

1103-35-170

**Svetlana Roudenko\***, 2115 G St NW, Washington, DC 20052, and **Thomas Duyckaerts**, Paris, France. *Going beyond the threshold: scattering vs. blow-up dichotomy in the focusing NLS equation.*

We consider the focusing nonlinear Schrödinger equation in  $N$ -dimensions:  $iu_t + \Delta u + |u|^{p-1}u = 0$  in the  $L^2$ -supercritical regime, i.e. when  $p > 1 + \frac{4}{N}$ , with finite energy and finite variance initial data. We study solutions in the energy-critical case above the energy threshold  $E[u_0] > E[W]$ , where  $W$  is the stationary solution, or above the mass-energy threshold in the energy-subcritical cases. We obtain the scattering versus blow-up dichotomy above the threshold, which also includes solutions with arbitrarily large mass and energy. This is a joint work with T. Duyckaerts. (Received August 18, 2014)