

# YIFEI ZHAO

## CURRICULUM VITÆ

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### Personal Information

DATE OF BIRTH: January 19, 1993  
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ADDRESS: Westfälische Wilhelms-Universität Münster  
Mathematics Münster  
Einsteinstrasse 62  
48149 Münster

### Academic Positions

PRESENT Postdoctoral researcher  
**Universität Münster**, Münster  
Mentor: Eugen Hellmann  
2020-2021 Postdoctoral researcher  
**Université Paris-Sud**, Orsay  
Mentor: Kęstutis Česnavičius

### Education

2015-2020 Ph.D. in MATHEMATICS  
**Harvard University**, Cambridge, MA  
Advisor: Dennis Gaitsgory  
2011-2015 B.A. in MATHEMATICS, SUMMA CUM LAUDE  
Junior Phi Beta Kappa (= 2% of graduating class)  
**Columbia University**, New York, NY  
Mentor: Aise Johan de Jong

### Publications

11. Yifei Zhao, *Spectral decomposition of genuine cusp forms over global function fields*. arXiv:2302.13023
10. Yifei Zhao, *Étale metaplectic covers of reductive group schemes*. arXiv:2204.00610
9. Appendix to Kęstutis Česnavičius, *Problems about torsors over regular rings*. *Acta Mathematica Vietnamica* **47** (2022), no. 1, 39-107. arXiv:2201.06424
8. Yifei Zhao, *Tannakian reconstruction of reductive group schemes*. *Pacific Journal of Mathematics* **321-2** (2022): 467-478. arXiv:2107.12472

7. Yifei Zhao, *Tame twistings and  $\Theta$ -data*. arXiv:2004.09671
6. Yifei Zhao,  *$p$ -torsion étale sheaves on the Jacobian of a curve*. *Journal of Algebra* **592** (2022): 64-99. arXiv:1909.12462.
5. James Tao and Yifei Zhao, *Central extensions by  $\mathbf{K}_2$  and factorization line bundles*. *Mathematische Annalen* (2021): 1-37. arXiv:1901.08760.
4. Yifei Zhao, *Quantum parameters of the geometric Langlands theory*. arXiv:1708.05108
3. Yifei Zhao, *Maximally Frobenius-destabilized vector bundles over smooth algebraic curves*. *International Journal of Mathematics* **28.02** (2017): 1750003. arXiv:1408.5117
2. Jacob McNamara and Yifei Zhao, *Limiting behavior of Donaldson's heat flow on non-Kähler surfaces*. arXiv:1403.8037
1. Jeffrey Adler, Michael Cassel, Joshua Lansky, Emma Morgan, and Yifei Zhao, *Lifting representations of finite reductive groups: a character relation*. *Involve, a Journal of Mathematics* **9.5** (2016): 805-812. arXiv:1205.6448

## Invited Talks

22. Arithmétiques des formes automorphes (une conférence en l'honneur de Laurent Clozel), Département de Mathématiques d'Orsay, Paris 2023
21. Representation Theory at Lyon, Institut Camille Jordan, Lyon 2023
20. Séminaire arithmétiques et géométrie algébrique, Institut de Recherche Mathématique Avancée, Strasbourg 2023
19. Mini-course, Yanqi Lake Beijing Institute of Mathematical Sciences and Applications, Beijing 2023
18. Workshop on Shtukas and higher Gross–Zagier formulas, Technische Universität Darmstadt, Darmstadt 2023
17. Gauge fields in arithmetic, topology & physics, International Centre for Mathematical Sciences, Edinburgh 2023
16. Workshop on the Bezzukavnikov equivalence, Essen–Münster–Bonn, 2022
15. Séminaire groupes réductifs et formes automorphes, Institut de Mathématiques de Jussieu–Paris Rive Gauche, Paris 2022
14. Representation and number theory seminar, Chinese University of Hong Kong, Hong Kong 2022
13. Virtual workshop on geometric representation theory (with a focus on flag varieties and affine Grassmannians), 2022
12. Cohomology and Singularity, Département de Mathématiques d'Orsay, Paris 2022
11. Gästseminar, Bergische Universität Wuppertal, Wuppertal 2022
10. Workshop on Higher Algebra, Technische Universität Darmstadt, Darmstadt 2022
9. Oberseminar, Universität Münster, Münster 2021, 2022

8. Mittagsemnar, Universität Münster, Münster 2021
7. Journée de rentrée, Département de Mathématiques d'Orsay, Paris 2021
6. Séminaire groupes réductifs et formes automorphes, Institut de Mathématiques de Jussieu–Paris Rive Gauche, Paris 2020
5. Réseau des Étudiants en Géométrie Algébrique, Institut Henri Poincaré, Paris 2020
4. Representation theory, University of Massachusetts, Amherst 2019
3. Conference on vertex algebras, factorization algebras and applications, Kavli IPMU, Tokyo 2018
2. Winter school on local geometric Langlands theory, Université Paris Diderot, Paris 2018
1. Global Langlands correspondence, American Institute of Mathematics, San Jose 2016

## Teaching Experience

### Harvard University:

#### *Instructor*

- Fall 2019 MATH 99 Étale cohomology
- Fall 2018 MATH 21A Multivariable calculus
- Fall 2016 MATH 21A Multivariable calculus

#### *Teaching Assistant*

- Fall 2017 MATH 25A Honors linear algebra and real analysis I

### Columbia University

#### *Teaching Assistant*

- Fall 2015 V2500 Analysis and optimization
- Spring 2014 V2020 Honors linear algebra
- Fall 2013 W3007 Complex variables
- Spring 2013 W4062 Introduction to modern analysis II
- Spring 2012 W1101 Calculus I