

1102-16-13

**Xueqing Chen\*** ([chenx@uww.edu](mailto:chenx@uww.edu)), Department of Mathematics, 800 West Main Street, Whitewater, WI 53190, and **Jie Xiao** and **Fan Xu**. *"Hall algebras and quantum groups arising from 2-periodic derived categories"*. Preliminary report.

Inspired by the recent work of Bridgeland [1], we extend the derived Hall algebras defined in [2] and [3] to that from a period 2 derived category. This provides a successful model to realize the quantum groups globally. The talk is based on a joint work with J. Xiao and F.Xu. 1 T.Bridgeland, Quantum groups via Hall algebras of complexes, *Annals of Math.* 177 (2013), 739-759. 2 B.Toen, Derived Hall algebras, *Duke Math.J.* 135 (2006), 587-615 3 J.Xiao and F.Xu, Hall algebras associated to triangulated categories, *Duke Math.J.* 143 (2008), 357-373. (Received May 05, 2014)