

**Meeting:** 1006, Lubbock, Texas, SS 6A, Special Session on Real Algebraic Geometry

1006-14-244      **Paulo Lima-Filho\*** (plfilho@math.tamu.edu), Department of Mathematics, Texas A&M University, College Station, TX 77843, and **Pedro F. dos Santos** (pedfs@math.ist.utl.pt), Departamento de Matematica, Instituto Superior Tecnico, Lisbon, Portugal. *On the  $RO(\mathbb{Z}/2)$ -graded equivariant cohomology of geometrically cellular real varieties.*

We study the  $RO(\mathbb{Z}/2)$ -graded Bredon cohomology of geometrically cellular varieties, along with the associated Borel cohomology theory. These are natural realizations of their motivic and etale motivic cohomology theories. Examples include the computation of the bigraded ring structure of the Bredon cohomology of real quadrics. (Received February 15, 2005)