1142-57-52 John A. Baldwin, Tye Lidman and C.-M. Michael Wong* (cmmwong@lsu.edu). GRID invariants obstruct decomposable Lagrangian cobordisms. Preliminary report.

Ozsváth, Szabó, and Thurston defined several combinatorial invariants of Legendrian links in the 3-sphere using grid homology, which is a combinatorial version of link Floer homology. These, collectively called the GRID invariants, are known to be effective in distinguishing some Legendrian knots that have the same classical invariants. In this talk, we describe a recent result that the GRID invariants provide an obstruction to the existence of decomposable Lagrangian cobordisms between Legendrian links. This obstruction is stronger than the obstructions from the Thurston–Bennequin and rotation numbers, and is closely related to a recent result by Golla and Juhász. This is joint work with John Baldwin and Tye Lidman. (Received August 23, 2018)