

UNCONFIRMED

Australian Council of Heads of Mathematical Sciences (ACHMS)**Meeting 1/2026****MINUTES**

The Meeting of the Australian Council of Heads of Mathematical Sciences (ACHMS) was held at 2:00 pm AEDT on Thursday, 28 May 2026, online via Zoom.

PRESENT**ACHMS Executive Committee**

Prof. Warwick Tucker (Chair), Prof. Inge Koch (Deputy Chair)

University Representatives

Prof. Kuldeep Kumar, Dr Iman Ardekani, Prof. Finnur Larusson, Dr Aaron Thornton, Professor Susanna Guatelli, Prof. Andrew Francis, Prof. Andrew Bassom, Dr Adam Harris, A/Prof. Michael Kemp, Prof. Jeffrey Hogan, A/Prof. Narelle Brack, A/Prof. Sergiy Shelyag, Dr Nargiz Sultanova, Prof. Steven Langford, Prof. Howard Bondell, Dr Gabe Sorrentino, Dr Trevor Langlands, Prof. Joe Grotowski, Prof. Tony Roberts, Professor Roozbeh Hazrat, Prof. Nicola Armstrong, A/Prof. Bishnu Lamichhane.

Friends of the Council

Prof. Stephan Tillmann, Dr Deborah Jackson, Ms Jennifer Bowden, Prof. Peter Kim, Dr Gabriele Tartaglino-Mazzucchelli, Dr Les Trudzik, Dr Glen Wheeler, Prof. Michael Plank, Prof. Aidan Sims, A/Prof. Lynne Giles

AMSI Staff

Prof. Tim Marchant, Ms Elena Panfilova, Ms Anna Muscara.

Guest Speakers

A/Prof. Nathan Brownlowe (University of Sydney)

BUSINESS**1. Welcome**

The Chair welcomed member university representatives, friends of the Council and invited guests. He acknowledged the Traditional Owners of the lands on which participants were located and paid respects to Indigenous Elders past, present and emerging.

1.1. Apologies and Proxies

Apologies were noted from Professor Kerri Morgan (WIMSIG), Professor Graeme Hocking (Murdoch University), Professor Federico Frascoli (Swinburne University of Technology) and Professor James Brown (UTS).

The Chair welcomed new university representatives Dr Aaron Thornton (Southern Cross University), Professor Susanna Guatelli (University of Wollongong), Professor Roozbeh Hazrat (Western Sydney University), and Professor James McCoy (RMIT University). New Friends of the Council welcomed were Professor Michael Plank (ANZIAM), Dr Gabriele Tartaglino-Mazzucchelli (ANZAMP) and Ms Laura Stewart, Acting CEO of the Australian Mathematics Trust (AMT).

1.2. Agenda Changes

No changes were made to the agenda.

1.3. Minutes of the Past Meeting

The minutes of the ACHMS meeting held on 10 December 2025 were accepted as an accurate record. No amendments were raised.

2. Appointments to the ACHMS Executive Committee

The Chair announced the incoming Executive Committee members: Professor Andrew Francis (UNSW) as Chair, Professor Nicola Armstrong (Curtin University) and Professor Tony Roberts (QUT) as Executive Committee members. In accordance with the ACHMS ToR Professor Warwick Tucker, the outgoing Chair, will serve as Deputy Chair for one year to support the transition.

Professor Francis thanked the outgoing executive and described ACHMS as a valuable forum through which HoS/HoD could share common challenges and work collectively for the discipline. He invited members to identify matters on which the Council could act and highlighted the importance of collaboration with AMSI, AustMS and other organisations.

Professor Armstrong emphasised the need for stronger promotion and advocacy for mathematics and statistics. Professor Roberts highlighted opportunities for ACHMS to connect the mathematical sciences community with broader science leadership and advocacy bodies, including Australian Council of Deans of Science (ACDS) and professional science organisations.

The Chair thanked Professor Inge Koch and Professor James Brown for their service on the outgoing Executive Committee. Professor Koch reflected positively on her term and wished the incoming executive success in strengthening the mathematical sciences nationally.

