

BENJAMIN KRUGER

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EDUCATION

2020 – 2024 Bachelor of Advanced Science with Honours (Class I), The University of Queensland, Australia.

Undergraduate Thesis: *The Ricci flow on Homogeneous Superspaces*.

GPA: 6.781/7

SCHOLARSHIPS AND AWARDS

2023 University of Queensland University Medal

Awarded to the top 5% of first class honours graduates across the entire university.

2020 – 2023 Dean's Commendation for academic excellence

Awarded to students for outstanding academic achievement

2022 Australian Mathematical Sciences Institute Vacation Research Scholarship

Competitive scholarship awarded to students who have been accepted into the AMSI research program

EXPERIENCE

Feb 2021 – March 2024 Teaching Assistant, The University of Queensland

Duties included: marking assignments, invigilating exams, and running tutorials for courses in analysis, algebra, and geometry.

April 2024 – Present Data Analyst, Cubiko

Duties include: developing and maintaining data pipelines with tools such as Clickhouse, DBT, CUBE.js, Airflow, and Python.

MATHEMATICAL WRITING

- The Ricci flow on homogeneous superspaces

Honours thesis 2023, supervised by Artem Pulemotov and Yang Zhang

- An introduction to supergeometry

AMSI summer project 2022, supervised by Artem Pulemotov

- The prescribed cross-curvature problem on three-dimensional unimodular Lie groups

Summer research project 2021, supervised by Artem Pulemotov

PRESENTATIONS

2023 Honours Presentation (The University of Queensland)

The Ricci flow on homogeneous supermanifolds

2023 AMSI Connect (The University of Melbourne)

An introduction to supergeometry

2022 – 2023 Analysis Seminar (The University of Queensland)

Various topics

2022 Summer Research Presentation

The prescribed cross-curvature problem on three-dimensional unimodular Lie groups