Jia Jia

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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 - 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

June 2023 Shuimu Tsinghua Scholar Program, Tsinghua University

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

Publications

Accepted articles

- 1. Wild automorphisms of compact complex spaces of lower dimensions Proceedings of the American Mathematical Society (to appear) (with L. Wang) arXiv:2211.12245
- 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

- 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 Programming Software

Chinese - mother tone Lua git - source version control English - fluent Python Neovim

Swift/SwiftUI T_EX

References

Caucher Birkar (Mentor at YMSC)

Tien-Cuong Dinh

Professor Professor

Yau Mathematical Sciences Center Department of Mathematics
Tsinghua University (China) National University of Singapore (Singapore)

birkar@tsinghua.edu.cn matdtc@nus.edu.sg

Keiji Oguiso De-Qi Zhang (supervisor) Professor Professor

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