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Katherine Vance* (kvance@rice.edu). *Tau invariants of knotted wedges of circles.* Preliminary report.

Harvey and O’Donnol defined a combinatorial Heegaard Floer homology theory \widehat{HFG} for spatial graphs. Their theory is relatively bigraded, with an integer-valued Maslov grading and a relative Alexander grading, which takes values in the first homology of the spatial graph exterior. We define a \mathbb{Z} -filtered \widehat{HFG} for a certain class of balanced spatial graphs whose associated graded object is the \widehat{HFG} defined by Harvey and O’Donnol. This class includes knotted wedges of circles. We then define a τ invariant for spatial graphs analogous to Ozsvath and Szabo’s τ invariant for knots. One step in showing there is a filtration is to lift the relative Alexander grading on \widehat{HFG} to an absolute grading. To do this, we use the Alexander polynomial of a spatial graph. (Received July 29, 2014)