

Simon N. Thomas

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INFORMATION `https://simonnthomasmaths.github.io`

EDUCATION **The University of Queensland**

PhD, 2024-present
Research area: Analytic Number Theory
Supervisor: Adrian Dudek

The University of Melbourne

Master of Science (Mathematics and Statistics), 2020-2022
Thesis: *Unramified Theta Correspondence for Unitary Groups*
Supervisor: Chenyan Wu

The University of Melbourne

Bachelor of Science (Mathematics and Statistics), 2017-2019

EXPERIENCE **SMP Poster Day 2025**

First Prize for a First Time Presenter for Mathematics.
Poster Title: Sieves and Almost Primes.

School of Mathematics and Physics, University of Queensland

Tutor, 2025-present
Subjects:

- Multivariate Calculus & Ordinary Differential Equations
- Discrete Mathematics
- Optimisation Theory
- Linear & Abstract Algebra & Number Theory
- Complex Analysis

The University of Queensland

Global Change Scholar, 2024-2025
Worked with Healthy Land and Water

Certus Solutions

Junior Software Engineer in Test, 2022-2023

The University of Melbourne

Vacation Scholar, 2020
Project: *Hamiltonicity of Honeycomb Toroidal Graphs*
Supervisors: Sanming Zhou and Binzhou Xia

Walter and Eliza Hall Institute of Medical Research

Undergraduate Research Student in Bahlo Laboratory, 2018-2019

Tutoring for Excellence

High School Tutor, 2017
 Subjects: Maths, Physics, Chemistry, Biology

PUBLICATIONS AND **Mathematics**

PREPRINTS

1. The sum of a prime power and an almost prime, *Forum Math.*, 2026 (with D. R. Johnston).
2. Primes and almost primes between cubes, submitted, 2026 (with D. R. Johnston, J. P. Sorenson, J. E. Webster) arXiv:2601.15564

Bioinformatics

1. A survey of RNA editing at single cell resolution links interneurons to schizophrenia and autism, *RNA*, 2021, 27(12):rna.078804.121 (with B. R. E. Ansell, R. Bonelli, J. E. Munro, S. Freytag, M. Bahlo)
2. First report of RNA editing in human retina - a process central to photoreceptor health, and a risk factor for both AMD and rarer macular degeneration, *Invest. Ophthalmol. Vis. Sci.*, 2024, 65(7):3314 (with B. R. E. Ansell, R. Bonelli, A. Manda, R. Ratnapriya, M. Pinelli, A. Swaroop, D. diBernardo, S. Banfi, M. Bahlo)

TALKS

RNA editing in the human retina, UROP Conference, Melbourne (July 2019).

Hopf algebras, irreducible and primitive elements, Representation Theory Student Seminar, University of Melbourne (December 2020).

Global Hecke algebras, Number Theory Seminar, University of Melbourne (April 2021).

Theta series, Number Theory Seminar, University of Melbourne (September 2021).

Unramified theta correspondence for unitary groups, MSc. Final Presentation, University of Melbourne (May 2022).

Sieve-theoretic Rao theorem, Joint Meeting of the NZMS, AustMS and AMS, University of Auckland (December 2024).

Sieve theory and almost primes, Graduate Student Seminar, University of Queensland (May 2025).

The sum of a prime power and an almost prime, PhD Confirmation Seminar, University of Queensland (June 2025).

Almost primes between all cubes, Number Theory Down Under 2025, University of Canterbury (August 2025).

Sieves and almost primes, AustMS Meeting 2025, La Trobe University (December 2025).

Exploring explicit formulae, Number theory seminar, UNSW Canberra (April 2026)

CONFERENCES
 ATTENDED

Number Theory Down Under (2024), La Trobe University, Bendigo.

Joint Meeting of the NZMS, AustMS and AMS (2024), University of Auckland, Auckland.

Number Theory Down Under (2025), University of Canterbury, Christchurch.

AustMS Meeting (2025), La Trobe University, Bundoora.