

Yujie Luo

CONTACT INFORMATION

Johns Hopkins University
Department of Mathematics
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EDUCATION

Johns Hopkins University

Ph.D. Candidate, Mathematics, Aug 2018-now.

- Advisor: Professor Chenyang Xu, Co-Advisor: Professor Jingjun Han.

University of Science and Technology of China (USTC)

B. Sc. in Mathematics, August 2014-June 2018.

- Undergrad Thesis: Dirichlet's Problem for the Complex Monge-Ampère Operator.
- Advisor: Professor Xiangyu Zhou.

RESEARCH INTERESTS

Topics related to Birational Geometry and Differential Geometry.

PUBLICATIONS & PREPRINTS

- ❑ *ACC for minimal log discrepancies of terminal threefolds* (joint with Jingjun Han and Jihao Liu). Submitted. [arxiv:2202.05287](#) preprint.
- ❑ *On boundedness of divisors computing minimal log discrepancies for surfaces* (joint with Jingjun Han). Accepted by J. Inst. Math. Jussieu. [arxiv 2005.09626](#) preprint.
- ❑ *Shokurov's conjecture on conic bundles with canonical singularities* (joint with Jingjun Han and Chen Jiang). Accepted by Forum Math. Sigma. [arxiv:2104.15072](#) preprint.
- ❑ *A simple proof of ACC for MLD's for surfaces* (joint with Jingjun Han). Accepted by Acta Math. Sin. (Engl. Ser.)
- ❑ *Second largest accumulation point of minimal log discrepancies in dimension 3* (joint with Jihao Liu). [arxiv:2207.04610](#) preprint.

TALKS

- *Shokurov's conjecture on conic bundles with canonical singularities*, [Algebraic Geometry seminar in Johns Hopkins University](#), October 11, 2022.
- *ACC conjecture for minimal log discrepancies and its applications in birational geometry*, [Algebraic Geometry seminar in Northwestern University](#), October 5, 2022.
- *Second largest accumulation point of minimal log discrepancies of threefolds*, Short talks in [MPS Conference on Higher Dimensional Geometry](#), August 22-26, 2022.
- *Shokurov's conjecture on conic bundles with canonical singularities*, [USTC NTAG 1-st](#), April 13, 2021.
- *Shokurov's conjecture on conic bundles with canonical singularities*, [Morningside Center of Mathematics](#), January 13, 2021.
- *On boundedness of divisors computing minimal log discrepancies for surfaces*, [Simons conference-Rationality](#), July 30, 2020.
- *On boundedness of divisors computing minimal log discrepancies for surfaces*, Algebraic Geometry Seminar (Online), The University of Tokyo, July 26, 2020.

SEMINARS & LECTURES

- *Four lectures on the resolution of singularities*, [Reading Workshop: Boundedness and Resolution at SCMS Fudan, 2021 summer](#).
- *Geography of birational models*, reading seminar at BICMR 2021 Spring.
- *Seminars on birational geometry*, reading seminar at JHU 2019 Spring.

HONORS AND
AWARDS

Johns Hopkins University

2018-Now Full tuition fellowship and Teaching assistantship.

University of Science and Technology of China

2018 Outstanding Undergraduates
2015,2016,2017 China National Scholarship (three times)
2015,2016,2017 Scholarship of of Hua Loo-Keng Talent Program, First Class (three times)
2017 Prize of Hua Loo-Keng Talent Program in Mathematics
2016 First prize in the 7th National College Student Mathematics Contest
2014-2015 Silver Prize, Outstanding Freshmen/Undergraduates Scholarship

TEACHING
EXPERIENCE

Johns Hopkins University

2021 Fall Teaching assistant, Linear Algebra
Grader, Complex Analysis (Honor)
2021 Spring Teaching assistant, Linear Algebra
2020 Fall Teaching assistant, Linear Algebra
Grader, Complex Analysis (Honor)
2020 Spring Teaching assistant, Calculus II (For Physical Sciences and Engineering)
Grader, Riemannian Surface
2019 Fall Teaching assistant, Linear Algebra
Grader, Riemann Geometry
2018 Fall Grader, Complex Analysis (Honor)

University of Science and Technology of China

2017 Fall Teaching assistant, Functional Analysis