Cris Negron* (cnegron@email.unc.edu). Cohomology for Drinfeld doubles of finite group schemes.

Recall that the Drinfeld double of a finite group scheme \( G \) is a finite-dimensional Hopf algebra which integrates, in a certain way, both the group ring of \( G \) and the algebra of global functions on \( G \). I will discuss our recent proof of the fact that the Drinfeld double of an arbitrary finite group scheme has finitely generated cohomology. (One should view this result in light of Etingof and Ostrik’s conjecture, which proposes that any finite tensor categories has finitely generated cohomology.) In this talk I will focus on how deformation theory informs, and contributes to, our analysis of cohomology for such doubles. This talk is based in part on joint work with Eric Friedlander. (Received August 17, 2020)