

A LOWER BOUND FOR THE UNKNOTTING NUMBERS FROM UNIVERSAL KHOVANOV HOMOLOGY

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ABSTRACT. The goal of the talk is to describe a new knot invariant λ coming from a universal variation of Khovanov homology. While λ is a lower bound for the unknotting number, in fact more is true: λ is a lower bound for the proper rational unknotting number (the minimal number of rational tangle replacements preserving connectivity necessary to relate a knot to the unknot). This is based on joint work with Damian Iltgen and Lukas Lewark.