

1131-14-392

**Stephen Oloo\*** ([stephen.oloo@kzoo.edu](mailto:stephen.oloo@kzoo.edu)), 1200 Academy Street, Kalamazoo, MI 49006.  
*Generalized Moment Graphs and the Equivariant Intersection Cohomology of the Wonderful Compactification of a Group.*

We describe a method for computing the equivariant intersection cohomology of certain subvarieties of the wonderful compactification of a semisimple adjoint complex algebraic group. Specifically, we compute equivariant intersection cohomology of the borel orbit closures with respect to a torus action. This approach uses only the structure of certain low dimensional torus orbits, encoding this information combinatorially in what we call a *generalized moment graph* and yielding a functorial description of the cohomology in terms of ‘sheaves’ on the generalized moment graph. This work generalizes the moment graph approach of Braden and MacPherson to computing equivariant intersection cohomology of schubert varieties. (Received July 18, 2017)