

# YIFEI ZHAO

## CURRICULUM VITÆ

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### Personal Information

PLACE AND DATE OF BIRTH: Suzhou, China | 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

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

### Papers and Preprints

11. Yifei Zhao, *Spectral decomposition of genuine cusp forms over global function fields*. Preprint. arXiv:2302.13023
10. Yifei Zhao, *Étale metaplectic covers of reductive group schemes*. Preprint. arXiv:2204.00610
9. Appendix to Kęstutis Česnavičius, *Problems about torsors over regular rings*. Accepted to Acta Mathematica Vietnamica. arXiv:2201.06424

8. Yifei Zhao, *Tannakian reconstruction of reductive group schemes*. Accepted to Pacific Journal of Mathematics. arXiv:2107.12472
7. Yifei Zhao, *Tame twistings and  $\Theta$ -data*. Preprint. 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*. Accepted pending revision to Selecta Mathematica. 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*. Preprint. 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

15. Gauge fields in arithmetic, topology & physics, International Centre for Mathematical Sciences, Edinburgh, 2023
14. Representation and number theory seminar, Chinese University of Hong Kong, 2022
13. Virtual workshop on geometric representation theory (with a focus on flag varieties and affine Grassmannians), 2022
12. Cohomology and Singularity, Université Paris-Saclay, 2022
11. Gästseminar, Bergische Universität Wuppertal, 2022
10. Workshop on Higher Algebra, Technische Universität Darmstadt, 2022
9. Oberseminar, Universität Münster, 2021, 2022
8. Mittagsseminar, Universität Münster, 2021
7. Journée de rentrée, Université Paris-Saclay, 2021
6. Séminaire groupes réductifs et formes automorphes, Institut de Mathématiques de Jussieu, 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, 2018
2. Winter school on local geometric Langlands theory, Université Paris Diderot, Paris, 2018
1. Global Langlands correspondence, AIM, San Jose, CA, 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

## Languages

- ENGLISH: Fluent
- FRENCH: Intermediate
- MANDARIN: Fluent
- SPANISH: Intermediate