
LIAM WATSON, UBC

Mutation in Khovanov homology

Bloom and Wehrli have given proofs that Khovanov homology, with coefficients in the two-element field, is insensitive to mutation. I will describe some further progress on knot mutation in Khovanov homology. In particular, I will explain why Rasmussen's s -invariant (over any field) is insensitive to mutation (this is joint work with A Kotelskiy and C Zibrowius). On the other hand, I will describe how the presence of an involution can be used to refine Khovanov homology, resulting in an invariant that does detect mutation (this is joint work with A Lobb). The talk will assume little background and focus on examples.