BRANDON DOHERTY, Florida State University
Cubical Joyal model structures: recent and ongoing developments

Cubical Joyal model structures, which exhibit cubical sets as a model for the theory of $(\infty, 1)$-categories, were originally developed, and shown to be equivalent to the Joyal model structure on simplicial sets, for categories of cubical sets with faces, degeneracies and connections. In this talk we will discuss the extension of these results to the category of *minimal cubical sets*, having only faces and degeneracies (arXiv:2207.03636). Time permitting, we will also discuss current work in progress on establishing cubical Joyal model structures on categories of cubical sets with diagonals and symmetries.