Speaker:	Lin, Xiao-Song
Title:	Knot adjacency, genus and essential tori
Authors:	Effie Kalfagianni and Xiao-Song Lin
Affiliations:	Michigan State University and UC Riverside

Abstract: A knot K is called n-adjacent to another knot K', if K admits a projection containing n "generalized crossings" such that changing any $0 < m \leq n$ of them yields a projection of K'. We apply techniques and results from the theory of sutured 3-manifolds, Dehn surgery and the theory of 3-manifold mapping class groups to answer the question of the extent to which non-isotopic knots can be adjacent to each other. A consequence of A consequence of our main result is that if K is *n*-adjacent to K' for all $n \in \mathbf{N}$, then K and K' are isotopic. This provides a partial verification of the conjecture of V. Vassiliev that the finite type knot invariants distinguish all knots.