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Radmila Sazdanovic and **Daniel Scofield***, dscofie@ncsu.edu. *Patterns in Khovanov link and chromatic graph homology.*

Khovanov homology of a link and chromatic graph homology are known to be isomorphic in a range of homological gradings that depend on the girth of a graph. In this talk, we discuss patterns shared by these two homology theories. In particular, we improve the bounds for the homological span of chromatic homology by Helme-Guizon, Przytycki and Rong. An explicit formula for the rank of the third chromatic homology group on the main diagonal is given and used to compute the corresponding Khovanov homology group and the fourth coefficient of the Jones polynomial for links with certain diagrams. (Received September 25, 2017)