

1151-11-150

Matthew Schmidt* (mwschmid@buffalo.edu). *Dwork Theory and the Artin-Hasse Exponential.*

The Artin-Hasse exponential plays a central role in explicit Dwork Theory. In this talk, we will examine some p -adic properties of this power series and discuss a handful of open problems. In particular, the coefficients of the Artin-Hasse exponential have an interesting combinatorial interpretation and have been studied in some form for years. We will also discuss how this theory relates to some new computations involving Newton polygons of exponential sums. (Received August 15, 2019)