

Meeting: 1003, Atlanta, Georgia, SS 34A, AMS Special Session on Algorithmic Algebraic and Analytic Geometry, I

1003-14-1124 **Clint McCrory*** (clint@math.uga.edu), Department of Mathematics, University of Georgia,
Athens, GA 30602. *Stiefel-Whitney classes of real toric varieties*. Preliminary report.

The k th Stiefel-Whitney homology class of an n -dimensional real toric variety X is represented by the mod 2 cycle which is the sum of the closures of the k -dimensional orbits of the action of $(\mathbb{R}^*)^n$ on X . To prove this result a theorem of Banchoff and the author is applied to the composition of the moment map $X \rightarrow \mathbb{R}^n$ with projection to a generic $(k + 1)$ -plane. (Received October 04, 2004)