

Larissa Kroell

PERSONAL DATA

WEBSITE: www.larissakroell.ca
EMAIL: lkroell@uwaterloo.ca
LANGUAGES: German (native), English (fluent)

EDUCATION

SEPTEMBER 2021 - PRESENT	PhD Candidate in PURE MATHEMATICS, University of Waterloo Supervisor: Matthew Kennedy
SEPTEMBER 2020 - AUGUST 2021	Master of Mathematics in PURE MATHEMATICS, University of Waterloo Project: Quantum Graphs Supervisor: Matthew Kennedy
OCTOBER 2016 - AUGUST 2020	Bachelor of Science in PHYSICS, University of Innsbruck Thesis: Steady-state probability distribution of active Brownian particles in confining potentials Supervisor: Thomas Franosch
OCTOBER 2016 - JUNE 2020	Bachelor of Science in MATHEMATICS, University of Innsbruck Thesis: Lipschitz-free Banach spaces Supervisor: Christian Bargetz

AWARDS AND SCHOLARSHIPS

2023-2026	NSERC Canada Graduate Scholarship – Doctoral , \$105,000
2023	Ontario Graduate Scholarship (declined), \$15,000
2022	Women in Math DRP Mentorship Award , University of Waterloo, \$400
2021	Provost Doctoral Entrance Award for Women , University of Waterloo, \$5000
2018	Early Student Award , Austrian Mathematics Society
2018	Leistungsstipendium (Achievement-based scholarship) , University of Innsbruck, 750€
2017	Leistungsstipendium (Achievement-based scholarship) , University of Innsbruck, 1178€

PUBLICATIONS

Foley, A.M., Kazdan, J., Kröll, L., Martínez Alberga, S., Melnyk, O., Tennenbaum, A., Spiders and their Kin: An Investigation of Stanley's Chromatic Symmetric Function for Spiders and Related Graphs. *Graphs and Combinatorics* 37, 87-110 (2021). <https://doi.org/10.1007/s00373-020-02230-4>

RESEARCH EXPERIENCE

SUMMER 2018	Fields Undergraduate Summer Research Program , The Fields Institute for Research in Mathematical Sciences Project: Project: Graphs, Chromatic Symmetric Functions, and Positivity Supervisor: Angèle Foley
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TALKS

- SEPTEMBER 10th 2023 Title: **Towards a dynamical characterization of the intersection property for partial actions**, AMS Sectional meeting, Buffalo, Recent developments in operator algebras and quantum information theory (invited)
- DECEMBER 4th 2022 Title: **An operator system view on regular quantum graphs**
CMS Winter meeting, Toronto, Quantum Information Session (invited)
- AUGUST 8th 2022 Title: **Quantum Graphs: Several Ways to Quantize a Graph**
YMC*A, University of Oslo, Lightning Talk (contributed)
- MARCH 2nd 2022 Title: **Different Perspectives on Quantum Graphs**
Arizona State University and Embry-Riddle Aeronautical University C*-seminar, online (invited)
- JULY 30th 2021 Title: **FUSR Research Series: From Fields to Quantum Graphs**
The Fields Institute for Research in Mathematical Sciences, online (invited)

TEACHING EXPERIENCE

- 2020 **Teaching Assistant**, University of Waterloo
- PRESENT *Selected duties:* Grading assignments, designing practice exams, holding office hours, holding tutorials, monitoring an online forum, developing a marking scheme and writing solutions
Courses: PMATH453/753, PMATH450/650, PMATH352, PMATH351, PMATH333, PMATH 331, MATH674, MATH600, MATH228, MATH237, MATH146, MATH138, MATH137
- 2018-2020 **Teaching Assistant**, University of Innsbruck
Selected duties: Monitoring an online forum, conducting and grading weekly problem solving sessions, holding tutorials
Courses: Analysis II, Analysis I, Calculus I
- 2019 **First-year advisor**, University of Innsbruck
Duties: Helped students with their homework in calculus, analysis, and linear algebra

SERVICE

- AUGUST 2023 **Board member**, Operator Algebra Mentor Network
-present
- SEPTEMBER 2022 **Pure Mathematics Graduate Student Representative**, University of Waterloo
- present
- SEPTEMBER 2022 **Co-organizer**, Pure Mathematics Graduate Student Colloquium, University of Waterloo
- present
- SPRING 2022 **Mentor for undergraduate directed reading program**, University of Waterloo
Project: Positive definite matrices
- JULY 2019 **Student Representative for Natural Sciences and Mathematics**, University of Innsbruck
-JULY 2020
- JULY 2017 **President**, Student representatives for Mathematics, University of Innsbruck
- JULY 2019