Contact INFORMATION School of Mathematical Sciences

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No. 422, Siming South Road

Xiamen University

Webpage: https://yishaoyun.github.io/syi/

Xiamen, Fujian, China 361005

https://math.xmu.edu.cn/info/1083/17409.htm

EMPLOYMENT

Xiamen University, Xiamen, Fujian, China

Assistant Professor Sept. 2022 - present

University of South Carolina, Columbia, SC, USA

Instructor Aug. 2019 - July 2022

**EDUCATION** 

University of Oklahoma, Norman, OK, USA

Ph.D., Mathematics. Advisor: Ralf Schmidt. May 2014 - May 2019

M.A., Mathematics. Aug. 2012 - May 2014

University of Science and Technology of China, Hefei, Anhui, China

B.S., Mathematics. Sept. 2008 - July 2012

Research INTERESTS Number Theory & Representation Theory

Research

arXiv, MathSciNet, ORCID, Google Scholar, ResearchGate, Semantic Scholar

PROFILES

**PUBLICATIONS** & Preprints

- 1. The prime number theorem over integers of power-free polynomial values (with Biao Wang). Submitted, 2025. [arXiv].
- 2. Number of abelian groups and the prime number theorem (with Biao Wang). Submitted, 2025.
- 3. Some ergodic theorems over squarefree numbers and squarefull numbers (with Huixi Li, Biao Wang and Chunlin Wang). To appear in Acta Arithmetica, 2025. [arXiv].
- 4. On Erdős covering systems in global function fields (with Huixi Li, Biao Wang and Chunlin Wang). Journal of Number Theory 266 (2025), 269-280. [arXiv, DOI].
- 5. Some remarks on strong multiplicity one for paramodular forms (with Xiyuan Wang, Zhining Wei and Pan Yan). Submitted, 2023. [arXiv].
- 6. On Covering Systems of Polynomial Rings over Finite Fields (with Huixi Li, Biao Wang and Chunlin Wang). Proceedings of the American Mathematical Society 152 (2024), no. 9, 3731-3742. [arXiv, DOI].
- 7. On the minimum modulus problem in number fields (with Huixi Li and Biao Wang). Submitted, 2023. [arXiv].
- 8. On distinguishing Siegel cusp forms of degree two (with Zhining Wei). Submitted, 2022. [arXiv].

## 9. Dimension formulas for Siegel modular forms of level 4

(with Manami Roy and Ralf Schmidt, and with an appendix by Cris Poor and David Yuen). *Mathematika* 69 (2023), no. 3, 795-840. [arXiv, DOI].

# 10. Generalizations of the Erdős-Kac Theorem and the Prime Number Theorem (with Biao Wang, Zhining Wei and Pan Yan).

Published online in Communications in Mathematics and Statistics, 2023. [arXiv, DOI].

### 11. Classical and adelic Eisenstein series

(with Manami Roy and Ralf Schmidt).

To appear in Rocky Mountain Journal of Mathematics, 2024. [arXiv].

## 12. Generalizations of Alladi's formula for arithmetical semigroups

(with Lian Duan and Ning Ma).

The Ramanujan Journal 58 (2022), no. 4, 1285-1319. [arXiv, DOI].

## 13. Congruences for dimensions of spaces of Siegel cusp forms and 4-core partitions (with Chiranjit Ray and Manami Roy).

The Ramanujan Journal 58 (2022), no. 4, 1011-1023. [SharedIt link, arXiv, DOI].

## 14. Analogues of Alladi's formula over global function fields

(with Lian Duan and Biao Wang).

Finite Fields and Their Applications 74 (2021), 101874, 26 pp. [arXiv, DOI].

## 15. On counting cuspidal automorphic representations for GSp(4)

(with Manami Roy and Ralf Schmidt).

Forum Mathematicum 33 (2021), no. 3, 821-843. [arXiv, DOI].

## 16. Klingen $\mathfrak{p}^2$ vectors for GSp(4).

The Ramanujan Journal 54 (2021), no. 3, 511-554. [SharedIt link, DOI].

### 17. Klingen vectors of level 2 for GSp(4).

Ph.D. Thesis, University of Oklahoma, 2019. [PDF].

## TEACHING EXPERIENCE

#### Assistant Professor, School of Mathematical Sciences, Xiamen University

#### Instructor of Record

| Advanced Algebra I                      | Fall 2025   |
|---|-------------|
| Elementary Number Theory                | Fall 2025   |
| No Teaching                             | Spring 2025 |
| Advanced Algebra I                      | Fall 2024   |
| Elementary Number Theory                | Fall 2024   |
| Function Theory of One Complex Variable | Spring 2024 |
| Advanced Algebra I                      | Fall 2023   |
| Elementary Number Theory                | Fall 2023   |

Advanced Algebra II (Discussion Session Leader)

Spring 2023 Fall 2022

No Teaching

## Instructor, Department of Mathematics, University of South Carolina

#### Instructor of Record

Math 142 Calculus II Spring 2022 Math 546/701I Algebraic Structures I Spring 2022

