

Pan Yan

Curriculum Vitae

OSU Math Department
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Education

- 2016 – 2022 **Ph.D.** in Mathematics, The Ohio State University
(expected) Advisor: [James W. Cogdell](#)
- 2014 – 2016 **M.S.** in Mathematics, Oklahoma State University
Advisor: [Mahdi Asgari](#) GPA:4.0/4.0
- 2010 – 2014 **B.S.** in Mathematics, Beijing University of Chemical Technology (BUCT)
GPA Ranking: 1/51

Research Interests

Number Theory and Representation Theory. I am especially interested in automorphic forms and representations, integral representations of L -functions, converse theorems, functoriality, representation theory of real and p -adic groups, the Langlands program.

(Pre)publications

- **On the poles of the L -function for $\mathrm{Sp}(4) \times \mathrm{GL}(2)$** , in advanced stage of preparation
- **A note on a Rankin-Selberg integral for $\mathrm{SL}(2) \times \mathrm{GL}(2)$** , preprint available upon request
- **L -function for $\mathrm{Sp}(4) \times \mathrm{GL}(2)$ via a non-unique model**, [arXiv:2110.05693](https://arxiv.org/abs/2110.05693)
- **On unipotent orbital integrals for p -adic groups**, [Master Thesis](#), Oklahoma State University
- **Study of the optimization of cylindrical nanoparticle centrifugation**, (with Jinyang Huang), Journal of Beijing University of Chemical Technology (Natural Science Edition), 2013, 40(4), 125-128. (in Chinese, with English abstract)

Research Talks

- 2021 Dec. HAAR (Harmonic Analysis and Automorphic Representations) Zoominar (scheduled)
- 2021 Nov. Algebra, Geometry, and Number Theory Seminar at University of South Carolina (scheduled invited talk)
- 2021 Oct. Morningside Seminar on Number Theory at Morningside Center of Mathematics (invited talk)
- 2021 Oct. Upstate Number Theory Conference at Union College (contributed talk)
- 2021 Oct. Number Theory Seminar at Ohio State (invited talk)

Honors and Awards

- 2021 Apr. Finalist for Phil Huneke Distinguished Graduate Teaching Associate Award, Ohio State Math Department (9 out of around 140 graduates students were selected to be finalists)
- 2019 Spring SGA (Special Graduate Assignment) Award, Ohio State Math Departmental Fellowship (awarded based on academic merit)
- 2016 Mar. Hazel Bucy Graduate Award, Oklahoma State Math Department
- 2015 Oct. Phi Kappa Phi member
- 2015 Apr. Schiller J. Scroggs Distinguished Graduate Fellowship, Oklahoma State Math Department (“The recipient of this award is a student who displays academic leadership and outstanding leadership ability.”)

- 2013 Nov. National Second Prize in Chinese Mathematical Contest in Modeling
- 2013 Oct. China National Scholarship
- 2012 Oct. China National Scholarship

Teaching Experience & Teaching Evaluation (5.0 Max)

