



INDIAN STATISTICAL INSTITUTE
Theoretical Statistics and Mathematics Unit, Kolkata

Thesis Defence Seminar

Date: December 29, 2023
Time: 02:30 PM

VENUE/MODE: Online
(Link to be provided later)

TITLE:

Equivariant Homology Decompositions for Projective Spaces and Associated Results

SPEAKER:

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ABSTRACT:

In this talk I will discuss some basic notions in equivariant cohomology theory to finally present our work where we have calculated the equivariant additive homology decompositions of complex and quaternionic projective spaces. Some applications of these results include proving non-existence of some cohomology operations. Following Lewis's approach we have been able to calculate the equivariant cohomology ring structure of projective spaces with integer coefficients. There is another interesting construction of connected sums of equivariant projective planes by Humboldt and Tanasse. We have been able to give some specific conditions for constructing such connected sums and then calculated the homology decomposition structure.

ALL ARE CORDIALLY INVITED