## On the structure of the first homology of the group of equivariant diffeomorphisms of manifolds with smooth torus actions

Kōjun Abe (Shinshu University)

We calculated the first homology group of diffeomorphims of smooth orbifolds and applied to the case of smooth manifolds with finite group actions in [1]. In this talk we shall calculate the first homology of the group of equivarinat diffeomorphisms of manifolds with smooth torus actions.

## References

 K. Abe and K. Fukui, The first homology of the group of equivariant diffeomorphisms and its applications, Journal of Topology, 1 (2008), 461-476.