Math 122 Calculus for Business Administration and Social Sciences (hybrid) Fall 2021

| Math 141 Calculus I (hybrid) Math 241 Vector Calculus (hybrid)  |                    | <ul><li>2021</li><li>2021</li></ul> |
|---|--------------------|-------------------------------------|
| Math 546/701I Algebraic Structures I (online)   | Summer             | 2021                                |
| Math 122 Calculus for Business Administration and Social Sciences (online) Math 141 Calculus I (online)   | ) Spring<br>Spring |                                     |
| Math 122 Calculus for Business Administration and Social Sciences (online)  | ) Fall             | 2020                                |
| Math 546/701I Algebraic Structures I (online)   | Summer             | 2020                                |
| Math 142 Calculus II<br>Math 242 Elementary Differential Equations  | Spring<br>Spring   |                                     |
| Math 122 Calculus for Business Administration and Social Sciences   | Fall               | 2019                                |
| Graduate Teaching Assistant, Department of Mathematics, University of Oklahom   | ıa                 |                                     |
| Instructor of Record Math 1743 Calculus I for Business, Life, and Social Sciences   | Spring             | 2019                                |
| Discussion Session Leader   |                    |                                     |
| Math 2924 Differential and Integral Calculus II   |                    | 2018                                |
| Math 2924 Differential and Integral Calculus II<br>Math 2423 Differential and Integral Calculus II  | Spring<br>Fall     | 2018                                |
| Tutor Fall 2013<br>Pre-Calculus; Trigonometry; College Algebra; Business Calculus; Advanced   |                    |                                     |
| Grader Fall 2012 Calculus; Ordinary differential equations; Linear algebra; Abstract algebra Analysis; Partial differential equations; Discrete mathematics (Capstone)      |                    |                                     |
| Arizona Winter School 2018: Iwasawa Theory University of Arizona, Tucson, AZ, USA  M.   | ar. 3-7,           | 2018                                |
| MSRI Summer School: Automorphic Forms and the Langlands Program Mathematical Sciences Research Institute (MSRI), Berkeley, CA, USA July 24-                                 | Aug. 4,            | 2017                                |
| On classical and adelic Siegel Eisenstein series of degree 2,<br>International Conference on Modular Forms and Their Applications,<br>Wuhan University, Wuhan, Hubei, China | July 11,           | 2025                                |
| On classical and adelic Eisenstein series, Sichuan University, Chengdu, Sichuan, China  | June 20,           | 2025                                |
| Generalizations of the prime number theorem and applications, Mini Workshop on Number Theory, Chengdu University of Technology, Chengdu, Sichuan, China                     | June 20,           | 2025                                |
| Dynamical generalizations of the prime number theorem, Sichuan Normal University, Chengdu, Sichuan, China   | June 19,           | 2025                                |
| On global representations generated by Eisenstein series, Summer Workshop on Arithmetic Geometry and Representation Theory, Harbin Institute of Technology, Harbin, China   | June 5,            | 2025                                |
| On adelic Siegel Eisenstein series of degree 2,<br>2025 Fudan University Workshop on Diophantine Geometry and Exponential Sum<br>Fudan University, Shanghai, China          | as,<br>May 24,     | 2025                                |
|   |                    |                                     |

SUMMER & WINTER SCHOOLS

INVITED TALKS

An adelic approach to Eisenstein series, The Chinese University of Hong Kong (Shenzhen), Shenzhen, Guangdong, China Apr. 11, 2025 On adelic Eisenstein series, University of Science and Technology of China, Hefei, Anhui, China Mar. 28, 2025 Some results on refined strong multiplicity one for paramodular forms, 2024 Summer Conference on Number Theory, Wuhan University, Wuhan, Hubei, China Aug. 28, 2024 A brief introduction to classical modular forms, Nankai University, Tianjin, China Aug. 9, 2024 On Siegel modular forms of degree 2, Shenzhen MSU-BIT University, Shenzhen, Guangdong, China July 12, 2024 Strong multiplicity one and applications to Siegel modular forms, 2024 Chengdu Workshop on Number Theory, Sichuan Normal University, Chengdu, Sichuan, China May 18, 2024 On Erdős covering systems, Sichuan University, Chengdu, Sichuan, China May 17, 2024 Representation theory of GSp(4) and applications to Siegel modular forms of degree 2, Shanghai Tech University, Shanghai, China Apr. 11, 2024 Studying Siegel modular forms from representation theoretic approach, 2024 Workshop on Number Theory and Applications, Southeast University & Minnan Normal University, Nanjing, Jiangsu, China Mar. 10, 2024 On strong multiplicity one for paramodular forms, Symposium on Number Theory and Representation Theory VII, Zhejiang University, Hangzhou, Zhejiang, China Jan. 7, 2024 From Riemann Hypothesis to Langlands Program, University of Science and Technology of China, Hefei, Anhui, China Dec. 20, 2023 Computing dimension formulas of Siegel modular forms from representation theory of GSp(4), Wuhan University, Wuhan, Hubei, China (online) Sept. 6, 2023 An introduction to classical modular forms and their generalizations, Shaanxi Normal University, Xian, Shaanxi, China Aug. 24, 2023 Siegel modular forms of degree 2 and representation theory of GSp(4), Workshop on Automorphic Representations, Shandong University, Jinan, Shandong, China Aug. 15, 2023 Siegel modular forms of degree 2 and representation theory of GSp(4), July 6, 2023 Nankai University, Tianjin, China (hybrid) On Eisenstein series of weight 2 (online), Chengdu University of Technology, Chengdu, Sichuan, China Nov. 30, 2022 Classical and adelic Eisenstein series (online), Nov. 28, 2022 Academy of Mathematics and Systems Science, Chinese Academy of Sciences, Beijing, China Classical and adelic Eisenstein series, International Conference on L-Functions and Related Themes. Minnan Normal University, Zhangzhou, Fujian, China (online) Aug. 7, 2022 Some results on Eisenstein series,

AMS Special Session on Recent Advances on the Langlands Program,

Counting cuspidal automorphic representations of GSp(4) and dimensions of Siegel cusp forms, Institute of Geometry and Physics, University of Science and Technology of China, Hefei, Anhui, China (online) Jan. 11, 2022

