



4 June, 2026

Ph.D. Thesis Defense

Speaker : *Sandeep S*
Title : *Two questions in the theory of $\mathbb{A}^1$ -invariant sheaves*
Date & Time : *Wednesday, 10 June, 2026 at 4:00 p.m.*
Venue : *Lecture Room (AG-77) as well as Via Zoom*

Abstract

The talk will have two independent parts.

- Part 1: Bachmann proved a C_2 -equivariant version of Gabber's geometric presentation lemma. We extend this to the case of a general abelian group under suitable hypotheses.
- Part 2: We extend Otabe's definition of the unramified curve-tame cohomology groups to $\mathbb{A}^1$ -invariant étale sheaves under some additional hypotheses. We define a pairing of this group with the Suslin homology satisfying desirable properties and using this, we show that the unramified curve-tame cohomology of a smooth geometrically connected variety over a field of positive characteristic agrees with the cohomology of the base field.

Milind Pilankar

Zoom Link and Credentials

Meeting ID: 9341 5866 010

Passcode: 7073 8718