3. Report from the Chair

The Chair thanked AMSI Executive Assistant for the administrative support provided to the Council and reiterated ACHMS's core purposes: facilitating the sharing of best practice in mathematical sciences education, research and community engagement, and keeping Heads of Schools of Mathematical Sciences informed of relevant initiatives.

The Chair reported on the action arising from the December 2025 meeting regarding the Mathematical Sciences Decadal Plan. He had contacted Professor Adrian Baddeley, Chair of the National Committee for Mathematical Sciences, regarding follow-up, implementation and reporting for the 2016 Decadal Plan. The Academy's National Committees had recently been reorganised and their new terms of reference no longer explicitly referred to decadal plans. Professor Baddeley

understood that the National Committee may undertake work along similar lines and had sought further advice.

The Council agreed that communication with the National Committee should remain open and that the matter should be followed up when further information becomes available.

4. Introducing the new Bachelor of Mathematical Sciences, University of Sydney

Associate Professor Nathan Brownlowe outlined the development of the University of Sydney's new Bachelor of Mathematical Sciences, which commenced in 2026 following the reintroduction of a named undergraduate mathematics degree. The degree was developed after the University moved away from named mathematics degrees in 2018 and later reviewed the effectiveness of the Mathematical Sciences Program and integrated Master of Mathematical Sciences pathway. The new degree aims to provide a stronger disciplinary identity for mathematically focused students while maintaining breadth, flexibility and employability-focused skill development.

The three-year degree combines a common first-year curriculum with later specialisation through majors in mathematics, statistics, data science, financial mathematics and statistics, mathematical modelling and computation, and discrete mathematics and algorithms. The first year was designed to keep all of the School's major pathways open while giving students foundations in mathematics, statistics, data science and coding.

A distinctive feature is the new first-year subject MATH1080 Research and Communication in Mathematical Sciences. Students work in small research-style groups with academic staff, give presentations, prepare a research essay, and develop skills in mathematical reading, writing, logic and LaTeX. Professor Stephan Tillmann explained that the seminar format was also designed to create a strong cohort identity that can be difficult to establish in large first-year classes.

Professor Tillmann added that coding was embedded for all students through the program and that MATH1080 included ethics, ethical reasoning and discussion of AI and generative AI. The active seminar model used preparatory readings, group discussion and changing group membership to promote critical engagement and help students build connections across the cohort.

Associate Professor Brownlowe reported an inaugural cohort of 87 students, comprising 65 domestic and 22 international students. Around half enrolled in advanced mathematics streams, and approximately 30% of the MATH1080 cohort were female. Although the degree was still in its first semester, the School regarded the initial enrolment as positive and was considering workshops, career-focused activities and cohort events to sustain engagement beyond the first semester.

Discussion

Professor Koch congratulated the University of Sydney on securing approval for a named mathematics degree and reflected on similar challenges at RMIT. She asked how many subjects constituted a major and whether students had to select a specialisation in first year. Associate Professor Brownlowe explained that a major comprised approximately eight courses and that first-year students largely followed the common foundation. Professor Tillmann added that the curriculum was intentionally designed to keep all six School majors accessible until students selected one or two pathways after first year.

Dr Les Trudzik welcomed the new degree and asked how the intake compared with earlier advanced mathematics and integrated Masters offerings, what level of interest students were showing in data science, and whether MATH1080 taught students to communicate mathematics to non-

mathematicians. Associate Professor Brownlowe did not have comparable historical enrolment data but noted that the School viewed the inaugural intake positively and that data science appeared to be increasing in popularity. Professor Tillmann explained that the earlier integrated Masters was difficult to compare because it had limited Commonwealth-supported places and students continued to choose Honours. He added that MATH1080 used popular mathematical writing, research essays, museum objects and in-class writing exercises to develop communication for broader audiences.

Associate Professor Lynne Giles asked whether accreditation of the Statistics major through the SSA accreditation process was being considered. Associate Professor Brownlowe advised that he did not know the current position and acknowledged that accreditation could be worth exploring.

