The \textit{RO}(C_2)-graded homology of \textit{C}_2\text{-equivariant Eilenberg–MacLane spaces}

Abstract: This talk describes an extension of Ravenel–Wilson Hopf ring techniques to \textit{C}_2\text{-equivariant homotopy theory. Our main application and motivation for introducing these methods is a computation of the \textit{RO}(C_2)-graded homology of \textit{C}_2\text{-equivariant Eilenberg–MacLane spaces. The result we obtain for \textit{C}_2\text{-equivariant Eilenberg–MacLane spaces associated to the constant Mackey functor } \mathbb{F}_2 \text{ gives a } \textit{C}_2\text{-equivariant analogue of the classical computation due to Serre at the prime 2. We also investigate a twisted bar spectral sequence computing the homology of these equivariant Eilenberg–MacLane spaces.}