
MATT HOGANCAMP, University of Southern California

Categorical Diagonalization

I will discuss recent joint work with Ben Elias in which we develop a theory of diagonalization of functors. We apply our theory to the diagonalization of the full-twist Rouquier complex acting on Soergel bimodules in type A, resulting in categorifications of Young idempotents, both primitive and central. I will also discuss the relevance of this construction to the higher representation theory of Hecke algebras.