The Chair asked how difficult it had been to agree on the ten common core units. Professor Tillmann explained that the design process involved extensive consultation and was guided by the requirement that every major remain accessible after first year. The principal point of resistance was the apparent emphasis on data science. It was addressed partly by recognising the relevant first-year data subject as a coding pathway, with an alternative computer science coding subject also available.

Professor Roberts asked how the Data Science major incorporated computer science and how AI had influenced the curriculum. Professor Tillmann explained that both Data Science and Discrete Mathematics and Algorithms were interdisciplinary majors delivered approximately equally by School of Mathematics and Computer Science. Associate Professor Brownlowe said AI had not been a major focus when the degree was approved, although it was increasingly appearing in individual subjects and curriculum discussions.

Professor Tillmann explained that generative AI had changed considerably between the proposal and delivery of MATH1080. The teaching team was considering reducing the weighting of the research essay and increasing assessed in-class activities. He also described the University's approach to non-secure assessment, under which students were expected to acknowledge the system used, the date and the prompts. Associate Professor Brownlowe noted that staff were reviewing the future of take-home mathematics assignments because AI use had reduced student interaction with teaching staff and challenged the value of marking polished submissions.

Professor Francis asked whether double-degree pathways had been established, noting that many UNSW advanced mathematics students combined mathematics with engineering. Professor Tillmann responded that the principal purpose of the new degree was to provide a pathway for students wishing to take as much mathematics or statistics as possible. Students seeking a double degree could instead use the Bachelor of Science and complete a mathematics major.

Professor Koch shared an assessment approach in which students received marks for documenting how AI had been used and, importantly, how they had checked whether its output was correct. She observed that verification was often the most difficult part for students. Professor Tillmann agreed and described fact-checking activities in MATH1080 that required students to trace claims back to primary sources and examine how evidence was produced.

The Chair observed that AI was rapidly affecting both education and mathematical research. He suggested that the implications of AI for the mathematical sciences could warrant a dedicated discussion at the hybrid Council meeting in December.

The Chair thanked Associate Professor Brownlowe and Professor Tillmann for the informative and inspiring presentation and wished the University of Sydney well with the new degree.

6. Other Business

Australian Mathematics Calendar

Professor Tillmann advised that the SMRI had established an Australian Mathematics Calendar to improve national visibility and coordination of workshops and research events. He noted that overlapping workshops had occurred because organisers were unaware of one another's plans. Members were encouraged to promote the calendar within their schools and submit planned events using the online form.

Calendar: [Australian Mathematics Calendar](#)

Event submission: [Submit an event](#)

The Chair congratulated the Institute on its recent philanthropic support and welcomed the positive development for mathematics.

Future meeting topics and ACHMS history

The Chair invited members to send suggestions for future meeting topics to Professor Francis. He also thanked Ms Jan Thomas for preparing a history of ACHMS, which is currently being proofread and will be uploaded to the ACHMS website shortly.

Next Meeting

The next meeting will be held online and in person during the AustMS Annual Meeting 2026 at the University of Western Australia, between 1 and 4 December 2026. The exact date and time are to be confirmed.

There being no further business, the Chair thanked attendees for their participation and declared the meeting closed at approximately 2:53pm AEST.

ACTION SHEET

Item #	Action	Responsibility	Comments	Status
28/05/2026 Chair's Report	Maintain communication with the National Committee for Mathematical Sciences regarding any follow-up reporting on the 2016–2025 Mathematical Sciences Decadal Plan and any future strategic planning or successor arrangements, and report back to the Council when further information becomes available.	Chair	Initial action item from 10/12/2025 completed. Professor Warwick Tucker contacted Professor Adrian Baddeley and reported back to ACHMS on 28 May 2026. Further advice from the National Committee is awaited following the Academy's committee restructure.	Ongoing

Item #	Action	Responsibility	Comments	Status
28/05/2026 Other Business	Promote the Australian Mathematics Calendar and encourage colleagues to submit workshops and events. Australian Mathematics Calendar Submit an event	ACHMS members		Ongoing

