# Jia Jia

Address Blk S17, #06-13 Homepage https://mathjiajia.github.io/

 $10\,Lower\,Kent\,Ridge\,Road,\,S119076 \qquad \qquad \textbf{Phone} \qquad \qquad +65\,8120\,0230$ 

Nationality Chinese Email jia\_jia@u.nus.edu

#### 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 candidate - National University of Singapore, Singapore

Department of Mathematics

2022-2023 Student Researcher - National University of Singapore, Singapore

Department of Mathematics

### **Honours & Awards**

Oct 2022 PhD Conference Award, Faculty of Science, National University of Singapore,

2018–2022 President's Graduate Scholarship, National University of Singapore

Nov 2017 National Scholarship, Ministry of Education of the People's Republic of China

2017 First-class Scholarship for Outstanding Merits, Zhejiang University

2016–2017 First-class Scholarship for Elite Students in Basic Science, Zhejiang University

#### **Publications**

#### **Accepted articles**

- 1. Automorphisms groups of compact complex surfaces: T-Jordan property, Tits alternative and solvability, The Journal of Geometric Analysis, **33**, Article number: 219 (2023), link
- 2. 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
- 3. 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
- 4. Amplified endomorphisms of Fano fourfolds, manuscripta mathematica (2022) (with G. Zhong) link
- 5. 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. Wild automorphisms of compact complex spaces of lower dimensions (with L. Wang) arXiv:2211.12245
- 3. Moishezon manifolds with no nef and big classes (with S. Meng) arXiv:2208.12013
- 4. 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	Programming	Software
Chinese - mother tone	Lua	git - source version control
English - fluent	Python	Neovim
	Swift/SwiftUI	$T_{ extbf{E}}X$

#### 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