

ZOU, HAITAO

Yangpu District, Shanghai China
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Last Update: 2023/12/19

EDUCATION

Fudan University, Shanghai, China Ph.D, Pure Mathematics, Shanghai Center of Mathematical Sciences. Advisor: Zhiyuan Li	<i>Sept 2021 - June 2023</i>
Fudan University, Shanghai, China Master of Science, Pure Mathematics, School of Mathematical Science. Advisor: Zhiyuan Li	<i>Sept 2017 - June 2021</i>
Sichuan University, Chengdu, Sichuan, China Bachelor of Science, Pure and Applied Mathematics, July 2017. Mentor: Xiaojun Chen	<i>Sept 2012 - July 2017</i>

PROFESSIONAL POSITIONS

Universität Bielefeld, Germany Post-Doc, SFB-TRR 358, "Integral Structures in Geometry and Representation Theory"	<i>Starting in 2024</i>
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RESEARCH INTERESTS

- Algebraic geometry:
 - * irreducible symplectic varieties in positive characteristic
 - * derived category of schemes
 - * moduli of (twisted) sheaves
 - * ...
- Arithmetic geometry and applications of algebraic topology on it:
 - * p -adic Hodge theory
 - * orthogonal Shimura varieties and their integral canonical models
 - * ...

PUBLICATIONS AND PREPRINTS

1. **Supersingular O'Grady's varieties of dimension six** (with Lie Fu and Zhiyuan Li), *Int. Math. Res. Not*, 2022, [arXiv:2009.10959](#).
2. A note on Fourier-Mukai partners of abelian varieties over positive characteristic fields (with Zhiyuan Li), *Kyoto J. Math.* 63 (4), 893-913, (November 2023), [arXiv:2107.05404](#).
3. Derived isogenies and isogenies for abelian surfaces (with Zhiyuan Li), *submitted*, [arXiv:2108.08710](#).
4. Unpolarized Shafarevich conjectures for hyper-Kähler varieties (with Lie Fu, Zhiyuan Li and Teppei Takamatsu), *submitted*, [arXiv:2203.10391](#).

5. On the derived category of varieties in positive characteristics (Master Thesis, in Chinese).
6. The arithmetic algebraic geometry of abelian varieties and hyper-Kähler varieties over general fields (Ph.D Thesis, in Chinese)

TEACHINGS

- 2020.2-2020.6, Modern Algebra III(H), TA
- 2019.9-2019.12, Algebraic Geometry, TA
- 2019.2-2019.7, Linear Algebra II, TA
- 2018.9-2018.12, Abstract Algebra I, TA
- 2018.2-2018.7, PDEs in Mathematical Physics, TA
- 2017.9-2017.12, Advanced Mathematics C (I), TA

LANGUAGES

Working languages: Chinese & English.

I'm also a beginner in learning French.