Signed by the Chair: _____

and dated: _____

DISTRIBUTION

ACHMS Executive Committee

Professor Warwick Tucker, Outgoing Chair
 Professor Inge Koch, Outgoing Deputy Chair
 Professor James Brown, Outgoing Executive Committee Member
 Professor Andrew Francis, Incoming Chair
 Professor Warwick Tucker, Incoming Deputy Chair
 Professor Tony Roberts, Incoming Executive Committee Member
 Professor Nicola Armstrong, Incoming Executive Committee Member

Members

Dr Duncan Sutherland, Australian Defence Force Academy (UNSW Canberra)
 Professor Lilia Ferrario, Australian National University
 Associate Professor Adam Butt, ANU School of Finance, Actuarial Studies & Statistics
 Professor Kuldeep Kumar, Bond University
 Dr David Ompong, Charles Darwin University
 A/Professor Michael Kemp, Charles Sturt University
 Professor Nicola Armstrong, Curtin University
 Associate Professor Julien Ugon, Deakin University
 Dr Steven Richardson, Edith Cowan University
 Dr Nargiz Sultanova, Federation University Australia
 Associate Professor Sergiy Shelyag, Flinders University
 Mr James McBroom, Griffith University
 Associate Professor Shaun Belward, James Cook University
 Associate Professor Narelle Brack, La Trobe University
 Associate Professor Richard Garner, Macquarie University
 Professor Warwick Tucker, Monash University
 Professor Graeme Hocking, Murdoch University
 Professor Tony Roberts, Queensland University of Technology
 Professor James McCoy, RMIT University
 Dr Aaron Thornton, Southern Cross University

Professor Federico Frascoli, Swinburne University of Technology
Professor Finnur Larusson, University of Adelaide
Professor Howard Bondell, University of Melbourne
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Dr Iman Ardekani, University of Notre Dame
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Dr Trevor Langlands, University of Southern Queensland
Professor Dingxuan Zhou, University of Sydney
Professor Andrew Bassom, University of Tasmania
Professor Steven Langford, University of Technology Sydney
Dr Aaron Wiegand, University of the Sunshine Coast
Professor Michael Giudici, University of Western Australia
Professor Susanna Guatelli, University of Wollongong
Dr Gabriele (Gabe) Sorrentino, Victoria University
Professor Roozbeh Hazrat, Western Sydney University

Friends of the Council

Professor Katie Makar, Mathematics Education Research Group of Australasia MERGA
Dr Thomas Britz, Combinatorial Mathematics Society of Australasia CMSA
A/Professor Lynne Giles, Statistical Society of Australia SSA
Professor Michael Plank, Australia and NZ Industrial and Applied Mathematics ANZIAM
Dr Gabriele Tartaglino-Mazzucchelli, Australian and New Zealand Association of Mathematical Physics ANZAMP
A/Professor Honglei Xu, Australian Society For Operations Research ASOR
Mr Allan Dougan, Australian Association of Mathematics Teachers AAMT
Professor Aidan Sims, Australian Mathematical Society AustMS
Dr Deborah Jackson, Australian Mathematical Society AustMS
Professor Tim Marchant, Australian Mathematical Sciences Institute AMSI
Professor Adrian Baddeley, National Committee for Mathematical Sciences NCMS
Australian Mathematics Trust AMT
Mr Ryan Winn, Science and Technology Australia STA
Professor Chris Matthews, Aboriginal and Torres Strait Islander Mathematics Alliance ATSIMA
Dr Tony Willis, Australian Council of Deans of Science ACDS
Professor Jan de Gier, Mathematical Research Institute MATRIX
Dr Judy-anne Osborn, Computer-Assisted Research Mathematics and its Applications CARMA
Professor Stephan Tillmann, University of Sydney Mathematical Research Institute SMRI
Dr Kerri Morgan, Women in Mathematics Special Interest Group WIMSIG
Professor Ute Roessner, Australian Research Council ARC
Dr Anders Holmberg, Australian Bureau of Statistics ABS
Professor James Brown, University of Technology Sydney
Professor Inge Koch, RMIT University

Written by E. Panfilova on 07/09/2026.