

# THE ÉTALE SITE OF THE STABLE MODULE CATEGORY OF A FINITE GROUP

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To any symmetric-monoidal category  $T$ , there is a natural way to associate a Grothendieck site and sheaf cohomology. The objects in this site are the commutative separable monoids in  $T$ . For instance, if  $T$  is the derived category of quasi-coherent sheaves on a scheme  $X$ , then the site fits in between the classical étale site and the recently discovered pro-étale site on  $X$ .

In this talk, I will explain what separable monoids are and show how they pop up in various settings. For a finite group  $G$ , I will show that the compact separable monoids in both the derived and stable module category of  $G$  correspond to  $G$ -sets. This allows us to describe the site associated to the derived and stable module category of  $G$ , to compute the corresponding sheaf cohomology and its relation to traditional group cohomology.