Gilberto Spano

Title: On Heegaard Floer and fix point Floer homologies for fibered knots

Abstract: Let K be a genus g fibered knot in a closed oriented 3-manifold Y. In this talk we consider two topological invariants associated with these data. The first is the "hat" version of the knot Floer homology of K, which consists in a family $\widehat{HFK}(Y,K,i)$ of abelian groups indexed by an integer $i \in [-g,g]$. The second is a version $HF^{\#}(f)$ of the fix point Floer homology of any area-preserving representative f of the monodromy of the fibration of $Y-K$ over S^1. We show that there exists an isomorphism between $\widehat{HFK}(Y,K,-g+1)$ and $HF^{\#}(f)$ and we discuss some applications. This is a joint work with Paolo Ghiggini.