Counting cuspidal automorphic representations of GSp(4) and dimensions of Siegel cusp forms, Sichuan Normal University, Chengdu, Sichuan, China (online) Dec. 29, 2021

Classical modular forms and local-global representation theory,

Nankai University, Tianjin, China (online)

Dec. 10, 2021

Dimension formulas for spaces of Siegel modular forms of Klingen level 4,

Sun Yat-sen University (Zhuhai), Zhuhai, Guangdong, China (online)

Dec. 6, 2021

Siegel modular forms of degree 2 and Klingen level 4 (online),

Nov. 17, 2021

Morningside Seminar on Number Theory, Morningside Center of Mathematics, Beijing, China

Siegel modular forms of degree 2 and Klingen level 4,

University of Science and Technology of China, Hefei, Anhui, China (online)

Nov. 2, 2021

An equidistribution theorem for cuspidal automorphic representations of GSp(4),

Sichuan University, Chengdu, Sichuan, China (online)

Jan. 29, 2021

The equidistribution theorem for a certain family of cuspidal automorphic representations for GSp(4), Capital Normal University, Beijing, China (online) Nov. 14, 2020

An equidistribution theorem for GSp(4) by counting cuspidal automorphic representations,

University of Science and Technology of China, Hefei, Anhui, China (online) Nov. 12, 2020

On counting automorphic representations and its connection to an equidistribution theorem for GSp(4), Algebra Seminar, University of North Texas, Denton, TX, USA (online) Oct. 23, 2020

An equidistribution theorem for cuspidal automorphic representations for GSp(4).

Shandong University, Jinan, Shandong, China (online)

Oct. 22, 2020

A bridge between modular forms theory and representation theory,

Apr. 16, 2019

Cameron University Math Seminar Series, Cameron University, Lawton, OK, USA

Klingen  $\mathfrak{p}^2$  vectors for GSp(4),

Feb. 26, 2019

Algebraic Geometry and Number Theory Seminar, Clemson University, Clemson, SC, USA

Klingen  $\mathfrak{p}^2$  vectors for GSp(4),

Lie Groups Seminar, Oklahoma State University, Stillwater, OK, USA

Feb. 13, 2019

TALKS

Contributed An Introduction to Modular Forms

Dec. 15, 2022

Analytic Number Theory Seminar, School of Mathematical Sciences, Nankai University (online)

Classical and adelic Eisenstein series of weight 2

Mar. 19, 2022

34th Automorphic Forms Workshop,

Brigham Young University (online)

On certain Siegel modular forms of level 4

Mar. 13, 2022

2022 Southern Regional Number Theory Conference,

Louisiana State University (online)

On dimension formulas of Siegel modular forms of level 4

Dec. 17, 2021

WCNT 2021: Problems in Number Theory (online)

Siegel modular forms of level 4

Sept. 26, 2021

PAlmetto Joint Arithmetic, Modularity, and Analysis Series III (online)

| Dimension formulas of Siegel cusp forms for certain congruence subgroups<br>Women in automorphic forms,<br>Bielefeld University (online)  | Sept. 21, 2021        |
|---|-----------------------|
| On counting cuspidal automorphic representations of $GSp(4)$<br>New Developments in Number Theory (online)  | June 1, 2021          |
| On counting cuspidal automorphic representations of GSp(4)<br>Mid-Atlantic Seminar On Numbers V (online)  | Mar. 28, 2021         |
| Analogues of Alladi's formula over global function fields PAlmetto Joint Arithmetic, Modularity, and Analysis Series II (online)  | Dec. 6, 2020          |
| On counting cuspidal automorphic representations for GSp(4)<br>Front Range Number Theory Day (online)   | Sept. 26, 2020        |
| Klingen $\mathfrak{p}^2$ vectors for $GSp(4)$<br>Ninth Annual Upstate Number Theory Conference,<br>Cornell University   | Apr. 28, 2019         |
| Klingen $\mathfrak{p}^2$ vectors for $\mathrm{GSp}(4)$ TORA X,<br>University of North Texas   | Apr. 6, 2019          |
| Klingen $\mathfrak{p}^2$ vectors for $GSp(4)$<br>33rd Automorphic Forms Workshop,<br>Duquesne University  | Mar. 10, 2019         |
| Klingen $\mathfrak{p}^2$ vectors for $\mathrm{GSp}(4)$<br>Graduate Algebra Symposium,<br>University of Oklahoma   | Mar. 2, 2019          |
| Klingen $\mathfrak{p}^2$ vectors for $\mathrm{GSp}(4,F)$<br>PANTS XXXI,<br>University of South Carolina   | Dec. 8, 2018          |
| $\mathrm{Kl}(\mathfrak{p}^2)$ vectors for $\mathrm{GSp}(4,F)$<br>$\mathrm{TORA\ IX},$<br>University of Oklahoma   | Apr. 7, 2018          |
| Dimensions of $Kl(\mathfrak{p}^2)$ -invariant vectors for $GSp(4, F)$<br>31st Automorphic Forms Workshop,<br>East Tennessee State University  | Mar. 8, 2017          |
| Dimensions of $Kl(\mathfrak{p}^2)$ -invariant vectors for irreducible non-supercuspidal representational expressions. Graduate Algebra Symposium,   |                       |
| University of North Texas   | Nov. 5, 2016          |
| Dimensions of $Kl(\mathfrak{p}^2)$ -invariant vectors for Iwahori-spherical representations of $Kl(\mathfrak{p}^2)$ -invariant vectors for $Kl(\mathfrak{p}^2)$ -invariant v |                       |
| University of North Texas   | Apr. 10, 2016         |
| Dimensions of Parahori-invariant vectors for Iwahori-spherical representation<br>Graduate Algebra Symposium,  | as of GSp(4)          |
| University of Oklahoma  | Mar. 5, 2016          |
| Dimensions of spaces of Parahori-invariant vectors for Iwahori-spherical repres   | entations of $GSp(4)$ |
| TORAS I,<br>University of Oklahoma  | Mar. 28, 2015         |
|   |                       |

