1163-55-1251 **Daniel Scofield*** (`daniel.scofield@fmarion.edu`) and **Radmila Sazdanovic**
(`rsazdanovic@ncsu.edu`). *Extremal Khovanov homology and the girth of a knot.*

The maximal girth among the all-A graphs of a link L determines certain gradings in which the Khovanov homology of L is trivial. We describe these gradings and obtain a simple characterization of extreme Khovanov homology groups and the associated extreme coefficients of the Jones polynomial. Defining the girth of L to be the maximal girth of its all-A graphs, we describe possible values for this invariant and show that if L has an all-A graph whose girth is equal to $\ell > 2$, then the girth of L is equal to ℓ. (Received September 15, 2020)