

# LAURENCE PETRUS WIJAYA

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## ACADEMIC POSITIONS

**University of Kentucky**, Lexington, KY (2023-now)

- PhD Student in Mathematics, working under supervision of Fernando Shao.

## EDUCATION

**The Abdus Salam International Center for Theoretical Physics (ICTP)**, Trieste, Italy (2021-2022)

- Postgraduate Diploma

**Bandung Institute of Technology (ITB)**, Bandung, Indonesia (2015-2019)

- Bachelor of Science

## MATHEMATICAL RESEARCH: INTERESTS AND PUBLICATIONS

### Research Interests

- I am interested in analytic number theory, additive combinatorics, and related areas.

### Peer-Reviewed Publications

- (1) Laurence P. Wijaya, *On Monochromatic Solutions of Linear Equations Using At Least Three Colors*, *Integers* **25**, Paper No. A88, 2025.
- (2) Muhammad Afifurrahman, Pritta E. Putri, Devi I. D. Prismakun, Laurence P. Wijaya, *On constructing 1-factors of labelled complete graph  $K^{p+1}$* , *Boletín de la Sociedad Matemática Mexicana*, vol. 31, article 82.
- (3) Igor E. Shparlinski and Laurence P. Wijaya, *On Nonzero Coefficients of Binary Cyclotomic Polynomials*, *Journal of Number Theory*, vol. 271, 2025. The arXiv version is available [here](#).
- (4) Pritta E. Putri, Laurence P. Wijaya, *A Relationship Between Cayley-Dickson Process and The Generalized Study Determinant*, *Communications of Korean Mathematical Society*, vol.36, no.3, 2021.

### Submitted Work

- (1) Laurence P. Wijaya, *Roth's Theorem in Super Smooth Numbers*, preprint.
- (2) Xuancheng Shao, Igor E. Shparlinski, and Laurence P. Wijaya, *Sums of Kloosterman sums over square-free and smooth integers* (accepted to *Bulletin of the Australian Mathematical Society*).

## CONTRIBUTED RESEARCH TALKS AND WORKSHOPS

### Talks:

- Virtual Workshop in Arithmetic Combinatorics (2026, Invited)
- INTEGERS Conference 2025 (2025).
- Algebra Joint Seminar held by Indonesia Algebra Society with title "Introduction to Algebraic Number Theory" (2024).

- University of Kentucky Graduate Student Colloquium (2023, 2024, 2025).
- The Canadian Discrete and Algorithmic Mathematics Conference (2021).  
Speaker list can be found [here](#).

**Poster :**

- Midwest Arithmetic Geometry and Number Theory Series 2023, 2025.

**Attended :**

- Combinatorial and Additive Number Theory, New York Number Theory Seminar, attended online (2025).
- Ohio River Analysis Meeting 13, University Kentucky (2024).

RESEARCH SCHOOL

- SEAMS School Number Theory and Applications, Ho Chi Minh City, Vietnam (2023).
- CIMPA Introduction to Galois Representations and Modular Forms and their Computational Aspects, Manila, Philippines (2023).
- International school on Algebraic Geometry and Algebraic Groups, Hanoi, Vietnam (2022).
- IHES Summer School on Langlands Program, participated online (2022).
- Cohomology, Geometry, and Explicit Number Theory, participated online (2022).
- International school on Algebraic Geometry and Algebraic Groups and Workshop on Commutative Algebra and Algebraic Geometry, participated online (2021).
- Trimester Program by Hausdorff Institute of Mathematics, participated online (2021).
- Summer School in Analytic Number Theory, participated online (2021).
- Future Research Talent, Australian National University, done online (2021).
- CIMPA Group Actions in Arithmetic and Geometry, Yogyakarta, Indonesia (2020).

JOURNAL REFEREED

Electronic Journal of Combinatorics.

TEACHING EXPERIENCE

**Primary Instructor :** Teaching a class, making and grading homeworks, quizzes, and exams.

- MA 322 (Matrix Algebra) (Spring 2026).

**Teaching Assistant:** Holding recitation for two sections, each section has two recitations a week. Grading assignments and exams. Proctoring exams. In MA 213 make quiz problems.

- University of Kentucky.
  - MA 162 (Finite Mathematics and Its Applications) (Spring 2025).
  - MA 213 (Calculus III) (Fall 2024).
  - MA 213 (Calculus III) (Spring 2024).
  - MA 113 (Calculus I) (Fall 2023).

**Grading Assistant :** Grade homeworks and quizzes for the course.

- Bandung Institute of Technology
  - Introduction to Real Analysis (2018).
  - Introduction to Complex Analysis (2018).

**Miscellany**

- Algebra Prelim Coaching (Winter 2025).

#### SELECTED AWARDS

- Access, Community, and Engagement Award, given to graduate students who contribute significantly to the promotion of access, community, and/or engagement to the university or the broader community (Summer 2025).
- Ed Enoch Graduate Scholarship in Algebra, given to outstanding student that are working in the area of algebra (Summer 2025).
- Research Assistant of Zhongwei Shen, the topic is real variable method applies to PDE (Summer 2024).
- ICTP Scholarship (2021).
- Dean's List for 7 semesters (GPA at least 3.50/4.00) at Bandung Institute of Technology (2019).
- Top Quarter in Simon Marais Mathematics Competition (SMMC) for Team Section (2018).
- Honourable Mention in International Mathematics Competition (IMC) for University Students in Blagoevgrad, Bulgaria (2018).
- Silver medalist in Indonesia National Olympiad in Mathematics and Natural Sciences for University Students for Mathematics Section (ONMIPA) (2018).
- First Prize in Indonesia National Science Olympiad (OSN) for Mathematics Section, held by Ministry of Education and Sports Yogyakarta, Indonesia (2017).