|                            | Klingen $\mathfrak{p}^2$ vectors for $GSp(4)$ and applications<br>Boston University-Keio University Workshop in Number Theory 2019,<br>Boston University | June 24, 2019                   |
|----------------------------|--|---------------------------------|
|                            | Klingen $\mathfrak{p}^2$ vectors for $GSp(4)$ and applications TORA X,<br>University of North Texas  | Apr. 6, 2019                    |
|                            | Dimensions of $\mathrm{Kl}(\mathfrak{p}^2)$ -invariant vectors for Iwahori-spherical representations of $\mathrm{Cl}(\mathfrak{p}^2)$                    | $\operatorname{GSp}(4,F)$       |
|                            | TORA VII,<br>University of North Texas   | Apr. 10, 2016                   |
| DEPARTMENTAL SEMINAR TALKS | Xiamen University  Some remarks on classical and adelic Eisenstein series,  XMU/XMUM Joint Mathematics Online Seminar (hybrid)                           | Apr. 7, 2025                    |
|                            | A friendly introduction to modular forms (general talk for undergraduate), Elementary Number Theory-Fall 2024  | Dec. 16, 2024                   |
|                            | A brief introduction to Riemann Hypothesis (general talk for undergraduate), Elementary Number Theory-Fall 2024  | Dec. 9, 2024                    |
|                            | An informal introduction to automorphic representations (general talk for undergraduate), Student Seminar  | Nov. 27, 2024                   |
|                            | An Invitation to Modular Forms (general talk for undergraduate), Student Seminar   | June 5, 2024                    |
|                            | Introduction to Sarnak's conjecture, II (general paper reading talk), Dynamical System and Number Theory Seminar (online)                                | Mar. 21, 2024                   |
|                            | Introduction to Sarnak's conjecture, I (general paper reading talk), Dynamical System and Number Theory Seminar (online)                                 | Mar. 14, 2024                   |
|                            | From Riemann Hypothesis to Langlands Program, Part II (general talk for undergraduate), Student Seminar  | Mar. 13, 2024                   |
|                            | From Riemann Hypothesis to Langlands Program, Part I (general talk for undergraduate), Student Seminar   | Feb. 28, 2024                   |
|                            | The asymptotics of $r(4,t)$ (general paper reading talk),<br>Dynamical System and Number Theory Seminar  | Nov. 10, 2023                   |
|                            | An Introduction to Modular Forms, Part II,<br>Number Theory Seminar (online)   | Dec. 28, 2022                   |
|                            | An Introduction to Modular Forms, Part I,<br>Number Theory Seminar (online)  | Dec. 21, 2022                   |
|                            | University of South Carolina:  Eisenstein series from an adelic point of view,  Algebra, Geometry, and Number Theory Seminar (online)                    | Apr. 15, 2022                   |
|                            | On dimensions of the spaces of Siegel modular forms,<br>Algebra, Geometry, and Number Theory Seminar (hybrid)  | Oct. 29, 2021                   |
|                            | On counting cuspidal automorphic representations and an equidistribution theory Algebra, Geometry, and Number Theory Seminar (online)                    | em for GSp(4),<br>Oct. 30, 2020 |
|                            | Klingen vectors of level 2 for GSp(4), Number Theory Seminar   | Oct. 31, 2019                   |

|                     | University of Oklahoma:<br>$Klingen \mathfrak{p}^2  vectors  for  \mathrm{GSp}(4),  \mathrm{Algebra}  \mathrm{and}  \mathrm{Representation}  \mathrm{Theory}  \mathrm{Semina}$ | r Nov. 30, 2018                         |
|---------------------|--|---|
|                     | $\mathrm{Kl}(\mathfrak{p}^2)$ vectors for $\mathrm{GSp}(4,F),$ Algebra and Representation Theory Seminar   | Aug. 24, 2018                           |
|                     | An Introduction to $\mathrm{GSp}(4)$ , Student Algebra Seminar   | Mar. 26, 2018                           |
|                     | An Introduction to Modular Form, Student Algebra Seminar   | Oct. 26, 2017                           |
|                     | Induced modules, Student Algebra Seminar   | Apr. 7, 2017                            |
|                     | An introduction to Saito-Kurokawa Lifting, Student Algebra Seminar   | Sept. 26, 2016                          |
|                     | Automorphic representations, Student Algebra Seminar   | Apr. 26, 2016                           |
|                     | Representations of Weil Groups, Student Algebra Seminar  | Feb. 11, 2016                           |
|                     | Weil Groups and Representations, Student Algebra Seminar   | Feb. 4, 2016                            |
|                     | Projective varieties, Student Algebra Seminar  | Dec. 3, 2015                            |
|                     | Affine varieties and Algebraic varieties, Student Algebra Seminar  | Oct. 22, 2015                           |
|                     | Automorphisms and derivations of Lie algebras, Student Algebra Seminar   | May 1,2015                              |
|                     | Dimensions of spaces of Parahori-invariant vectors for Iwahori-spherical GSp(4), Algebra and Representation Theory Seminar   | representations of Apr. 3, 2015         |
|                     | Haar measure, Student Algebra Seminar  | Sept. 17, 2014                          |
|                     | Haar measure, convolution, and characters of admissible representations<br>Algebra Seminar   | , <i>Part 2</i> , Student Apr. 24, 2014 |
|                     | Haar measure, convolution, and characters of admissible representations Seminar  | , Student Algebra<br>Apr. 17, 2014      |
|                     | Ramification and Bases, Part 2, Student Algebra Seminar  | Feb. 27, 2014                           |
|                     | Ramification and Bases, Student Algebra Seminar  | Feb. 20, 2014                           |
|                     | The Gelfand Transform, Student Algebra Seminar   | Oct. 17, 2013                           |
|                     | Banach Algebras and the Gelfand Transform, Student Algebra Seminar   | Oct. 10, 2013                           |
| Academic<br>service | Reviewer for Mathematical Reviews (MR) of AMS  | Dec. 2020 - present                     |
|                     | Reviewer for International Journal of Number Theory (IJNT)   | June 2024 - present                     |
|                     | Reviewer for The Research in Number Theory (RNTB)  | Mar. 2024 - present                     |
|                     | Reviewer for The Acta Arithmetica (AA)   | Nov. 2023 - present                     |
|                     | Reviewer for The Manuscripta Mathematica (MAMA)  | Apr. 2023 - present                     |
|                     | Reviewer for a paper in an edited book (Springer), Mathematics (number the   | eory) May 2022                          |
|                     | A session chair @ 2025 Workshop on Number Theory and Related Fields  | July 17 - 20, 2025                      |
|                     | A session chair @ International Conference on Modular Forms and Their App  | olications July 6-12, 2025              |
|                     | A session chair @ 2024 Summer Conference on Number Theory  | Aug. 26-30, 2024                        |

