

Jie Fu 傅杰

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PERSONAL STATEMENT

I am Jie Fu (傅杰 in Chinese). I am now a PhD student at Qiuzhen College, Tsinghua University.

RESEARCH INTERESTS

Algebraic geometry and related areas, with current work on automorphism groups of hyper-surfaces and hyperkähler manifolds. Further interests include moduli theory, rationality problems and derived categories.

EDUCATION

2025–present	Tsinghua University , Qiuzhen College, Beijing, China. Ph.D. student in Mathematics. Advisor: Prof. Zhiwei Zheng.
2021–2025	Tsinghua University , Qiuzhen College, Beijing, China. Bachelor in Mathematics and Applied Mathematics.

PUBLICATIONS AND PREPRINTS

Preprints

- [1] **Non-symplectic Indices of Automorphism Groups of Smooth Cubic Fourfolds.**
With Shihao Wang and Zhiwei Zheng. *arXiv preprint*, arXiv:2606.11754 [math.AG], 2026. 30 pages.
arxiv.org/abs/2606.11754

TALKS, SEMINARS AND ACADEMIC ACTIVITIES

- *Smooth hypersurface with automorphism group of large order.* Spring Learning Seminar in Algebraic Geometry, YMSC, Beijing. March 18th, 2026.
- *New results on automorphism groups of cubic fourfolds.* YMSC Seminar on Moduli Spaces and Related Topics, YMSC, Beijing. March 12th, 2026.
- *Symplectic automorphism of $K3^{[n]}$ -type manifolds.* Hyperkähler Seminar, YMSC, Beijing. December 2nd, 2025.
- *Linear system of $K3$ surfaces.* Hyperkähler Seminar, YMSC, Beijing. October 24th, 2025.
- *Basic lattice theory following Nikulin.* Hyperkähler Seminar, YMSC, Beijing. September 30th, 2025.
- Co-organization: Student Seminar on Perverse Sheaves and Application to Representation Theory, Qiuzhen College, Beijing, Fall 2025.

TEACHING EXPERIENCE

Spring 2026 Teaching assistant, *Algebraic Variety* given by Prof. Junpeng Jiao, Tsinghua University.

HONORS AND AWARDS

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| Spring 2026 | Pi day's best problems award, Qiuzhen College. |
| Spring 2023 | Honorable Mention, Analysis and Differential Equations, S.-T. Yau College Student Mathematics Contest. |
| Fall 2020 | First prize in China's national high school mathematics competition, Chinese Mathematical Society. |

REFERENCES

Prof. Zhiwei Zheng	Advisor. Asistant Profosser, Tsinghua University, Yau Mathematical Sciences Center, zhengzhiwei@mail.tsinghua.edu.cn
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