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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)