Arnab Kundu

PhD Student, 24 years old

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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 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
- **KVPY**(Kishore Vaigyanik Protsahan Yojana) SA 2013 scholar.

Talks

June 2022	**Seminar SAGA**, *Tilting Correspondences of Perfectoid Rings*.
December 2021	**Seminar RéGA**, *Tilting Correspondences of Perfectoid Rings*.
February 2022	**Seminar CohoSing**, *The Arc Topology*.

Teaching Experience

Fall 2022, 2021 & 2020	**Mathematics - 1**, *Teacher*, Institut Universitaire de Technologie (IUT). 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, Java   Web design HTML, CSS