Joshua Wang* (jxwang@math.harvard.edu). The cosmetic crossing conjecture for split links.

Given a nontrivial band sum of two knots, we may add full twists to the band to obtain a family of knots indexed by the integers. In this talk, I’ll show that the knots in this family have the same Heegaard and instanton knot Floer homology but distinct Khovanov homology, generalizing a result of M. Hedden and L. Watson. A key component of the argument is a proof that each of the three knot homologies detects the trivial band. The main application is a verification of the generalized cosmetic crossing conjecture for split links. (Received September 06, 2020)