1015-42-304 **Svetlana Roudenko*** (`svetlana@math.asu.edu`), Department of Mathematics, Arizona State University, Tempe, AZ 85287-1804, and **James Colliander**, University of Toronto. *Blow up behavior in the L^2-critical and H^s-critical NLS equations.* Preliminary report.

We discuss the blow up behavior (such as the dependence of the window of mass concentration on space-time norm growth) for the L^2-critical NLS in 2D. We also investigate the blow up phenomenon in $H^{1/2}$-critical NLS in 3D, in particular, L^3-norm concentration. (Received February 07, 2006)