Ruxuan Zhang

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BICMR, Peking University, 5 Yiheyuan Rd, Haidian District, Beijing, China, 100871

EDUCATION

Fudan University	Shanghai, China
Ph.D. in Mathematics	2016.9 - 2022.6
School of Mathematical Sciences	
Nanjing University of Aeronautics and Astronautics	Nanjing, China
Bachelor of Engineering	2012.9 - 2016.6
Department of Automation Engineering	

EMPLOYMENT

Peking University	Beijing, China
Boya Postdoc in Beijing International Center for Mathematical Research	2022.9 - 2024.9
Shanghai Center for Mathematical Sciences	Shanghai, China
Postdoc	2024.9 - now

PAPERS AND PREPRINTS

- *One-cycles on Gushel-Mukai fourfolds and the Beauville-Voisin filtration*, Science China Mathematics(2023)

- *Beauville-Voisin filtrations on zero cycles of moduli space of stable sheaves on K3 surfaces* (with Zhiyuan Li), International Mathematics Research Notices, Volume 2023, Issue 13.

- *Bloch's conjecture for (anti-)autoequivalences on K3 surfaces* (with Zhiyuan Li and Xun Yu), available on arXiv:2305.10078

- *Filtrations on derived category of twisted K3 surfaces*(with Zhiyuan Li and Xun Zhang), available on arXiv:2402.13793.

- *The D-equivalence conjecture for hyper-Kähler varieties via hyperholomorphic bundles*(with Davesh Maulik, Junliang Shen and Qizheng Yin,), available on arXiv:2408.14775.

INVITED TALKS

1. Bloch's conjecture for automorphisms of K3 surfaces, Workshop 'Young Perspectives on Algebraic Geometry', Chinese Academy of Sciences, December 2023.

2. Bloch's conjecture for K3 surfaces and hyper-Kähler varieties. Workshop 'Geometry of hyper-Kähler varieties', Banff, Sep 2023.

3. 1-cycles on a Gushel-Mukai fourfold and the Beauville-Voisin filtration. Postdoc Seminar, BICMR, 2022.

4. BV filtrations of moduli space of stable sheaves. 3rd National Algebraic Geometry Conference, Fudan, 2022.

SELECTED CONFERENCES

1. Workshop 'Young Perspectives on Algebraic Geometry', December 2023, Chinese Academy of Sciences, Beijing.

2. Workshop 'Geometry of hyper-Kähler varieties', September 2023, Banff, Hangzhou.

3. 3rd National Algebraic Geometry Conference, July 2022, Fudan University, Shanghai.

4. Workshop 'Algebraic geometry in East Asia', online, April 2022.

5. Workshop on Algebraic Geometry, July 2019, Fudan University, Shanghai.

6. The second National Algebraic Geometry Conference, July 2019, East China Normal University, Shanghai.

7. Tianyuan Advanced Seminar in Algebraic Geometry, May 2019, Tianjin University, Tianjin.

8. Winter school on Algebraic Curves, Riemann surfaces and Moduli Spaces, March 2019, MCM, Beijing.

9. Joint Annual Conference of AMS-CMS, June 2018, Fudan University, Shanghai.

10. Program of Moduli Spaces and Varieties, Sept 2018, SCMS, Shanghai.

11. Tianyuan Advanced Seminar on Moduli Spaces in Algebraic Geometry, March 2017, BICMR, Beijing.

Teaching experiences

- Fall 2016: TA for Mathematical analysis

- Fall 2017: TA for Mathematical analysis

- Spring 2018: TA for Abstract algebra

- Summer 2019: Instructor for Algebra II

- Summer 2022: TA for Hodge theory

- Spring 2024: TA for seminar on complex surface

Skills

Languages: Chinese (mother language), English (Fluent)
Coding: Latex