PhD Headstart Program Instructor (Recitation Instructor), Ohio State University

2021 Summer **Abstract Algebra** (graduate course for first-year Ph.D. students)

Recitation Instructor, Ohio State University

Math 2173 – Engineering Mathematics B

2021 Fall (evaluations not available yet)

2021 Spring Responses#: 20, Instructor Mean: **4.70**, Dept Mean: 4.09, University Mean: 4.41

2021 Spring Responses#: 19, Instructor Mean: 4.21, Dept Mean: 4.09, University Mean: 4.41

2021 Spring Responses#: 18, Instructor Mean: 4.33, Dept Mean: 4.09, University Mean: 4.41

2020 Spring Responses#: 11, Instructor Mean: **4.82**, Dept Mean: 4.17, University Mean: 4.59

2020 Spring Responses#: 13, Instructor Mean: **4.92**, Dept Mean: 4.17, University Mean: 4.59

2020 Spring Responses#: 10, Instructor Mean: **4.90**, Dept Mean: 4.17, University Mean: 4.59

2019 Fall Responses#: 25, Instructor Mean: 4.44, Dept Mean: 4.24, University Mean: 4.37

2019 Fall Responses#: 21, Instructor Mean: **4.62**, Dept Mean: 4.24, University Mean: 4.37

2019 Fall Responses#: 16, Instructor Mean: 4.13, Dept Mean: 4.24, University Mean: 4.37

Math 2153 – Calculus III

2018 Spring Responses#: 18, Instructor Mean: **4.5**, Dept Mean: 4.3, University Mean: 4.3

2018 Spring Responses#: 17, Instructor Mean: **4.9**, Dept Mean: 4.3, University Mean: 4.3

2018 Spring Responses#: 14, Instructor Mean: **4.6**, Dept Mean: 4.3, University Mean: 4.3

Math 1172 – Engineering Mathematics A

2020 Fall Responses#: 27, Instructor Mean: **4.88**, Dept Mean: 4.17, University Mean: 4.41

2020 Fall Responses#: 29, Instructor Mean: 4.00, Dept Mean: 4.17, University Mean: 4.41

2018 Fall Responses#: 22, Instructor Mean: 4.23, Dept Mean: 4.19, University Mean: 4.34

2018 Fall Responses#: 19, Instructor Mean: 4.32, Dept Mean: 4.19, University Mean: 4.34

2017 Fall Responses#: 25, Instructor Mean: **4.8**, Dept Mean: 4.3, University Mean: 4.3

2017 Fall Responses#: 22, Instructor Mean: 4.3, Dept Mean: 4.3, University Mean: 4.3

2017 Spring Responses#: 21, Instructor Mean: **4.8**, Dept Mean: 4.2, University Mean: 4.3

2017 Spring Responses#: 24, Instructor Mean: **4.8**, Dept Mean: 4.2, University Mean: 4.3

Math 1151 – Calculus I

2016 Fall Responses#: 24, Instructor Mean: 4.2, Dept Mean: 4.2, University Mean: 4.3

2016 Fall Responses#: 19, Instructor Mean: 4.1, Dept Mean: 4.2, University Mean: 4.3

Grader, Ohio State University

2020&2018 Su. **Math 4568 – Linear Algebra for Engineering Graduate Students** (graduate course)

2020&2018 Su. **Math 2568 – Linear Algebra**

Recitation Instructor, Oklahoma State University

2016 Sp. 2015 **Math 2103 – Business Calculus**
F.& 2015 Sp.

Grader, Oklahoma State University

2015 Spring **Math 4663 – Combinatorial Mathematics**

(Note: “Sp.”=Spring, “Su.”=Summer, “F.”=Fall)

Mentoring Experience

2020 Spring Mentor for Directed Reading Program at Ohio State, mentored student Aditya Jambhale on a reading project on analytic number theory

Expository Talks

- 2019 Fall 8 talks on Kudla's "Notes on the Local Theta Correspondence", Automorphic Forms Seminar, Ohio State University
- 2019 Fall 3 talks on An introduction to Langlands-Shahidi method, Automorphic L -functions Student Seminar, Ohio State University
- 2019 Fall 7 talks on Cogdell's notes "Lectures on L -functions, Converse Theorems, and Functoriality for GL_n ", Automorphic L -functions Student Seminar, Ohio State University
- 2019 Spring 3 talks on the paper "Linnik's ergodic method and the distribution of integer points on sphere" by Ellenberg-Michel-Venkatesh, Automorphic Forms Seminar, Ohio State University
- 2019 Apr. *On Converse Theorems for GL_n* , Number Theory Student Seminar, Ohio State University
- 2018 Feb. *On Unipotent Orbital Integrals for p -adic Groups*, Number Theory Student Seminar, Ohio State University
- 2015 Oct. *Group Cohomology and Local Class Field Theory*, Junior Number Theory Seminar, Oklahoma State University
- 2014 Sept. *Congruent Numbers and Elliptic Curves*, Junior Number Theory Seminar, Oklahoma State University

Conferences and Workshops Attended

- 2021 Oct. Upstate Number Theory Conference, Union College
- 2021 Sept. Women in automorphic forms, Bielefeld University
- 2021 July Theta Series: Representation Theory, Geometry, and Arithmetic, The Fields Institute
- 2021 May New connections in number theory and physics, Isaac Newton Institute
- 2020 Oct. The 2020 Paul J. Sally, Jr. Midwest Representation Theory Conference
- 2020 Sept. Associated Varieties and Unipotent Representations, BICMR (Zoom)
- 2020 May Cross Atlantic Representation Theory and Other topics ONline (CARTOON)
- 2020 May Conference on Representation Theory and Algebraic Analysis, Weizmann Institute of Science
- 2019 Oct. Midwest Arithmetic Geometry and Number Theory Series, Ohio State University
- 2019 Mar. 33rd Automorphic Forms Workshop, Duquesne University
- 2018 June From the Fundamental Lemma to Discrete Geometry, to Formal Verification, Pittsburgh
- 2018 June Connecticut Number Theory Conference, University of Connecticut
- 2018 May Workshop on Schubert Calculus, Ohio State University
- 2018 Apr. Upstate New York Number Theory Conference, University at Buffalo
- 2016 Apr. Texas-Oklahoma Representations and Automorphic Forms VII, University of North Texas
- 2016 Mar. Arizona Winter School: Analytic Methods in Arithmetic Geometry, University of Arizona
- 2015 June Representation Theory, Number Theory and Invariant Theory, Yale University
- 2015 Mar. Texas-Oklahoma Representations and Automorphic Forms for Students, University of Oklahoma
- 2015 Mar. Arizona Winter School: Arithmetic and Higher-Dimensional Varieties, University of Arizona
- 2015 Feb. Southwest Local Algebra Meeting, Oklahoma State University
- 2014 Dec. Analysis, Spectra and Number Theory, Princeton University

Service

Reviewer Reviewer for zbMATH, 2021-present

Co-organizer Number Theory Student Seminar at Ohio State, 2021-2022
Organizer Automorphic L -functions Student Seminar at Ohio State, 2019 Summer - 2020 Spring
Peer Mentor Peer mentor to incoming first-year PhD students at Ohio State Math Dept, 2017 - 2020

Professional Membership

American Mathematical Society (AMS), 2015 – present
American Association for the Advancement of Science (AAAS), 2020 – present

References

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[James Cogdell](#), Professor at The Ohio State University, USA
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[Ivo Herzog \(Teaching\)](#), Professor at The Ohio State University, USA
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[David Soudry](#), Professor at Tel Aviv University, Israel
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