1145-57-479 Adam M Lowrance* (adlowrance@vassar.edu) and Radmila Sazdanovic. Gordian distance and spectral sequences in Khovanov homology.

The Gordian distance between two knots is the fewest number of crossing changes necessary to transform one knot into the other. Khovanov homology is a categorification of the Jones polynomial that comes equipped with several spectral sequences. In this talk, we show that the page at which some of these spectral sequences collapse gives a lower bound on the Gordian distance between a given knot and the set of alternating knots (and also on other related Gordian distances). We also discuss connections to the existence of torsion in Khovanov homology. (Received September 07, 2018)