1150-55-497 **Gregory Michel*** (miche417@umn.edu). *Nichols Algebras and Asymptotic Point Counts of Number Fields.* Preliminary report.

It has been conjectured that the number of degree n number fields with bounded discriminant is asymptotically linear in the discriminant bound. Moreover some limited data about the second order asymptotics has been computed for small n. In this talk, we'll relate recent work of Ellenberg, Tran, and Westerland on Hurwitz spaces and Quantum Shuffle Algebras to this topic, and we'll explore the relation between Nichols Algebras and this asymptotic point count. Finally, we'll explain some preliminary results describing Nichols Algebras when the underlying group is a dihedral group. (Received July 15, 2019)