1153-20-338 **Siddharth N Venkatesh***, 12 Cambridge Terrace, 3rd floor, Cambridge, MA 02140. *Algebraic Groups in the Verlinde Category.*

In characteristic p, the Verlinde category is an important symmetric tensor category that can be constructed from the category of representations of $\mathbb{Z}/p\mathbb{Z}$ or, alternatively, from the category of tilting modules for SL_2. It is a universal base for finite semisimple symmetric tensor categories, and consequently, all such categories are representation categories of commutative Hopf algebra objects in the Verlinde category. In this talk, I will describe some fundamental properties of these Hopf algebras and show how you can reduce their representation theory to the representations of an underlying ordinary Hopf algebra and representations of Lie algebra objects in Verlinde. Lastly, I will describe the maximal tori in this category and classify their representation categories as Verlinde categories associated to algebraic groups of higher rank. (Received September 01, 2019)