

1086-57-2781      **Allison L Gilmore\*** (gilmore@math.ucla.edu). *An algebraic approach to knot Floer homology*. Preliminary report.

Ozsvath and Szabo gave the first completely algebraic description of knot Floer homology via a cube of resolutions construction. Starting with a braid diagram for a knot, one singularizes or smooths each crossing, then associates an algebra to each resulting singular braid. These can be arranged into a chain complex that computes knot Floer homology. I will discuss generalizations of this construction to framed trivalent graphs and the conjectural relationship of such generalizations to Khovanov and Rozansky's HOMFLY-PT homology. (Received September 25, 2012)