| ·  | Theory Nov. 3-6, 2023                      |
|--|--|
| A session chair @ Workshop on Representations of Lie Groups and Auto   | •  |
| A . I . © MYCINITI 9091 D. II . N. I. ITI . ( I' )   | May 26 - 28, 2023                          |
| A session chair @ WCNT 2021: Problems in Number Theory (online)  | Dec. 16-19, 2021                           |
| Co-organizer @ 2025 'Jingrun Star' Expert Committee Meeting and Works and Applications                                   | shop on Number Theory<br>May 21 - 23, 2025 |
| Organizer @ Workshop on Number Theory  | Dec. 6-9, 2024                             |
| Organizer @ Workshop on Number Theory and Representation Theory  | Dec. 8-11, 2023                            |
| School of Mathematical Sciences (Xiamen University):   |  |
| Master's Thesis Defense Committee Member   | Spring 2025 - present                      |
| Bachelor's Thesis Defense Committee Member   | Spring 2024 - present                      |
| Seminar  | Spring 2023 - present                      |
| Mathematics Department (University of South Carolina):   |  |
| Lower division advising for undergraduate students of math major   | Fall 2019 - Spring 2022                    |
| Course transfer equivalency duties (Course evaluations)  | Fall 2019 - Spring 2022                    |
| Volunteer for The 34th Annual High School Mathematics Contest  | Jan. 25, 2020                              |
| Volunteer for Set-Up Team in Math Picnic (Events Committee)  | 2019                                       |
| Volunteer for Set-Up Team in End-of-Semester Holiday Drop In (Ever   | nts Committee) 2019                        |
| Mathematics Department (University of Oklahoma):   |  |
| Volunteer for The 4th Annual Meeting of SIAM Central States Section  | n 2018                                     |
| Volunteer for TORA IX  | 2018                                       |
| Organizer of the Student Algebra Seminar   | 2015 - 2016                                |
| Volunteer for 20th Midwest Geometry Conference   | 2015                                       |
| Volunteer for OU MATH DAY  | 2013 - 2018                                |
| Tongde Teaching Award -School of Mathematical Sciences, Xiamen University  | 2025                                       |
| The 19th Young Faculty Teaching Competition (First Prize, Rank 2)  -Awarded annually to Young Faculty, Xiamen University | 2024                                       |
| National Natural Science Foundation of China (Participated)  | 2025 - 2028                                |
| National Natural Science Foundation of China (PI)  | 2024 - 2026                                |
| Fundamental Research Funds for the Central Universities (PI)   | 2023 - 2025                                |
| John Clark Brixey Graduate Scholarship  -Awarded annually to PhD Students, Math. Department, OU                          | 2016                                       |
| Teaching Assistantship   | 2012 - 2019                                |

AWARDS, HONORS -Awarded annually to undergraduate students, Math. Department, USTC

Memberships Chinese Mathematical Society (CMS) Nov. 2022 - present American Mathematical Society (AMS) Aug. 2012 - present Conferences, Workshop on Number Theory and Related Fields Workshops Xiamen University, Xiamen, Fujian, China July 17 - 20, 2025 ATTENDED Recent Progress on Representation Theory of Reductive Groups and Quantum Theory (\*: ONLINE) Chern Institute of Mathematics, Nankai University, Tianjin, China July 13-17, 2025 International Conference on Modular Forms and Their Applications Wuhan University, Wuhan, Hubei, China July 6 - 12, 2025 2025 Conference on Number Theory and Related Fields Xinjiang Normal University, Ürümgi, Xinjiang, China July 1-6, 2025 Mini Workshop on Number Theory Chengdu University of Technology, Chengdu, Sichuan, China June 20, 2025 Summer Workshop on Arithmetic Geometry and Representation Theory Harbin Institute of Technology, Harbin, China June 4-9, 2025 2025 Fudan University Workshop on Diophantine Geometry and Exponential Sums Fudan University, Shanghai, China May 23 - 26, 2025 2025 'Jingrun Star' Expert Committee Meeting and Workshop on Number Theory and Applications (Co-organizer) Xiamen University, Xiamen, Fujian, China May 21 - 23, 2025 Workshop on Number Theory (Organizer) Xiamen University, Xiamen, Fujian, China Dec. 6-9, 2024 2024 Summer Conference on Number Theory Wuhan University, Wuhan, Hubei, China Aug. 26 - 30, 2024 2024 Chen Jing-Run Prize Conference Morningside Center of Mathematics, Chinese Academy of Sciences, Beijing, China July 29-31, 2024 Workshop on Representation Theory of Lie Groups and Related Topics Xiamen University, Xiamen, Fujian, China July 18 - 21, 2024 Working Seminar on Analytic Number Theory II Lanzhou University, Lanzhou, Gansu, China July 7-11, 2024

