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Constructing a Homotopy Type For Triply-Graded Link Homology.

Khovanov defined a knot invariant, called the triply graded link homology, using Soergel bimodules. These arise naturally in the study of representation theory, more specifically in Kazhdan-Lusztig theory. Kitchloo realized these Soergel bimodules as cohomology groups of certain Schubert varieties. I'll talk about extending this construction to the triply graded link homology and constructing a homotopy type out of it, thereby providing a knot invariant valued in spectra. This is joint work with Nitu Kitchloo and Vitaly Lorman. (Received January 24, 2019)