

TOPOLOGY SEMINAR

Christian Haesemeyer (UCLA)

On the K -theory of toric varieties in characteristic p

Tuesday, April 16th, 4:00pm, in 383-N

Abstract: We will explain our recent joint work with G. Cortinas, M. Walker and C. Weibel concerning properties of the algebraic K -theory of toric varieties in positive characteristic. The results are proved using trace methods and a variant of the cyclic nerve construction that provides a homotopy theoretical model of the so-called Danilov sheaves of differentials. Most of the technical work happens completely within the world of monoid schemes (which are a particular manifestation of what goes by the name of “schemes over the field with one element”).