2024 Chengdu Workshop on Number Theory
Sichuan Normal University, Chengdu, Sichuan, China
May 17-19, 2024
Southeast Workshop on Algebraic Geometry
Xiamen University, Xiamen, Fujian, China
Mar. 29-Apr. 1, 2024
2024 Workshop on Number Theory and Applications
Southeast University & Minnan Normal University, Nanjing, Jiangsu, China
Mar. 8-11, 2024
Working Seminar on Analytic Number Theory I

Tsinghua Sanya International Mathematics Forum (TSIMF), Sanya, Hainan, China Feb. 19-23, 2024

Zhejiang University, Hangzhou, Zhejiang, China

Symposium on Number Theory and Representation Theory VII

Jan. 5-7, 2024

| Workshop on Number Theory and Representation Theory (Organizer) Xiamen University, Xiamen, Fujian, China  | Dec. 8-11, 2023                             |
|---|---|
| Langlands Correspondence, Automorphic Representations, and Related Topi Wuhan University, Wuhan, Hubei, China   | cs<br>Nov. 18-19, 2023                      |
| Workshop on Langlands Program and Representation Theory Xiamen University, Xiamen, Fujian, China  | Nov. 3-6, 2023                              |
| The 3rd Cross Strait Workshop on Arithmetic Geometry University of Science and Technology of China (USTC), Hefei, Anhui, China                                | Aug. 18-23, 2023                            |
| 2023 Workshop on Automorphic Representations<br>Shandong University, Jinan, Shandong, China   | Aug. 14-18, 2023                            |
| The eleventh Pan Asian Number Theory (PANT) Conference<br>Harbin Institute of Technology, Harbin, China   | Aug. 1-5, 2023                              |
| Satellite Conference in Number Theory of International Congress of Basic Sc<br>Morningside Center of Mathematics, Chinese Academy of Sciences, Beijing, China | cience<br>July 10-14, 2023                  |
| 2023 USTC-HFUT Number Theory Conference USTC-HFUT, Hefei, Anhui, China  | July 2-5, 2023                              |
| 2023 Workshop on Representations of Lie Groups and Automorphic Forms Xiamen University, Xiamen, Fujian, China   | May 26 - 28, 2023                           |
| 2023 Fudan Number Theory Seminar<br>Fudan University, Shanghai, China   | May 13, 2023                                |
| USTC-XJTU Number Theory Conference University of Science and Technology of China (USTC), Hefei, Anhui, China  | Apr. 8-9, 2023                              |
| 22nd Fujian Province "Advanced Algebra" and "Linear Algebra" Course Con<br>Minnan Normal University, Zhangzhou, Fujian, China                                 | nstruction Conference<br>Mar. 24 - 26, 2023 |
| Shimura Varieties and L-Functions*  Mathematical Sciences Research Institute (MSRI), Berkeley, CA, USA  | Mar. 13 - 17, 2023                          |
| Zeta functions and their representations*  Research Institute for Mathematical Sciences (RIMS Symposium), Kyoto, Japan  | Mar. 6-8, 2023                              |
| Instructional workshop on Iwasawa theory for automorphic forms*  Korea Institute for advanced Study (KIAS), Seoul, Republic of Korea                          | Dec. 19-22, 2022                            |
| International Conference on L-Functions and Related Themes* Minnan Normal University, Zhangzhou, Fujian, China  | Aug. 5-9, 2022                              |
| AMS Special Session on Recent Advances on the Langlands Program* Spring Western Sectional Meeting (formerly at University of Denver)                          | May 14 - 15, 2022                           |
| 34th Automorphic Forms Workshop* Brigham Young University, Provo, Utah  | Mar. 16-19, 2022                            |
| 2022 Southern Regional Number Theory Conference* Louisiana State Universit  | <i>ity</i> Mar. 12-13,                      |
| Southern California Number Theory Day*  | Feb. 5, 2022                                |
| WCNT 2021: Problems in Number Theory*   | Dec. 16-19, 2021                            |
| PAlmetto Joint Arithmetic, Modularity, and Analysis Series III*   | Sept. 25 - 26, 2021                         |
| Women in automorphic forms* Bielefeld University  | Sept. 20 - 22, 2021                         |

