



**GOLDEN JUBILEE
DISTINGUISHED ALUMNI
LECTURE SERIES
2025**

**SCHOOL OF MATHEMATICS AND
STATISTICS**

Chair: Prof. Saroj Panigrahi

Dean, School of Mathematics and Statistics
University of Hyderabad

Date & Time:

24 Feb, 2025 | 02:30 PM

Venue:

Central Seminar Hall (East Campus)

Coordinator : Dr. M.S.Datt

School of Mathematics and Statistics
University of Hyderabad

SPEAKER



Prof. A J PARAMESWARAN

Former Professor, Tata Institute of Fundamental Research, Mumbai. Visiting Professor, Kerala School of Mathematics, Kerala. He completed his M.Sc from University of Hyderabad and Ph.D from Tata Institute of Fundamental Research, Mumbai.

Title of the talk

Genuinely Ramified maps and some consequences

Abstract

We will begin with various equivalent definitions of genuinely ramified map of complete varieties:

- (a) Purely topological definition over complex numbers.
- (b) Using etale fundamental group over any algebraically closed field
- (c) Using the direct image of the structure sheaf
- (d) Using the fibre product over itself and its connectedness
- (e) Using fibre product (as in (d)) minus the diagonal

We will begin with defining/discussing those notions mentioned above with some examples. Finally we will state some results as a consequence:

- 1) The Galois group of a general projection of a curve is the full symmetric group.
- 2) If a dominant morphism between smooth projective varieties X and Y including isomorphism of the etale fundamental group will induce isomorphism on the stratified fundamental group.