1081-14-94 **Thomas Nevins*** (nevins@illinois.edu), Department of Mathematics, University of Illinois at Urbana-Champaign, 1409 W. Green Street, MC-382, Urbana, IL 61801. *Derived equivalences for quantum symplectic resolutions.*

Quantizations of symplectic resolutions appear in many aspects of geometric representation theory related to enveloping algebras of semisimple Lie algebras, rational Cherednik algebras, and other examples. I will discuss a framework for proving derived equivalences for quantum symplectic resolutions in characteristic zero that formalizes ideas of Bridgeland and Bezrukavnikov-Mirkovic-Rumynin. I will then explain how it applies to the examples mentioned. Finally, provided there is ample remaining time, I may say something about how t-structures should behave under such equivalences. This is joint work with K. McGerty of Oxford. (Received February 02, 2012)