

Tāmaki Makaurau Auckland DELTA 2027 – First Announcement

This is the first announcement of the 16th Southern Hemisphere Delta Conference on the Teaching and Learning of Undergraduate Mathematics and Statistics

21–26 November 2027 · University of Auckland | Tāmaki Makaurau · Auckland, New Zealand

Kia ora koutou, and a warm invitation to join us in Tāmaki Makaurau Auckland for Delta 2027. After gathering online in 2021, we are delighted to welcome the Delta community in person to the University of Auckland's City Campus, in the heart of New Zealand's largest city.

Delta 2027 is a milestone: it marks 30 years since the first Delta conference was held in Brisbane, Australia, in 1997. Since then, Delta has met every two years across the Southern Hemisphere, building a close-knit international community of academics interested in mathematics and statistics education.

Delta is also unusual among academic conferences in having a refereed Special Issue of the *International Journal of Mathematical Education in Science and Technology* (IJMEST) usually published in time for the start of the conference. The Special Issue features peer-reviewed articles by the research teams presenting at Delta and is usually published within about seven months of the submission deadline, so in most years it appears in time for the conference itself. Few conferences anywhere offer this, and the long-standing partnership between Delta and IJMEST is one of the things that makes Delta special.

We warmly welcome friends and colleagues, old and new, from across the Southern and Northern hemispheres. Delta attracts an international audience of academics interested in mathematics and statistics education, including disciplinary specialists, education theorists, learning scientists and tertiary education practitioners across the sciences and engineering.

Conference theme

Making sense of mathematics and statistics: cognitive and psychological insights into university learning

Delta 2027 puts cognitive science and psychological research on teaching and learning at the centre of university mathematics and statistics. We invite contributions that draw on what we know about how people learn: how students come to understand, remember, connect and apply mathematical and statistical ideas, and how teaching, assessment and course design can be shaped by that knowledge. Research in educational and cognitive psychology suggests that cognitive processes do not operate in

isolation: affective and motivational factors, such as interest, self-efficacy, beliefs about mathematics, anxiety and sense of belonging, interact with cognition and can influence attention, persistence and learning outcomes. Contributions that examine these interactions are particularly welcome. To keep the call open and simple, there are no sub-themes: all contributions on the teaching and learning of undergraduate mathematics and statistics are welcome.

Keynote speakers

We are pleased to announce our first two keynote speakers, whose research spans the learning sciences and undergraduate mathematics education and speaks directly to the conference theme.



Logan Fiorella

University of Georgia, USA

Logan Fiorella is a Professor of Educational Psychology at the University of Georgia. His research examines the cognitive processes underlying effective learning and instruction, with a particular focus on generative learning and how students actively make sense of new information. He is co-author of *Learning as a Generative Activity* and co-editor of the most recent editions of *The Cambridge Handbook of Multimedia Learning* and *Handbook of Research on Learning and Instruction*. His honours include the Outstanding Early Career Scholar Award from the American Educational Research Association (Division C), the Richard E. Snow Award from the American Psychological Association (Division 15), and the Creative Research Medal from the University of Georgia. He is also a Fellow of the Psychonomic Society. Delta 2027 will be Logan's first Delta conference, and we look forward to the fresh perspective he will bring to our community.



Tracy Craig

University of Twente, the Netherlands

Tracy Craig is an Associate Professor of mathematics education at the University of Twente in the Netherlands, in the chair of Mathematics of Imaging and AI, Department of Applied Mathematics. She is head of the mathematics education research group FERMAT, and her research interests are in practice-led mathematics education, in particular multivariable and vector calculus, as well as linear algebra. She explores conceptual understanding of specific mathematical ideas and the associated cognitive decision-making approaches when engaging with these topics. More specifically, her recent research projects have been contextualised in the areas of vector calculus problem solving, the double integral and differential equations. She is also engaged in a project on game-based learning in linear algebra. Tracy has been part of the Delta community for more than 20 years, first from South Africa and now from Twente.

Further keynote speakers will be announced in the Second Announcement.

Ways to contribute

1. IJMEST Special Issue. Full manuscripts may be submitted for a refereed Special Issue of the *International Journal of Mathematical Education in Science and Technology* (IJMEST), due **6 April 2027**. The Special Issue is expected to be published around the time of the conference. Manuscripts may be up to 8,000 words, excluding the title, abstract, author details, tables, declarations and references. Authors agree to review at least one other Special Issue submission.

2. Conference Proceedings full papers. Refereed full papers for the Delta 2027 Conference Proceedings are due **15 August 2027**, with decisions to authors around 23 September 2027. At least one author of each accepted paper must be registered by **30 September 2027** for the paper to be published. Papers should be 6,000–8,000 words, excluding references. Authors agree to review at least one other Proceedings submission.

