Arnab Kundu

PhD Student, 24 years old

Education

2020-2023 **PhD in Mathematics**, *2nd 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 over 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
- o KVPY(Kishore Vaigyanik Protsahan Yojana) SA 2013 scholar.

Talks

December 2021 Seminar RéGA, Tilting Correspondences of Perfectoid Rings.

February 2022 **Seminar CohoSing**, *The Arc Topology*.

Teaching Experience

Fall 2020, Mathematics - 1, Teacher, Institut Universitaire de Technologie (IUT).

2021 & 2022 Cachan, France

Fall 2016 Analysis 1, Teaching Assistant.

January 2016 INMO Training Camp Chennai, Instructor.

Internships

- Spring 2020 **M2 Mémoire**, *Tilting Correspondences for Integral Perfectoid Rings*, under Prof. Kęstutis Česnavičius, Université Paris-Saclay, France.
- Spring 2019 **T.E.R.**, *Proper Base Change Theorem in Etale Cohomology*, under Prof. Benoît Stroh, Sorbonne Université, Paris, France.
- Summer 2018 **CMI-ENS Exchange Program**, *Perfectoid Fields*, Under Prof. Ariane Mézard, École Normale Supérieure, Paris, France.
- Summer 2017 **Maths REU**, *The Étale Fundamental Group of an Elliptic Curve*, University of Chicago, Chicago, USA.
- Summer 2016 **Summer Internship**, Vershik Okunkov Approach to Representations of Symmetric Groups, Under Prof. K.N. Raghavan, IMSc, Chennai, India.

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.

Languages

Native Bengali

Advanced English

Intermediate French

Conversational Hindi

Absolute beginner German

Computer skills

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

Last updated on June 6, 2022