

1155-55-94

Nitu Kitchloo*, Johns Hopkins University, Baltimore, MD. *Link Homologies for Homotopy Theorists.*

In my talk, I will describe a geometric equivariant stable homotopy type that recovers several known link homology theories (Khovanov homology, $\mathfrak{sl}(n)$ -link homology, Khovanov-Rozansky homology etc) when one applies suitable equivariant cohomology theories to the homotopy type. In addition, most of the algebraic structure known in the context of link homologies (like spectral sequences connecting different homology theories) will be shown to arise in a natural manner that is very familiar to homotopy theorists. The geometry alluded to above refers to the framework of symmetry breaking for principal bundles on a circle with marked points. More on that if time permits. (Received January 02, 2020)