

## Algebraic K-Theory Seminar

*The genuine stabilization of a  $G$ -topos*

Jay Shah (Notre Dame)

**Abstract:** Let  $G$  be a finite group and  $X$  a topos with homotopy coherent  $G$ -action. From this, we construct a stable homotopy theory  $\mathrm{Sp}^G(X)$  which recovers and extends the theory of genuine  $G$ -spectra. We explain what our construction yields when: (i)  $X$  is the topos of sheaves on a topological space with  $G$ -action (ii)  $X$  is the étale  $\mathbb{C}_2$ -topos of a scheme  $S$  adjoined a square root of  $-1$ . We conclude with an application to realization functors out of the stable motivic homotopy category of a scheme. This is joint work with Elden Elmanto.

Wednesday, October 31 at 3:00 PM in 1227 SEO