1077-57-622 **John A. Baldwin**, **David Shea Vela-Vick*** (shea@math.columbia.edu) and **Vera Vertesi**.

On the equivalence of Legendrian and transverse knot invariants in Heegaard Floer homology.

The Heegaard Floer package provides a robust tool for studying contact 3-manifolds and their subspaces. Within the sphere of Heegaard Floer homology, several invariants of Legendrian and transverse knots have been defined. The first such invariant, constructed by Ozsváth, Szabó and Thurston, was defined combinatorially using grid diagrams. The second invariant was obtained by geometric means using open book decompositions by Lisca, Ozsváth, Stipsicz and Szabó. We show that these two previously defined invariant agree. Along the way, we define a third, equivalent Legendrian/transverse invariant which arises naturally when studying transverse knots which are braided with respect to an open book decomposition. (Received September 08, 2011)