

**Meeting:** 1001, Evanston, Illinois, SS 1A, Special Session on Modern Schubert Calculus

1001-14-324      **Tom Braden\*** (braden@math.umass.edu), **Linda Chen** and **Frank Sottile**. *Equivariant cohomology of the Quot scheme*. Preliminary report.

We describe the  $T$ -equivariant cohomology of the Quot scheme compactifying the space of degree  $d$  maps from  $\mathbb{P}^1$  to the Grassmannian  $\text{Gr}(r, n)$ , where  $T$  is the product of the natural torus acting on the Grassmannian with a  $\mathbb{C}^*$  acting on  $\mathbb{P}^1$ . The calculation is by equivariant localization. The one-dimensional orbits are not isolated, but we can describe explicitly the relations coming from each connected family of one-dimensional orbits, since the closure of each such family is a product of projective spaces. (Received August 30, 2004)