# Kazuma Ohara | Curriculum Vitae

Graduate School of Mathematical Science, The University of Tokyo, 3-8-1 Komaba, Meguroku, Tokyo 153-8914, Japan 

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#### **Education**

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

Supervisor: Noriyuki Abe

o Bachelor, Science, The University of Tokyo, April 2016-March 2020

#### **Research Interests**

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

### **Grants/Fellowships**

- o 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 Science and Physics, September 2020–March 2025

#### **Award**

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

#### **Papers**

#### **Published or Accepted:**

- 1. On the formal degree conjecture for non-singular supercuspidal representations, Int. Math. Res. Not. IMRN (2023), no. 13, 10997–11034. MR 4609777
- 2. Hecke algebras for tame supercuspidal types, arXiv e-prints (2021), to appear in American Journal of Mathematics, arXiv:2101.01873.

#### **Preprints:**

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

## Talks in Seminars/Workshops/Conferences

- o Research on automorphic forms, RIMS, January 22-26, 2024 (promised)
- o Symposium on Representation Theory 2021, Okinawa, Japan, November 20-22, 2023
- o 24th Autumn Workshop on Number Theory, Hokkaido University, October 30 to November 3,

#### 2023

- o Kurashiki Number Theory Meeting 2023, Kurashiki Seaside Hotel, September 11-18, 2023
- o Trimester Seminar Series, Hausdorff Institute For Mathematics, May 18, 2023
- o Group, Lie and Number Theory Seminar, the University of Michigan, March 27, 2023
- o Johns Hopkins Number Theory Seminar, Johns Hopkins University, February 08, 2023
- o 9th Kyoto conference on automorphic forms, Kyoto University, June 24-26, 2022
- o Algebraic Lie Theory and Representation Theory, online, May 23-27, 2022
- o Automorphic form, automorphic L-functions and related topics, RIMS, January 24-28, 2022
- o Colloquium of Algebra, the University of Tokyo, November 24, 2021
- o Symposium on Representation Theory 2021, online, November 18-21, 2021