Jennifer Hom*, jenhom@math.upenn.edu. Bordered Heegaard Floer homology and the τ -invariant of cable knots. Preliminary report.

We will use bordered Heegaard Floer homology to give a formula for the Ozsváth-Szabó concordance invariant τ of the (p,q)-cable of a knot K, in terms of p, q, and two invariants, $\tau(K)$ and $\delta(K)$, associated to the knot Floer complex of K. As a consequence, we will show that for any integer n, there exist knots K and K' with $\tau(K) = \tau(K') = n$, such that $\tau(K_{p,q}) \neq \tau(K'_{p,q})$, for all pairs of relatively prime integers p and q. (Received March 30, 2010)