1125-55-1943   **Julianna Tymoczko*** (`jtymoczko@smith.edu`), Department of Mathematics and Statistics, Smith College, Northampton, MA 01063. *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. We will explicitly describe generating sets for certain affine Springer fibers, using the combinatorial methods of Goresky-Kottwitz-MacPherson. Part of this work is joint with Claudia Yun of Smith College. (Received September 19, 2016)