

Yu-Sheng Lee

Department of Mathematics
University of Michigan, Ann Arbor,
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EDUCATION

Columbia University, New York, NY, USA Sep 2017 - May 2023
Ph.D. in Mathematics
Thesis advisor: Eric Urban

National Taiwan University, Taipei, Taiwan Sep 2012 - May 2016
B.S. in Mathematics

EMPLOYMENT

University of Michigan, Ann Arbor, MI, USA Aug 2023 - Present
Assistant Professor (non-tenure track)

RESEARCH INTERESTS

Number Theory, Arithmetic of L-functions, Galois representations, and automorphic forms.

PREPRINTS AND PUBLICATION

- *Anticyclotomic Euler Systems for CM fields*,
Preprint. ([arXiv](#))
- *Hida family of theta lift from $U(1)$ to definite $U(2)$* ,
Submitted. ([arXiv](#))
- *Derived p -adic heights and the leading coefficient of the Bertolini–Darmon–Prasanna p -adic L -function*, with Francesc Castella, Chi-Yun Hsu, Debanjana Kundu, and Zheng Liu,
Trans. Amer. Math. Soc. Ser. B 12 (2025), 748–788. ([journal](#), [arXiv](#))

TEACHING

University of Michigan

- Applied Honor Calculus II, Fall 2025
- Applied Modern Algebra, Winter 2024
- Calculus II(2 sections), Fall 2024
- Calculus II(2 sections), Winter 2023
- Calculus II(2 sections), Fall 2023

Columbia University

- Calculus II, Fall 2021
- Linear Algebra, Summer 2020

INVITED TALKS

- *Fourier coefficients of theta functions*
NCTS Number Theory Day, Jul 2025

- *Anticyclotomic Euler systems for CM fields*
University of Michigan GLNT seminar, Apr 2025
- *Congruences of automorphic forms and Euler systems*
Arithmetic aspects of automorphic forms and automorphic representations, RIMS, Jan 2025
- *Families of CM forms*
University of Michigan RTG Number Theory seminar, Mar 2024
- *Arithmetic of theta liftings*
UBC Number Theory Seminar, Oct 2022
- *Ribet's converse to the Herbrand theorem*
Columbia Number Theory Seminar, Oct 2022

LANGUAGES

Mandarin(Native), English(Fluent), Japanese(Intermediate)