Arnab Kundu

PhD Student, 24 years old

Laboratoire de Mathématiques d'Orsay Université Paris-Saclay, France ⊠ arnab.kundu@universite-paris-saclay.fr www.imo.universite-paris-saclay.fr/~kundu/

Education

2020-2023 **PhD in Mathematics**, *3rd year*, Université Paris-Saclay, Orsay, France. under the supervision of Prof. Kęstutis Česnavičius

2018-2020 **Master : Mathématiques Fondamentales**, *Sorbonne Université*, Paris, France, Score - 18.9/20.

Mention: Très Bien

2015–2018 **B.Sc.(Hons.)**, *Chennai Mathematical Institute*, Chennai, India, *CGPA - 9.83*. Mathematics and Computer Science Undergraduate

Preprints:

arXiv:2110.10120

Tilting Correspondances of Perfectoid rings, accepted to the Journal of the Ramanujan Mathematical Society.

Grothendieck–Serre on Smooth over Valuation Rings, in Preparation. Purity over Valuation Rings, in Preparation.

Achievements:

- Recieved FSMP(Fondation Sciences Mathématiques de Paris) PSGM Masters 2018-2020 scholarship.
- Recieved Gold Medal for the best undergraduate academic record of the 2018 batch.
- Attended the Indian IMO training camp thrice in 2013, 2014 and 2015 which were held at HBCSE, Mumbai.

Talks

- November 2022 **Preprint Seminar**, *Paris*, "Torsors on the Complement of a Smooth Divisor" after Česnavičius.
- November 2022 **Seminar of PhD students**, *Orsay*, Grothendieck–Serre conjecture on Valuation Rings.
 - October 2022 **Seminar Mathjeunes**, *Paris*, Grothendieck–Serre conjecture on Valuation Rings.
 - June 2022 **Seminar SAGA**, *Orsay*, Tilting Correspondences of Perfectoid Rings.
- December 2021 Seminar RéGA, Paris, Tilting Correspondences of Perfectoid Rings.

Teaching Experience

- Fall 2022, Mathematics 1, Teacher, Institut Universitaire de Technologie (IUT).
- 2021 & 2020 Cachan, France
 - Fall 2016 Analysis 1, Teaching Assistant, Chennai Mathematical Institute(CMI), Chennai, India.
- January 2016 INMO Training Camp Chennai, Instructor.

Workshops and Conferences

- Spring 2022 Franco-Asian Summer School on Arithmetic Geometry, CIRM, Luminy, France.
 - Géométrie Algébrique en Liberté (GAeL) XXIX, Université Paris-Saclay, Orsay, France.
 - Cohomology of Varieties, IMPAN, Warsaw, Poland.
 - Kleine AG: Weil Conjectures, Universität Bonn, Germany.
 - Fall 2019 Perfectoid Spaces, ICTS, Bangalore, India.
- Summer 2019 **Arithmetic Geometry in Carthage**, *Tunisian Academy Beit al-Heikma*, Carthage, Tunisia.
- Summer 2018 **École Jeunes Chercheurs en Théorie des Nombres 2018**, *Université de Franche-Comté Laboratoire de Mathématiques de Besançon*, Besançon, France.
 - Winter 2017 ATMW Analytic Number Theory, ISI, Kolkata, India.
 - Winter 2016 Theoretical and Computational Aspects of the Birch and Swinnerton-Dyer Conjecture, *ICTS*, Bangalore, India.

Seminar Organising

2022- **Seminaire Réseau des étudiants en Géométrie Algébrique (RéGA)**, *Institut Henri Poincaré(IHP)*, Paris, France, Website.

Languages

Native Bengali

Advanced English

Intermediate French

Conversational Hindi

Absolute beginner German

Computer skills

Programming Python, Haskell, C++, C, Web design HTML, CSS Java