## Yu Xin

Contact Depar

Department of Mathematics

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Information

Bar-Ilan University

Ramat-Gan, 5290002, Israel

EMPLOYMENT

Bar-Ilan University, 2023-current

Postdoctoral Researcher, Mathematics

**EDUCATION** 

Brandeis University, 2017-2023

Ph.D., Mathematics, August 2023

• Dissertation Topic: On the  $Sp_{2n}$ -Distinguished Spectrum of  $U_{2n}$ 

• Advisor: Omer Offen

Brandeis University, 2015-2017

Master of Art, Mathematics, May 2017

Tongji University, 2010-2015

Bachelor of Science, Mathematics and Applied Mathematics, July 2015

• Thesis Topic: Some Relations of Multiple Zeta Values and Their Applications

• Advisor: Zhonghua Li

RESEARCH INTERESTS Number Theory, Representation Theory, Automorphic Representation, Period Integral, Local Langlands Correspondence

**PAPERS** 

On the Rankin-Selberg gamma factor of simple supercuspidal representations of the even unitary group for p-adic local fields, submitted, arXiv:2410.11995

On the  $Sp_{2n}$ -distinguished spectrum of  $U_{2n}$ , submitted, arXiv:2412.05518

Honors and Awards Harold I Levine Endowed Fellowship Prize, 2022

Summer research funding, 2021

INVITED TALKS

On the Rankin-Selberg gamma factor of simple supercuspidal representations of the unitary group for p-adic local fields, p-adic Lie group representation theory seminar, Beihang University, Nov. 2024

OTHER TALKS

On the Casselman-Shalika Formula, Ph.D. qualification major exam (advisor: Omer Offen), Brandeis University, Oct. 2021

The Root Datum of a Reductive Group, Ph.D. qualification minor exam (advisor: Jöel Bellaïche), Brandeis University, May 2021

An Introduction to the Langlands Program, Graduate Student Seminar, Brandeis University, November 2021

Conference Participation Winter STAR 2024 workshop, Weizmann Institute of Science, Rehovot, Israel, Dec 24-26, 2024

The 25th Autumn Workshop on Number Theory (Representation theory of p-adic groups and related topics), Hokkaido University, Sapporo, Japan, Oct 28 - Nov 1, 2024

Modular Forms, L-functions and Eigenvarieties (A conference in memoriam of Joël Bellaïche), École Normale Supérieure, Paris, France, June 18-21, 2024

Teaching	
Experience	

Fall 2017	Teaching Assistant, Introduction to Combinatorics
Spring 2018	Teaching Assistant, Mathematical Statistics
Spring 2019	Instructor, Techniques of Calculus (a)
Summer 2019	Instructor, Techniques of Calculus (b)
Fall 2019	Instructor, Techniques of Calculus (a)
Spring 2020	Instructor, Techniques of Calculus (a)
Fall 2020	Teaching Assistant, Real Analysis
Spring 2021	Teaching Assistant, Complex Analysis

Fall 2021 Teaching Assistant, Introduction to Combinatorics

Spring 2022 Teaching Assistant, Topology II Fall 2022 Instructor, Applied Linear Algebra Spring 2023 Instructor, Applied Linear Algebra

OTHER EXPERIENCE Evening Help on Calculus, Fall 2017 & Spring 2018

ENCE Instructor of Brandeis Graduate Students Prep Camp, Algebra, 2021 & 2022

MISCELLANIES

Language Proficiency: Chinese(native), English(fluent), Japanese(fluent)