TOPOLOGY SEMINAR
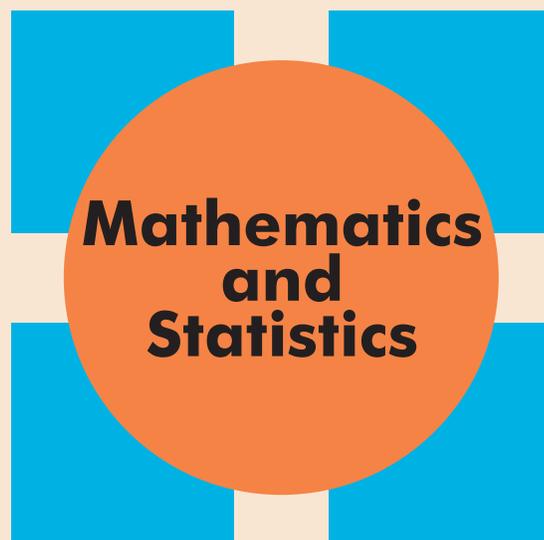
Sarah Petersen
MPIM Bonn

The $RO(C_2)$-graded homology of C_2-equivariant Eilenberg–MacLane spaces

Mathematics and Statistics

Date: Monday November 14, 2022
Time: 1:00 PM
Zoom link:

https://uregina-ca.zoom.us/j/99127226830?pwd=bnFQR1R3UUdyWUxqSS9JMExMRlZwZz09

Abstract: This talk describes an extension of Ravenel–Wilson Hopf ring techniques to C_2-equivariant homotopy theory. Our main application and motivation for introducing these methods is a computation of the $RO(C_2)$-graded homology of C_2-equivariant Eilenberg–MacLane spaces. The result we obtain for C_2-equivariant Eilenberg–MacLane spaces associated to the constant Mackey functor $\underline{\mathbb{F}}_2$ gives a C_2-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.

University of Regina