

QIXIA LUO

<https://qixia-luo.github.io>
luoqixia@math.ubc.ca

EDUCATION

The University of British Columbia, PhD Mathematics

September, 2025 - Present, Vancouver, BC, CA

GPA: TBD

- Advisor: Prof. Elina Robeva
- Research topics: Mathematical statistics; algebraic statistics; data science; machine learning
- Affiliated with the Institute of Applied Mathematics (IAM)

Queen's University, MSc Mathematics

September, 2023 - July, 2025, Kingston, ON, CA

GPA: 4.30/4.30

- Advisor: Prof. James A. Mingo
- Research topics: Random matrix theory; free probability
- Thesis: The north pole problem and recent developments in infinitesimal free probability

University of Toronto, HBSc Mathematics & Statistics

September, 2017 - June, 2022, Toronto, ON, CA

GPA: 3.95/4.00

- Degree: Honours Bachelor of Science with High Distinction
- Program: Mathematics & Its Applications Specialist (Probability/Statistics)

TEACHING & MENTORING

Teaching Assistant, The University of British Columbia

Starting September, 2025, Vancouver, BC, CA

- Graded homework assignments and midterms for differential calculus and multivariable calculus
- Tutored students in the Math Learning Center (MLC)

Teaching Assistant, Queen's University

September, 2023 - August, 2025, Kingston, ON, CA

- Graded homework and exams for linear algebra, integral and differential calculus, complex analysis, vector analysis
- Facilitated tutorials for integral and differential calculus
- Proctored exams

Tutor, Self-employed

September, 2023 - present, Remote

- Provided one-on-one tutoring and mentoring for high school students in all mathematics subjects
- Accumulated more than 200 hours of tutoring and individualized lesson planning

INDUSTRY EXPERIENCE

Intern, International Air Transport Association (IATA)

July, 2022 - April, 2023, Montréal, QC, CA

- Conducted business data analytics and created reports

- Supported the global operations for IATA Training in a large international team setting

SPEAKING EXPERIENCE

Departmental Seminar Speaker, Queen's University

- Stieltjes Transform and its Inversion; *two talks, 50 minutes each, Random Matrix Theory Seminar*
- Joint Infinitesimal Free Cumulants of Certain Unitarily Invariant Matrix Ensembles and their Transposes; *one talk, 50 minutes, Random Matrix Theory Seminar*
- Multiplicative Linear Functionals on Unital Banach Algebras; *two talks, 50 minutes each, Operator Algebras Seminar*
- Computing Maximal Ideal Spaces on Unital Banach Algebras; *two talks, 50 minutes each, Operator Algebras Seminar*
- Commutative C^* -Algebras; *one talk, 50 minutes, Operator Algebras Seminar*
- The Johnson-Lindenstrauss Lemma; *one talk, 50 minutes, Graduate Seminar*

CONFERENCES & WORKSHOPS

Alumn, AI4GoodLab

May, 2020 - June, 2020, Edmonton, AB, CA (remote due to pandemic)

- 7 weeks full-time workshop with a focus on the social implications of AI
- Amongst a small cohort of students selected across Canada to participate

GRADUATE AWARDS & SCHOLARSHIPS

- Four Year Doctoral Fellowship, *The University of British Columbia*, \$72,800 total over 4 years
- Four Year Doctoral Fellowship Tuition Award, *The University of British Columbia*, full tuition coverage over 4 years
- President's Academic Excellence Initiative PhD Award, \$840 per annum, *The University of British Columbia*
- The Senator Frank Carrel Fellowship, *Queen's University*, \$30,000 total over 2 years

UNDERGRADUATE AWARDS & SCHOLARSHIPS

- Howard Ferguson Scholarship, *University of Toronto*, \$12,000 total over 4 years
- The Coxeter Scholarship In Mathematics, *University of Toronto*, \$1480, *one time recipient*
- Galois Fund, *University of Toronto*, \$750 total, *two times recipient*
- C L Burton Open Scholarship, *University of Toronto*, \$400, *one time recipient*
- Dr. James A. & Connie P. Dickson Scholarship In Science & Mathematics, *University of Toronto*, \$400, *one time recipient*
- Dean's Scholar, *University of Toronto*, 2018 Summer, 2020 - 2022 Winters
- Hugh G. White Memorial Scholarship, *Actuarial Foundation of Canada*, \$1200, *one time recipient*

MISCELLANEOUS

- Permanent Resident of Canada
- First name pronunciation: /tʃiːʃə/ or *chee-shuh*
- This *curriculum vitae* is up-to-date as of *October 24, 2025*