1125-53-844   **Chen He*** (`he.chen@husky.neu.edu`). *GKM graphs for odd dimensional manifolds with torus actions.*

Let torus T act on a manifold M, if the equivariant cohomology $H_T^*(M)$ is a free module of $H_T^*(pt)$, then according to the Chang-Skjelbred Lemma, $H_T^*(M)$ can be determined by the 1-skeleton M_1 consisting of fixed points and 1-dimensional orbits. Goresky, Kottwitz and MacPherson considered the case where M is an algebraic manifold and M_1 is 2-dimensional, and introduced a graphic description of equivariant cohomology. In this paper, we follow those ideas to consider the case where M is an odd-dimensional (possibly non-orientable) manifold and M_1 is 3-dimensional, and give a similar graphic description of equivariant cohomology. (Received September 12, 2016)