1158-18-188 **Beren Sanders*** (beren@ucsc.edu). *Finite étale algebras belong in the heart.*

In the context of tensor triangular geometry, understanding the finite étale morphisms out of a tensor triangular category amounts to classifying the finite étale algebras (a.k.a. compact tt-rings) in the category. For an equivariant tensor triangulated category, restricting to a finite-index subgroup is an example of such a finite étale morphism. The question of whether these restriction functors are the only finite étale morphisms, say on the stable module category of a finite group, remains an open question in general. In this talk I will discuss recent work, joint with Paul Balmer, which addresses these questions in the case when your category is equipped with a weight structure. Our theorem reduces the problem to classifying the finite étale algebras in the heart of the weight structure. It provides a new perspective on the fact (due to John Rognes) that the sphere spectrum is separably closed, and also has applications to understanding the étale topology of the equivariant stable homotopy category. The latter was our original motivation. (Received March 01, 2020)