1125-VN-2923 **Joseph Gunther\*** (`jgunther@gradcenter.cuny.edu`), **Daniel Hast** and **Vlad Matei**.
*Counting low degree extensions of function fields.*

Recent work of Bhargava, Shankar, and Wang extended results on counting low-degree $S_n$-extensions to allow any global field as the base field. Their work uses geometry of numbers for both number fields and function fields. We'll show how, in the function field case, one can instead give algebro-geometric proofs, which shed light on the geometry present in the number field situation as well. This is joint work with Daniel Hast and Vlad Matei. (Received September 20, 2016)