Nyla Basharat and Yi Hu* (yihu@georgiasouthern.edu), Department of Mathematical Sciences, Georgia Southern University, Statesboro, GA 30460, and Shijun Zheng. Some blow-up rates of solutions to nonlinear Schrödinger equations with rotations. Preliminary report.

In this talk we consider the nonlinear Schrödinger equation with rotation \( iu_t = -\frac{1}{2} \Delta u + V(x)u + u|u|^{p-1} - \Omega \cdot Lu \) and introduce some recent progress of the blow up rate. In the mass super critical and energy subcritical range, for radially symmetric initial data, we give a universal upper bound on the blow up rate. In the mass critical case, assuming some spectral property, we give limiting profiles of blow-up solutions. This is a joint work with Nyla Basharat and Shijun Zheng. (Received September 20, 2016)