# Jia Jia

AddressJinchun Garden, Xilou, 310Tsinghua University, HaidianBeijing, China, 100084NationalityChinese

Homepagehttps://mathjiajia.github.io/Phone+86 188 8897 2830Emailjia\_jia@u.nus.edu<br/>mathjiajia@tsinghua.edu.cn

# **Research fields**

Algebraic Geometry, Birational Geometry

# Education

 2014 - 2018 BSc (Honours) - Zhejiang University, Hangzhou School of Mathematical Sciences, and Chu Kochen Honors College
2018 - 2023 PhD - National University of Singapore, Singapore Department of Mathematics Supervisor: De-Qi Zhang

# Employment

 2022 - 2023 Student Researcher - National University of Singapore, Singapore Department of Mathematics Supervisor: De-Qi Zhang
June 2023 - Postdoctoral Research Fellow - Tsinghua University, People's Republic of China

> Yau Mathematical Sciences Center Mentor: Caucher Birkar

## Honours, Awards & Grants

July 2023China Postdoctoral Science Foundation (special program)June 2023Shuimu Tsinghua Scholar Program, Tsinghua UniversityOct 2022PhD Conference Award, Faculty of Science, National University of Singapore,2018-2022President's Graduate Scholarship, National University of SingaporeNov 2017National Scholarship, Ministry of Education of the People's Republic of China

# Publications

## **Accepted articles**

- 1. Wild automorphisms of compact complex spaces of lower dimensions Proceedings of the American Mathematical Society (with L. Wang) link
- 2. Automorphisms groups of compact complex surfaces: T-Jordan property, Tits alternative and solvability, The Journal of Geometric Analysis, **33**, Article number: 219 (2023), link

- 3. Surjective endomorphisms of projective surfaces: the existence of infinitely many dense orbits, Mathematische Zeitschrift **303**, Article number: 39 (2023) (with J. Xie and D.-Q. Zhang) link
- 4. Endomorphisms of quasi-projective varieties towards Zariski dense orbit and Kawaguchi-Silverman conjectures, Mathematical Research Letters (to appear) (with T. Shibata, J. Xie and D.-Q. Zhang) arXiv: 2104.05339
- 5. Amplified endomorphisms of Fano fourfolds, manuscripta mathematica (2022) (with G. Zhong) link
- 6. Potential density of projective varieties having an int-amplified endomorphism, New York J. Math. **28** (2022) 433-444. (with T. Shibata and D.-Q. Zhang) pdf

## Preprints

- 1. Smooth projective surfaces with pseudo-effective tangent bundles (with Y. Lee and G. Zhong) arXiv:2302.10077
- 2. Moishezon manifolds with no nef and big classes (with S. Meng) arXiv:2208.12013
- 3. Equivariant Kähler model for Fujiki's class (with S. Meng) arXiv:2108.11595

# **Seminar Talks**

- Surjective Endomorphisms of Projective Surfaces, Algebraic Dynamics Seminar, Korea Institute for Advanced Study, 15 July 2020
- Surjective Endomorphisms of Projective Surfaces, Topology & Geometry Seminar, National University of Singapore, 21 Oct. 2020
- Surjective Endomorphisms of Affine and Projective Surfaces, Seminar of Algebraic Geometry in East Asia, 3 Sept. 2021
- Potential density of projective varieties, Topology & Geometry Seminar, National University of Singapore, 12 Jan. 2022
- Automorphisms Groups of Compact Complex Surfaces, Workshop: Recent Development in Algebraic Geometry, National University of Singapore, 30 August 2022

## Conference

#### **Co-organized with others**

• Recent Development in Algebraic Geometry, Jointly organised by Jia Jia, Wing-Keung To and De-Qi Zhang, Tuesday 30 Aug 2022

## Attended

• Conference on Complex Analysis, Complex Geometry and Dynamics (in memory of Nessim Sibony), Laboratoire de Mathématiques d'Orsay, Université Paris-Saclay, France, 5 Dec 2022 – 9 Dec 2022,

## **Teaching Experience**

- Fall 2019, Basic Applied Mathematics for Sciences (Tutor)
- Spring 2020, Multivariable Calculus (Tutor)
- Fall 2020, Basic Discrete Mathematics (Tutor)

## Skills

#### Languages

Chinese - mother tone English - fluent **Programming** Lua

Python Swift/SwiftUI

#### Software

git - source version control Neovim T<sub>E</sub>X

# References

Caucher Birkar (Mentor at YMSC) Professor Yau Mathematical Sciences Center Tsinghua University (China) birkar@tsinghua.edu.cn

Keiji Oguiso Professor Graduate School of Mathematical Sciences University of Tokyo (Japan) oguiso@ms.u-tokyo.ac.jp

#### Tien-Cuong Dinh

Professor Department of Mathematics National University of Singapore (Singapore) matdtc@nus.edu.sg

De-Qi Zhang (supervisor) Professor Department of Mathematics National University of Singapore (Singapore) matzdq@nus.edu.sg