3. Abstract-only presentations. Abstract submissions open on **15 June 2027** and close on **30 September 2027**. Abstracts are reviewed in rounds, so submitting early means hearing early:

Abstract submitted by	Decision by
30 June 2027	7 July 2027
15 September 2027	22 September 2027
30 September 2027	7 October 2027

IJMEST or Proceedings? Authors may submit a manuscript to IJMEST or to the Proceedings, but not to both at the same time for the same piece of work. If IJMEST declines a manuscript, the authors may revise it in light of the reviewers' comments and submit it to the Proceedings; the IJMEST reviews will be passed on to the Proceedings editors. IJMEST decisions are expected in early July 2027, well ahead of the Proceedings deadline.

Submission links will go live on the conference website in January–February 2027.

Key dates

Date	
January–February 2027	Submission links open on the conference website
1 April 2027	Registration opens at the early-bird rate
6 April 2027	IJMEST Special Issue manuscripts due
15 June 2027	Abstract submissions open
15 August 2027	Conference Proceedings full papers due
About 23 September 2027	Proceedings decisions to authors
30 September 2027	Early-bird registration closes · Last day for abstract-only submissions · At least one author of each accepted paper must be registered
21–26 November 2027	Delta 2027 conference, University of Auckland

Conference programme at a glance

The conference opens with a welcome reception on the evening of Sunday 21 November and closes in the early afternoon of Friday 26 November 2027. Wednesday is a free day for sightseeing and excursions. A detailed programme will follow closer to the conference.

Day	Programme
Sunday 21 November	Registration and welcome reception (evening)
Monday 22 November	Conference sessions
Tuesday 23 November	Conference sessions
Wednesday 24 November	Free day for sightseeing and excursions
Thursday 25 November	Conference sessions
Friday 26 November	Conference sessions; close in the early afternoon

Registration

Registration opens on **1 April 2027** at the early-bird rate, which is available until **30 September 2027**. Registration fees and accommodation options will be published in the Second Announcement and on the conference website.

Website and contact

Conference website: https://delta2027.org.nz/

Please visit the website and use the **sign-up button** to subscribe to future announcements, so you receive the Second Announcement, submission links and registration details as soon as they are released.

For all enquiries, please email the Convener, Tanya Evans: **t.evans@auckland.ac.nz**

Visiting Aotearoa New Zealand

Whether this is your first trip to Aotearoa or a welcome return, here are a few things worth knowing as you plan.

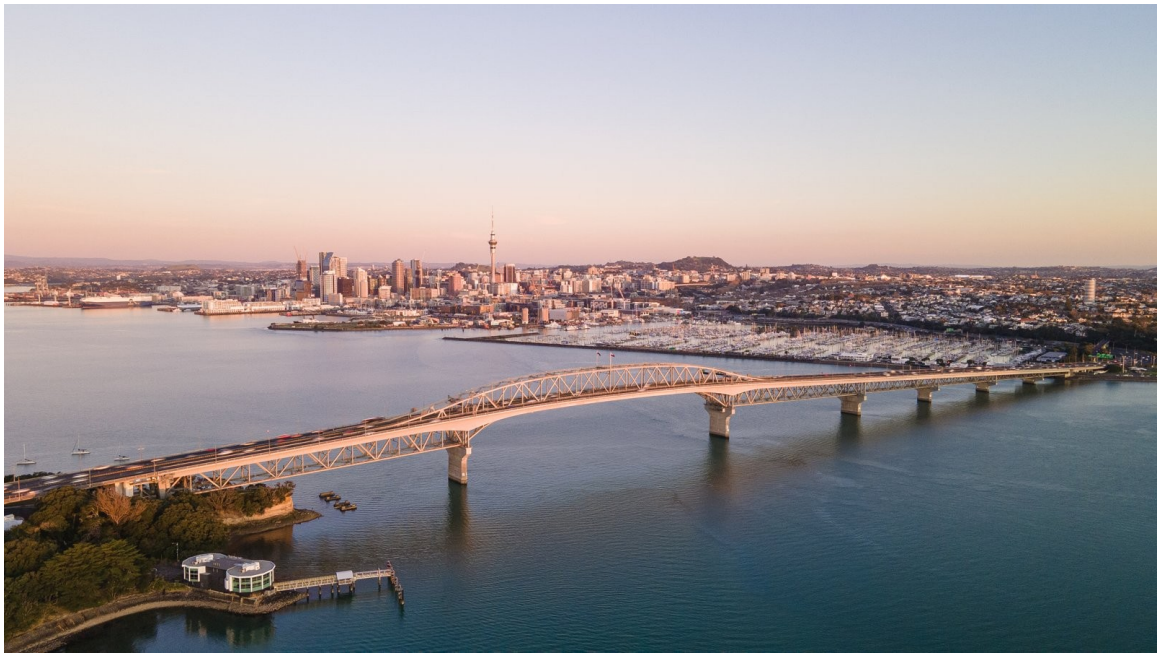
Aotearoa New Zealand

Aotearoa is the Māori name for New Zealand, and te reo Māori is an official language alongside English and New Zealand Sign Language. You will hear and see te reo every day, starting with the greeting *kia ora*.

