Philadelphia Area Number Theory Seminar

Joseph Gunther City University of New York

Counting Low-Degree Extensions of Function Fields

Abstract: Recent work of Bhargava, Shankar, and Wang extended results on counting low-degree number fields to allow any global field as the base field. Their work uses geometry of numbers for both number fields and function fields. We'll explain 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. Some of this is joint work with Daniel Hast and Vlad Matei.

> Wednesday, October 5, 2016 3:10–4:30PM

Bryn Mawr College Department of Mathematics Park Science Center **328** Tea and refreshments at 2:50PM in Park 355