

# Yujie Luo

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## 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](#), Apr 13, 2021.
- *Shokurov's conjecture on conic bundles with canonical singularities*, [Morningside Center of Mathematics](#), Jan 13, 2021.
- *On boundedness of divisors computing minimal log discrepancies for surfaces*, [Simons conference-Rationality](#), Jul 30, 2020.
- *On boundedness of divisors computing minimal log discrepancies for surfaces*, Algebraic Geometry Seminar (Online), The University of Tokyo, Jul 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 Collage 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