

Alexander Elzenaar

aelz176@aucklanduni.ac.nz • <https://aelzenaar.github.io/>

EDUCATION

The University of Auckland, New Zealand

- MSc. in mathematics 2021 – ongoing
 - Thesis topic: Deformation spaces of Kleinian groups
 - Advisors: Dist. Prof. Gaven Martin (NZ Inst. of Adv. Study, Massey Uni.), Dr. Jeroen Schillewaert
- BSc. (hons) in mathematics with first class honours 2020
 - Dissertation: Toric varieties
 - Advisor: Dr. Jeroen Schillewaert
- Certificate in Languages 2020
 - Russian and Ancient Egyptian
- BSc. in mathematics 2017 – 2019
 - Between 2016 and early 2019, I was enrolled in a conjoint Mathematics (BA)/Physics (BSc) degree
 - Exchange student at the University of Toronto, 2018 fall semester

The University of Canterbury, New Zealand

- STAR programme 2016
 - First year university mathematics program for secondary school students

RESEARCH EXPERIENCE

The University of Auckland, New Zealand

- Research assistant (Professional Casual Staff) 2020 – 2021
 - Studying properties of the real algebraic variety of spherical (t, t) -designs
 - Supervisor: Dr. Shayne Waldron
- Summer research project in Mathematics 2019 – 2020
 - Project: Numerical construction of spherical (t, t) -designs
 - Advisor: Dr. Shayne Waldron

TEACHING AND MARKING EXPERIENCE

The University of Auckland, New Zealand

- Tutor and marker in the Department of Mathematics 2019 – ongoing
 - Tutoring and marking: single- and multi-variate calculus; complex calculus; linear algebra; logic and proofwriting; mathematics for computer science; computational mathematics; mathematics for non-mathematicians (infinities, topology, fractals); real analysis

PUBLICATIONS

- [1] [A. Elzenaar](#), G. Martin, and J. Schillewaert, “Approximations of the Riley slice” (preprint), arXiv:2111.03230 [math.GT], 2021.

AWARDS & SCHOLARSHIPS

- University of Auckland Department of Mathematics Student Research Conference prize 2021
- University of Auckland Postgraduate Honours / PG Diploma Scholarship 2020
- University of Auckland Summer Research Scholarship 2019 – 2020
- University of Auckland Faculty of Arts Deans List 2017
- NZQA Outstanding Scholar Award 2016
 - Limited to top 40–60 secondary school students in New Zealand

PROFESSIONAL AFFILIATIONS

New Zealand Mathematical Society,
Student member

[2021-11-08]