Meeting: 999, Nashville, Tennessee, SS 8A, Special Session on Algebraic Geometry and Commutative Algebra

999-13-274 Luchezar L. Avramov<sup>\*</sup>, Department of Mathematics, University of Nebraska, Lincoln, NE 68516, and Oana Veliche (oveliche@math.utah.edu), Department of Mathematics, University of Utah, Salt Lake City, UT. Tate-Vogel cohomology algebras over some Gorenstein local rings.

Much of the additive structure of Tate cohomology can be recovered by using classical Ext and Tor functors, but few tools are available for computing its multiplicative structure. The cohomology algebra of the residue field of a Gorenstein ring presents a test case for such computations. When the ring is a hypersurface section of a ring of the same embedding dimension a nearly complete answer is available and will be presented in the talk. (Received August 24, 2004)