1139-35-615   **B. Dodson**, **J. Luhrmann** and **D. Mendelson*** (`dana@math.uchicago.edu`),
dana@math.uchicago.edu. *Probabilistic wellposedness and scattering results for wave and Schrodinger equations on Euclidean space.*

We will discuss recent progress on the probabilistic local well-posedness of the nonlinear Schrodinger equation. The main ingredient in our proof is the introduction of a functional framework for the study of the associated forced cubic nonlinear Schrödinger equation, which is inspired by certain function spaces used in the study of the Schrödinger maps problem, and is based on Strichartz spaces as well as variants of local smoothing, inhomogeneous local smoothing, and maximal function spaces. We will also discuss certain probabilistic scattering results for nonlinear Schrodinger and wave equations. (Received February 20, 2018)