- **Season and weather.** Late November is late spring, heading into summer. Auckland days are typically mild to warm (around 15–25 °C) but the weather can change quickly, so pack layers and a light rain jacket. The sun is strong: sunscreen, a hat and sunglasses are recommended even on cloudy days.
- **Time zone.** In November New Zealand is on daylight saving time (NZDT, UTC+13).
- **Entry requirements.** Most visitors need either a New Zealand Electronic Travel Authority (NZeTA) or a visitor visa before travelling, and most must also pay the International Visitor Conservation and Tourism Levy (NZD 100). Australian citizens are exempt from both. Request your NZeTA well before you fly; requests are usually processed within 72 hours but can take longer. Check your own requirements at immigration.govt.nz.

- **Biosecurity.** New Zealand protects its unique environment with strict border rules. Declare all food, plant and animal products, and any hiking boots or outdoor gear, on your arrival card. Undeclared items can attract on-the-spot fines.
- **Practicalities.** The currency is the New Zealand dollar (NZD); cards and contactless payment are accepted almost everywhere. Power is 230 V with Type I plugs (the same as Australia). Tipping is not expected. Traffic drives on the left.

Tāmaki Makaurau Auckland



The Auckland Harbour Bridge and city skyline at dusk. Photo: Tātaki Auckland Unlimited, Auckland Brand Library.

Auckland is New Zealand's largest city, home to about 1.7 million people, and is consistently rated among the world's most liveable cities. It sits on a narrow isthmus between two harbours, the Waitematā and the Manukau, across a field of around 50 volcanic cones, several of which are parks with sweeping city views a short walk or bus ride from campus.

- **Getting here.** Auckland Airport (AKL) is New Zealand's main international gateway, with direct flights from Australia, Asia, the Pacific and the Americas. The city centre is roughly 30–60 minutes away by taxi, rideshare or the AirportLink bus and train.
- **In the city.** Ferries from the downtown waterfront reach Devonport, Rangitoto Island (a young volcano with a summit walk) and Waiheke Island, known for beaches and vineyards. The West Coast black-sand surf beaches and rainforest of the Waitākere Ranges are under an hour's drive west.
- **Before or after the conference.** November is a lovely time to travel. Popular trips include Rotorua's geothermal landscapes and Māori cultural experiences (about 3 hours' drive), the Waitomo glowworm caves (about 2.5 hours) and the Bay of Islands (about 3–4 hours), with domestic flights to Wellington, Christchurch, Queenstown and the rest of the country.



Lion Rock and the black-sand beach at Piha, on Auckland's wild west coast, under an hour's drive from the city. Photo: Tātaki Auckland Unlimited, Auckland Brand Library.

University of Auckland | Waipapa Taumata Rau

The University of Auckland is New Zealand's largest and highest-ranked university (67th in the QS World University Rankings 2027), with more than 45,000 students from around 100 countries. The conference will be held on the City Campus, which sits in central Auckland beside Albert Park and the Auckland Domain, within walking distance of hotels, restaurants and the waterfront.

The University's Department of Mathematics and Department of Statistics have long-standing strengths in tertiary mathematics and statistics education, and Auckland's Department of Statistics is the birthplace of the R programming language. Delta has a long connection with Aotearoa: the 2027 conference follows Remarkable Delta in Queenstown (2003), Volcanic Delta in Rotorua (2011) and Herenga Delta, hosted from Auckland in 2021.

Details of venues, accommodation and social events will follow in the Second Announcement.

Committees

Local Organising Committee (Department of Mathematics, University of Auckland): Tanya Evans (Convener), Phil Kane (Deputy Convener), Nicolette Rattenbury and Jonny Stephenson.

International Steering Committee:

Name	Affiliation	Country
Prof Marcelo de Carvalho Borba	São Paulo State University	Brazil
Dr Rosie Cameron	University of Sydney	Australia
A/Prof Anita Campbell	University of Cape Town	South Africa

Name	Affiliation	Country
A/Prof Tracy Craig	University of Twente	Netherlands
Anne D'Arcy-Warmington	The University of Western Australia	Australia
Prof Johann Engelbrecht	University of Pretoria	South Africa
A/Prof Tanya Evans	University of Auckland	New Zealand
Prof David Holgate	University of the Western Cape	South Africa
Dr Michael Jennings	University of Queensland	Australia
Dr Phil Kane	University of Auckland	New Zealand
Dr Nazim Khan	The University of Western Australia	Australia
Prof Birgit Loch	University of New England	Australia
Prof Víctor Martinez-Luaces	Universidad de la República	Uruguay
A/Prof Greg Oates	University of Tasmania	Australia
A/Prof Pragashni Padayachee	University of Cape Town	South Africa
Dr Rachel Passmore	University of Auckland	New Zealand
Dr Nicolette Rattenbury	University of Auckland	New Zealand
Dr Jonny Stephenson	University of Auckland	New Zealand
Prof Leigh Wood	Macquarie University	Australia

We look forward to welcoming you to Tāmaki Makaurau in November 2027.

Ngā mihi nui, The Delta 2027 Local Organising Committee