| miniMAGNTS 2021*  | Aug. 11, 2021                 |
|---|-------------------------------|
| Theta Series: Representation Theory, Geometry, and Arithmetic* in honor of Steve Kudla 70th birthday  | July 5-9, 2021                |
| Around Frobenius distributions and related topics $\Pi^*$   | June 28 - 29, 2021            |
| Curves over Finite Fields: Past, Present and Future*  | May 25 - 29, 2021             |
| Rational Points and Galois Representations* University of Pittsburgh  | May 10 - 12, 2021             |
| Front Range Number Theory Day*  | Apr. 24, 2021                 |
| Mid-Atlantic Seminar On Numbers V*  | Mar. 27 - 28, 2021            |
| P<br>Almetto Joint Arithmetic, Modularity, and Analysis Series<br>$\mathrm{II}^*$   | Dec. 5-6, 2020                |
| 2020 Paul J. Sally, Jr. Midwest Representation Theory Conference*   | Oct. 16-18, 2020              |
| Number Theory Down Under 8 (NTDU8)*   | Oct. 6-8, 2020                |
| Québec-Maine Number Theory Conference*  | Sept. 26-27, 2020             |
| Front Range Number Theory Day*  | Sept. 26, 2020                |
| PAlmetto Joint Arithmetic, Modularity, and Analysis Series*   | Sept. 19-20, 2020             |
| Chicago Number Theory Day (CNTD 2020)*  | June 20, 2020                 |
| Online Conference in Automorphic Forms*<br>Automorphic Forms in Budapest 2020   | June 1-5, 2020                |
| Cross Atlantic Representation Theory and Other topics ONline*   | May 29 - 31, 2020             |
| S. I. Adian memorial conference, Moscow*  | May 26 - 27, 2020             |
| Conference on Representation Theory and Algebraic Analysis* in honor of Joseph Bernstein on the occasion of his 75th birthday                   | May 11 - 14, 2020             |
| DG methods in commutative algebra and representation theory*  | May 2-3, 2020                 |
| Front Range Number Theory Day*  | Apr. 25, 2020                 |
| AGONIZE: Arithmetic Geometry is ONline In Zoom, Everyone*   | Mar. 25, 2020                 |
| PANTS XXXIII: Palmetto Number Theory Series XXXIII in celebration of the 60th birthday of Michael Filaseta Clemson University, Clemson, SC, USA | Dec. 14-15, 2019              |
| Modular Forms, Arithmetic, and Women in Mathematics (MAAIM)   |                               |
| Emory University, Atlanta, GA, USA  | Nov. 1-3, 2019                |
| PANTS XXXII: Palmetto Number Theory Series XXXII<br>University of North Carolina at Charlotte, Charlotte, NC, USA                               | Sept. 21-22, 2019             |
| Boston University-Keio University Workshop in Number Theory 2019<br>Boston University, Boston, MA, USA  | June 24 - 28, 2019            |
| 49th John H. Barrett Memorial Lectures: Recent Developments in Number University of Tennessee, Knoxville, TN, USA                               | r Theory<br>May 28 - 30, 2019 |
| Ninth Annual Upstate Number Theory Conference<br>Cornell University, Ithaca, NY, USA  | Apr. 27-28, 2019              |
| TORA X: Texas–Oklahoma Representations and Automorphic Forms X University of North Texas, Denton, TX, USA                                       | Apr. 5-7, 2019                |

|                        | Hawaii Number Theory 2019 (HINT 2019)<br>University of Hawai'i at Mānoa, Honolulu, HI, USA   | Mar. 18-21, 2019                     |
|------------------------|--|--------------------------------------|
|                        | 33rd Automorphic Forms Workshop<br>Duquesne University, Pittsburgh, PA, USA  | Mar. 6-10, 2019                      |
|                        | Graduate Algebra Symposium(Joint with UTA, UNT, and OU)<br>University of Oklahoma, Norman, OK, USA   | Mar. 2, 2019                         |
|                        | JMM 2019: Joint Mathematics Meetings 2019 The Baltimore Convention Center, Baltimore, MD, USA  | Jan. 17-19, 2019                     |
|                        | PANTS XXXI: Palmetto Number Theory Series XXXI<br>University of South Carolina, Columbia, SC, USA  | Dec. 8-9, 2018                       |
|                        | TORA IX: Texas–Oklahoma Representations and Automorphic Forms University of Oklahoma, Norman, OK, USA  | IX<br>Apr. 7-8, 2018                 |
|                        | The 2017 Paul J. Sally, Jr. Midwest Representation Theory Conference Honoring the 70th Birthday of Freydoon Shahidi Purdue University, West Lafayette, IN, USA | Oct. 20-22, 2017                     |
|                        | TORA VIII: Texas—Oklahoma Representations and Automorphic Form Oklahoma Sate University, Stillwater, OK, USA   | s VIII<br>Mar. 31 - Apr. 2, 2017     |
|                        | 31st Automorphic Forms Workshop<br>East Tennessee State University, Johnson City, TN, USA  | Mar. 6-9, 2017                       |
|                        | Graduate Algebra Symposium(Joint with UTA, UNT, and OU)<br>University of North Texas, Denton, TX, USA  | Nov. 5, 2016                         |
|                        | TORA VII: Texas–Oklahoma Representations and Automorphic Forms University of North Texas, Denton, TX, USA  | VII<br>Apr. 8-10, 2016               |
|                        | Graduate Algebra Symposium(Joint with UTA, UNT, and OU)<br>University of Oklahoma, Norman, OK, USA   | Mar. 5, 2016                         |
|                        | TORAS I: Texas-Oklahoma Representations and Automorphic Forms funiversity of Oklahoma, Norman, OK, USA   | or Students<br>Mar. 28-29, 2015      |
|                        | Graduate Algebra Symposium(Joint with UTA, UNT, and OU)<br>University of Oklahoma, Norman, OK, USA   | Oct. 4, 2014                         |
|                        | TORA VI: Texas—Oklahoma Representations and Automorphic Forms University of Oklahoma, Norman, OK, USA  | VI Mar. 7-9, 2014                    |
|                        | Graduate Algebra Symposium(Joint with UTA, UNT, and OU) University of North Texas, Denton, TX, USA   | Nov. 9, 2013                         |
| Mini courses<br>online | Lecture on Cyclotomic Fields and Iwasawa Theory<br>Instructors: Preda Mihăilescu, Gottingen University   | Sept. 18-Dec. 4, 2024                |
|                        | Core topics in modern number theory. I' Dec<br>Instructors: Ivan Fesenko, The University of Warwick  | e. 1, 2022 - Apr. 20, 2023           |
|                        | Trimester Program on Harmonic Analysis and Analytic Number Theory. Organizers: Valentin Blomer, Farrell Brumley, Philip Gressman, Marina Iliopo                |                                      |
|                        | Spring School towards a mod $p$ Langlands correspondence Instructors: Christophe Breuil, Florian Herzig, Yongquan Hu, Stefano Morra,                           | Apr. 26-30, 2021<br>Benjamin Schraen |
|                        | Fourier methods in combinatorial number theory<br>Instructor: Sean Prendiville, Lancaster University   | Nov. 4-Dec. 9, 2020                  |

