mit.edu`). *Energy subcritical nonlinear wave equations.* Preliminary report.

We discuss some recent work with Dodson, and Dodson, Mendelson, Murphy on the energy subcritical nonlinear wave equation. We prove that if the critical norm of a solution stays bounded on the maximal time of existence, then the solution must be globally defined and scattering. The main new technical ingredient of the proof is a novel version of the so called double Duhamel trick, which allows us to access conserved quantities like the energy for solutions with pre-compact trajectories in the critical space. (Received September 21, 2016)

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