Meeting: 999, Nashville, Tennessee, SS 6A, Special Session on Local and Homological Algebra

999-13-141 Anurag K Singh* (singh@math.gatech.edu), School of Mathematics, 686 Cherry Street, Georgia Institute of Technology, Atlanta, GA 30332-0160. The F-signature of an affine semigroup ring.

We prove that the F-signature of an affine semigroup ring of positive characteristic is a rational number, and describe a method for computing this number. We use this method to determine the F-signature in some examples. (Received August 19, 2004)