

Yutaro Mikami

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EDUCATION

- Doctor course, Mathematical Science, The University of Tokyo, April 2023-present (expected to graduate in March 2026)
Supervisor: Yoichi Mieda
- Master, Mathematical Science, The University of Tokyo, April 2021-March 2023
- Bachelor, Science, The University of Tokyo, April 2017-March 2021

Grants/Fellowship

- JSPS Research Fellow (DC1), Japan Society for the Promotion of Science, April 2023-March 2026

Awards

- Dean's Award (Master Course, valedictorian), Graduate school of Mathematical Science, The university of Tokyo, March 2023

Papers

1. "Faithfully flat descent of quasi-coherent complexes on rigid analytic varieties via condensed mathematics." *Int. Math. Res. Not. IMRN* 2024, no. 8, 7099–7128.
2. "Fppf-descent for condensed animated rings." *arXiv preprint arXiv:2311.13408* (2023)
3. " (φ, Γ) -modules over relatively discrete algebras." *arXiv preprint arXiv:2409.14145* (2025)
4. "Finiteness and duality of cohomology of (φ, Γ) -modules and the 6-functor formalism of locally analytic representations." *arXiv preprint arXiv:2504.01780* (2025)
5. "On the relative nullstellensatz in nonarchimedean geometry." with Kiran S. Kedlaya, *arXiv preprint arXiv:2503.18183* (2025)

Talks in Seminars/Workshops/Conferences

1. 21st Sendai-Hiroshima Workshop on Number theory, Tohoku University, July 14, 2022
2. Number Theory Seminar, Kyoto University, July 29, 2022
3. *Kurashiki Number Theory Meeting, Kurashiki Seaside Hotel, September 6-7, 2022 (survey)
4. *Kurashiki Number Theory Meeting, Kurashiki Seaside Hotel, February 6-10, 2023 (survey)
5. Number Theory Seminar, The University of Tokyo, May 24, 2022
6. *Kurashiki Number Theory Meeting, Kurashiki Seaside Hotel, September 11-18, 2023 (survey)
7. UTokyo-NTU joint conference: Number theory and arithmetic geometry, National Taiwan University, December 7-8, 2023

8. *Kanazawa Arithmetic Geometry Meeting, Ishikawa Prefectural bunkyo hall, March 25-29, 2024 (survey)
9. 23rd Sendai-Hiroshima Workshop on Number theory, Tohoku University, July 11, 2024
10. Workshop on Shimura varieties, representation theory and related topics, The University of Tokyo, October 10, 2024
11. Algebraic Number Theory and Related Topics 2024, RIMS, January 6, 2025
12. 2025 Lyon-Tokyo conference in Number Theory and Arithmetic Geometry, ÉNS de Lyon, March 25, 2025

Teaching

1. Winter 2023, Teaching assistant, “Algebra and Geometry”, The University of Tokyo.
2. Winter 2024, Teaching assistant, “Algebra and Geometry”, The University of Tokyo.