1146-16-525 Yorck Sommerhäuser* (sommerh@mun.ca), Memorial University of Newfoundland, Department of Mathematics and Statistics, St. John's, NL A1C 5S7, Canada. *Cores in Yetter-Drinfel'd Hopf Algebras: Examples.* Preliminary report.

For a semisimple commutative Yetter-Drinfel'd Hopf algebra over a finite abelian group, one can define the core of a one-dimensional character, at least when the base field is algebraically closed of characteristic zero. In the case where the finite abelian group has prime order, these cores are always completely trivial in the sense that both the action and the coaction of the group on the core are trivial. In this talk, we describe examples of Yetter-Drinfel'd Hopf algebras whose cores are not completely trivial. The corresponding Radford biproducts are semisimple Hopf algebras of dimension 32 that appear not to have been considered in the literature before. The talk is based on joint work with Yevgenia Kashina, who will give the subsequent talk and discuss these biproducts from the point of view of extensions. (Received January 29, 2019)