

1172-55-43

Sarah Petersen* (speter13@nd.edu). *The $RO(C_2)$ - Homology of C_2 - Equivariant Eilenberg-MacLane Spaces.*

This talk describes work in progress computing the $H\underline{\mathbb{F}}_2$ homology of the C_2 - equivariant Eilenberg-MacLane spaces associated to the constant Mackey functor $\underline{\mathbb{F}}_2$. We expand a Hopf ring argument of Ravenel-Wilson computing the mod p homology of non-equivariant Eilenberg-MacLane spaces to the $RO(C_2)$ setting. An important tool that arises in this equivariant context is the twisted bar spectral sequence which is quite complicated, lacking an explicit E_2 page and having arbitrarily long equivariant degree shifting differentials. We avoid working directly with these differentials and instead use a computational lemma of Behrens-Wilson along with norm and restriction maps to complete the computation. (Received August 11, 2021)