1158-16-160 **Cris Negron*** (cnegron@email.unc.edu). *Support data for Hopf algebras via noncommutative hypersurfaces.* Preliminary report.

In recent work with J. Pevtsova, we develop an approach to support theory for Hopf algebras via noncommutative hypersurfaces. As a starting point, one considers a Hopf algebra u which admits a smooth deformation $U \to u$ by a Noetherian Hopf algebra U of finite global dimension. One uses this deformation to produce a rank variety for u which takes values in an associated projective space. Our work is inspired by earlier contributions of Avramov and Buchweitz, which concerned support for (commutative) local complete intersections. I will discuss some modular examples, functions on finite group schemes and Drinfeld doubles of infinitesimal group schemes, and also quantum groups over the complexes. I will discuss how one can use this hypersurface approach to address the tensor product property in certain "solvable" examples. (Received February 28, 2020)