LAURENCE PETRUS WIJAYA

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ACADEMIC POSITIONS

University of Kentucky, Lexington, KY

• PhD Student in Mathematics, starting from fall 2023.

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) 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.
- (2) 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.
- (3) 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, On Monochromatic Solutions of Linear Equations Using At Least Three Colors (accepted to Integers).
- (2) Xuancheng Shao, Igor E. Shparlinski, and Laurence P. Wijaya, Sums of Kloosterman sums over square-free and smooth integers.

CONTRIBUTED RESEARCH TALKS AND WORKSHOPS

Talks:

- 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).

TEACHING EXPERIENCE

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).

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).