



Du
07
DÉC.
2022

14h00
-
15h30

RÉGA

Vaidehee Thatte - 14h00 - Understanding the Defect via Ramification Theory

Salle Grisvard, IHP, Paris

INSCRIPTION

Classical ramification theory deals with complete discrete valuation fields $k((X))$ with perfect residue fields k . Invariants such as the Swan conductor capture important information about extensions of these fields. Many fascinating complications arise when we allow non-discrete valuations and imperfect residue fields k . Particularly in positive residue characteristic, we encounter the mysterious phenomenon of the *defect* (or ramification deficiency). The occurrence of a non-trivial defect is one of the main obstacles to long-standing problems, such as obtaining resolution of singularities in positive characteristic.

Degree p extensions of valuation fields are building blocks of the general case. In this talk, we will present a generalization of ramification invariants for such extensions and discuss how this leads to a better understanding of the defect. If time permits, we will briefly discuss their connection with some recent work (joint with K. Kato) on upper ramification groups.

URL of the page: <https://www.ihp.fr/fr/agenda/vaidehee-thatte-14h00-understanding-defect-ramification-theory>



INSTITUT HENRI POINCARÉ - UAR839

Sorbonne Université / CNRS
11 rue Pierre et Marie Curie
75231 Paris Cedex 05

HORAIRES

L'institut :

- lundi au vendredi de 8h30 à 18h,
- fermé les jours fériés.

Le musée - Maison Poincaré :

- lundi, mardi, jeudi et vendredi de 9h30 à 17h30,
- samedi de 10h à 18h,
- fermé le mercredi et le dimanche.