1126-05-398   **Julianna Tymoczko*** (`jtymoczko@smith.edu`), Department of Mathematics and Statistics, Smith College, 44 College Lane, Northampton, MA 01060. *Equivariant cohomology of certain affine Springer fibers.*

The (finite) Springer fiber is a subvariety of the flag manifold whose geometry encodes information about the representations of the symmetric group. We describe an infinite analogue: the affine Springer fiber sitting inside the affine Grassmannian. Using the methods of Goresky-Kottwitz-MacPherson, we give explicit generating sets for the equivariant cohomology of certain affine Springer fibers. Part of this work is joint with Holly Mandel of Rutgers University and Claudia Yun of Smith College. (Received January 18, 2017)