

ALGEBRA
SEMINAR

Forms of Toric Varieties

Alex Duncan
University of Michigan

Abstract: A toric variety is a special kind of compactification of a torus. A basic example of a toric variety is a projective space \mathbb{P}^n . Given an $n+1$ -dimensional vector space V there is a canonical projection map from V (minus the origin) to \mathbb{P}^n . A construction of Cox generalizes this situation to toric varieties. I will introduce toric varieties, then show how one may use Cox's construction to classify their forms over non-algebraically closed fields using Galois cohomology.

Tuesday, March 25, 2014, 4:00 pm
Mathematics and Science Center: W302

MATHEMATICS AND COMPUTER SCIENCE
EMORY UNIVERSITY