Yujie Luo

CONTACT
INFORMATION

Johns Hopkins University
Department of Mathematics
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EDUCATION

Johns Hopkins University

Ph.D. Candidate, Mathematics, August 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). Preprint, submitted. [arxiv]

❑ *On boundedness of divisors computing minimal log discrepancies for surfaces* (joint with Jingjun Han). Accepted by J. Inst. Math. Jussieu, 1-24. [arxiv]

❑ *Shokurov's conjecture on conic bundles with canonical singularities* (joint with Jingjun Han and Chen Jiang). Forum of Math. Sigma, 10, E38. [arxiv]

❑ *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). Preprint, submitted. [arxiv]

TALKS

- *Shokurov's conjecture on conic bundles with canonical singularities*, Algebraic Geometry seminar at Johns Hopkins University, October 11, 2022.
- *ACC conjecture for minimal log discrepancies and its applications in birational geometry*, Algebraic Geometry seminar at 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.

VISITINGS	January 2022-Present	Department of Mathematics at Princeton University
	July 2021-August 2021	SCMS at Fudan University
	October 2020-July 2021	BICMR at Peking University

HONORS AND AWARDS

University of Science and Technology of China

2018	Outstanding Undergraduates
2015,2016,2017	China National Scholarship (three times)
2017	Prize of Hua Loo-Keng Talent Program in Mathematics

TEACHING EXPERIENCE

Johns Hopkins University

2022 Fall	Grader, Differential Geometry
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