Melissa L. Zhang* (melissa.zhang@bc.edu) and Matthew Stoffregen. Localization in Khovanov homology.

When a topological object admits a group action, we expect that our invariants reflect this symmetry in their structure. This talk will explore how link symmetries are reflected in three generations of related invariants: the Jones polynomial; its categorification, Khovanov homology; and the youngest invariant in the family, the Khovanov stable homotopy type, introduced by Lipshitz and Sarkar. In joint work with Matthew Stoffregen, we use Lawson-Lipshitz-Sarkar’s construction of the Lipshitz-Sarkar Khovanov homotopy type to produce localization theorems and Smith-type inequalities for the Khovanov homology of periodic links. (Received February 01, 2019)