AGITTOC 2020: Algebraic Geometry in the Time of COVID

Math 216: Foundations of Algebraic Geometry

June 27 - Sept. 12, 2020

Instructor: Ravi Vakil, Stanford University

Tianyuan Mathematical Center in Southeast China (TMSE) Minicourse

Aug. 9-17, 2020

Exponential sums over finite fields, Instructor: Daqing Wan (UCI)

The evolvement of Galois's idea in number theory: from Galois theory to Galois representations,

Instructor: Yi Ouyang (USTC)

Introduction to modular form, Instructor: Shanwen Wang (RUC)

Torsion subgroups of modular Jacobian varieties over abelian fields

July 20 - 31, 2020

Instructor: Yuan Ren, Sichuan Normal University (@ USTC)

Distribution of prime numbers

May 1-3, 2020

Instructor: Jie Wu, Université Paris-Est Créteil (@ Soochow University)

#### Trainings

## Xiamen University:

Teaching Training Summer Camp

July 21 - 24, 2024

2023 Training for New Graduate Advisors

Nov. 25, 2023

2023 Provincial Undergraduate Courses Teacher Training

Nov. 1-3, 2023

New Faculty Training part II

Dec. 17-18, 2022

New Faculty Training part I

Nov. 14-15, 19, 2022

## University of South Carolina:

CAS Faculty Development Program (FDP)

Fall 2019 - Spring 2020

-Introduction to the resources of the National Center for Faculty Development and Diversity, other practical tips and information needed to be successful in their research, teaching, and service endeavors.

New Faculty Academy (NFA)

Fall 2019 - Spring 2020

-Certificate obtained by participating in six or more NFA sessions scheduled during the year

Online short course: Technology for Online Teaching and Learning

Oct. 29 - Dec. 9, 2019

 $-Certificate\ obtained\ by\ completing\ the\ 6-week\ online\ course\ on\ integrating\ technology\ for\ online\ course\ delivery\ to\ transform\ learning\ environments$ 

2019 Oktoberbest: A Celebration of Teaching

Oct. 18, 2019

-One-day symposium focused on sharing best practices in teaching.

#### University of Oklahoma:

Endorsement in Preparation for Teaching Undergraduate Mathematics

2019

-Certificate obtained by completing 6 credit hours of course work in undergraduate mathematics education and teaching atleast one class as the instructor of record

Academic Writing for Multilingual Graduate Students

Winter 2019

-Course certificate obtained by enrolling in a two weeks graduate course

The International Instructor Training Course

Fall 2018

-Course certificate obtained by enrolling in a semester graduate course

The ETCS English Fast Track Course

Summer 2018

-Course certificate obtained by enrolling in a two weeks graduate course

Development for International Teaching Assistant Training

2012

-Mandatory teacher training program for international students

Invited visits Sichuan University, China

June 20 - 23, 2025

|                          | Chengdu University of Technology, China               | June $20, 2025$       |
|--------------------------|---|-----------------------|
|                          | Sichuan Normal University, China                      | June 16-19, 2025      |
|                          | The Chinese University of Hong Kong (Shenzhen), China | Apr. 9-13, 2025       |
|                          | University of Science and Technology of China, China  | Mar. 26-31, 2025      |
|                          | Chinese Academy of Sciences, China                    | Mar. 19-20, 2025      |
|                          | Yunnan University, China                              | Jan. 12 - 25, 2025    |
|                          | Nankai University, China                              | Aug. 1-10, 2024       |
|                          | Ocean University of China, China                      | July 25 - 28, 2024    |
|                          | Shenzhen MSU-BIT University, China                    | July 12 - 14, 2024    |
|                          | Sichuan University, China                             | May 17, $2024$        |
|                          | ShanghaiTech University, China                        | Apr. 10-12, 2024      |
|                          | University of Science and Technology of China, China  | Dec. $20-21$ , $2023$ |
|                          | Shaanxi Normal University, China                      | Aug. 23-30, 2023      |
|                          | Nankai University, China                              | July 5-9, 2023        |
|                          | Caltech, USA  | June 1-9, 2019        |
|                          | Cameron University, USA                               | Apr. 16, 2019         |
|                          | Clemson University, USA                               | Feb. 26 - 27, 2019    |
|                          | Oklahoma State University, USA                        | Feb. 13, 2019         |
| UNDERGRAD<br>SUMMER CAMP | Chinese Academy of Sciences (CAS), Beijing, China     | Summer, 2011          |
| COMPUTER<br>SKILLS       |   |                       |
| LANGUAGES                | Chinese (native), English (fluent)                    |                       |