

# Kazuma Ohara | Curriculum Vitae

Graduate School of Mathematical Sciences, The University of Tokyo,  
3-8-1 Komaba, Meguroku, Tokyo 153-8914, Japan  
✉ kohara@ms.u-tokyo.ac.jp

## Education

---

- Doctor, Mathematical Sciences, The University of Tokyo, April 2022–present  
Supervisor: Noriyuki Abe, Tasho Kaletha (2023 winter; short-term stay at the University of Michigan)
- Master, Mathematical Sciences, The University of Tokyo, April 2020–March 2022  
Thesis: *Hecke algebras for tame supercuspidal types*  
Supervisor: Noriyuki Abe
- Bachelor, Science, The University of Tokyo, April 2016–March 2020

## Research Interests

---

- Representation theory of Hecke algebras and reductive groups over local fields
- Langlands correspondence and Langlands functoriality

## Grants/Fellowships

---

- JSPS Research Fellow (DC1), Japan Society for the Promotion of Science (Grant Number: 22J22712), April 2022–March 2025
- FMSP course student, The Leading Graduate Course for Frontiers of Mathematical Sciences and Physics, September 2020–March 2025

## Award

---

- Dean's Award(Master's course), Graduate School of Mathematical Sciences, the University of Tokyo, March 2022.

## Papers

---

### Published or Accepted:

1. *Hecke algebras for tame supercuspidal types*, Amer. J. Math. **146** (2024), no. 1, 277–293. MR 4691489
2. *On the formal degree conjecture for non-singular supercuspidal representations*, Int. Math. Res. Not. IMRN (2023), no. 13, 10997–11034. MR 4609777

### Preprints:

1. *A comparison of endomorphism algebras*, arXiv e-prints (2023), arXiv:2301.09182.

## **Talks in Seminars/Workshops/Conferences**

---

- (1) Landscape of Representation Theory, Aoyama Gakuin University, August 1-2, 2024, promised
- (2) Seminar on Number Theory and Automorphic Forms, Osaka University, July 12, 2024, promised
- (3) 23rd Sendai-Hiroshima Workshop on Number theory, Tohoku University, July 9-12, 2024, promised
- (4) Kanazawa Algebra Seminar, Kanazawa University, June 18, 2024
- (5) Expansion in Representation Theory and Harmonic Analysis, RIMS, June 11-14, 2024
- (6) Number theory seminar at Waseda university, Waseda University, May 31, 2024
- (7) Research on automorphic forms, RIMS, January 22-26, 2024
- (8) Symposium on Representation Theory 2021, Okinawa, Japan, November 20-22, 2023
- (9) 24th Autumn Workshop on Number Theory, Hokkaido University, October 30 to November 3, 2023
- (10) Kurashiki Number Theory Meeting 2023, Kurashiki Seaside Hotel, September 11-18, 2023
- (11) Trimester Seminar Series, Hausdorff Institute For Mathematics, May 18, 2023
- (12) Group, Lie and Number Theory Seminar, the University of Michigan, March 27, 2023
- (13) Johns Hopkins Number Theory Seminar, Johns Hopkins University, February 08, 2023
- (14) 9th Kyoto conference on automorphic forms, Kyoto University, June 24-26, 2022
- (15) Algebraic Lie Theory and Representation Theory, online, May 23-27, 2022
- (16) Automorphic form, automorphic  $L$ -functions and related topics, RIMS, January 24-28, 2022
- (17) Colloquium of Algebra, the University of Tokyo, November 24, 2021
- (18) Symposium on Representation Theory 2021, online, November 18-21, 2021

## **Teaching Experiences**

---

### **Teaching Assistant**

- (1) Summer 2024, Teaching assistant, "Foundations of Analysis" , University of Tokyo
- (2) Winter 2022, Teaching assistant, "Algebra and Geometry" , University of Tokyo
- (3) Summer 2022, Teaching assistant, "Foundations of Analysis" , University of Tokyo
- (4) Winter 2021, Teaching assistant, "Algebra and Geometry" , University of Tokyo
- (5) Summer 2021, Teaching assistant, "Foundations of Analysis" , University of Tokyo
- (6) Winter 2020, Teaching assistant, "Algebra and Geometry" , University of Tokyo
- (7) Summer 2020, Teaching assistant, "Foundations of Analysis" , University of Tokyo