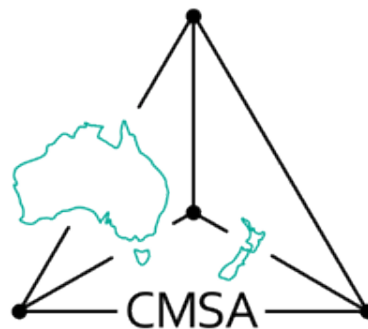# Combinatorial Mathematics Society of Australasia

Newsletter 74: October 2025

Incorporated 8 July 1996

Introduction

Thanks to all CMSA members who have sent information for this newsletter.

Please send news as soon as you have anything of interest to CMSA members and the combinatorial community, even if no newsletter is imminent. Email items to the Newsletter Editor: kevin.mcavaney@ozemail.com.au. Only in plain text please.

Closing date for Newsletter 75: 30 March 2026.

Old newsletters can be found here.

Workshop and conference announcements

47ACC December 2025

The 47th Australasian Combinatorics Conference (47ACC) will be held at Victoria University of Wellington, New Zealand, 1–5 December 2025.

It will include invited talks, contributed talks in parallel sessions, the conference dinner, a presentation of the CMSA Anne Penfold Street Student Prize for the best student talk at the conference, an excursion, and the CMSA Annual General Meeting. Registration will automatically include a one-year membership of CMSA, if not already a life member.

Researchers in any area of discrete mathematics and its applications are warmly invited to attend and to contribute a talk.

The invited speakers for 47ACC are:

- Johannes Carmesin (Technische Universität Bergakademie Freiberg, Germany)
- Katie Clinch (University of Queensland)
- Jim Geelen (University of Waterloo, Canada)
- Eunjung Kim (KAIST and DIMAG-IBS, Korea; and CNRS, France)
- Karen Meagher (University of Regina, Canada)
- Kerri Morgan (RMIT University, Melbourne)
- Luke Morgan (University of Western Australia)
- Rajko Nenadov (University of Auckland)

Organisers: Nick Brettell and Dillon Mayhew.

Early bird registration deadline: 3 October 2025.
Final registration deadline: 14 November 2025
Deadline for submission of abstracts: 14 November 2025.

Contact: 47AustCombCon@gmail.com

Website: https://sms.wgtn.ac.nz/Events/ACC47/

More combinatorics conferences

Workshop on Spectral Graph Theory, WSGT 2025,
Gramado, Rio Grande do Sul, Brazil, 28–31 October 2025

Queer and Trans Mathematicians in Combinatorics, QTMC 2025,
University of Queensland, Brisbane, Australia, 5–7 November 2025

XIII Latin American Algorithms, Graphs, and Optimization Symposium, LAGOS 2025,
Universidad de Buenos Aires, Argentina, 10–14 November 2025

The 69th Annual Meeting of the Australian Mathematical Society,
LaTrobe University, 9–12 December 2025. This conference has a session on algebra and combinatorics.

International Conference on Graph Theory and its Applications 2025, ICGTA25,
Amrita Vishwa Vidyapeetham, Coimbatore, India, 15–17 December 2025

Recent Developments on Lattice Polytopes in Leipzig,
Max Planck Institute for Mathematics in the Sciences, Leipzig, Germany, 20–23 January 2026

12th International Conference on Algorithms and Discrete Applied Mathematics, CALDAM 2026,
Indian Institute of Technology Dharwad, India, 12–14 February 2026

57th Southeastern International Conference on Combinatorics, Graph Theory & Computing,
Florida Atlantic University, Boca Raton, USA, 9–13 March 2026

Combinatorics and Geometry in Mytilene,
Mytilene, Greece, 25–29 May 2026

Combinatorics 2026,
Naples, Italy, 25–29 May, 2026

Fourth Meru Combinatorics Conference 2026,
Indian Institute of Technology Bhilai, India, 27–29 May 2026

27th Conference on Integer Programming and Combinatorial Optimization, IPCO 2026,
University of Padova, Italy, 17–19 June 2026

Structure in Matroids, Embedded Graphs and Graphs,
International Centre for Mathematical Sciences, Edinburgh, Scotland, 29 June–3 July 2026

31st British Combinatorial Conference 2026,
Cardiff University, Wales, 6–10 July 2026

International Congress of Mathematicians 2026,
Philadelphia, USA, 23–30 July 2026. The Congress is a quadrennial event organised by the International Mathematical Union. There are 20 sections across mathematics including Section 13 Combinatorics, which lists the following topics. Combinatorial structures. Enumeration: exact and asymptotic. Graph theory. Probabilistic and extremal combinatorics. Designs and finite geometries. Algebraic combinatorics. Topological and analytical techniques in combinatorics. Combinatorial geometry. Combinatorial number theory. Additive combinatorics. Polyhedral combinatorics and combinatorial optimization.

The 48th Australasian Combinatorics Conference (48ACC) will be held at Monash University, Melbourne, December 2026, dates TBA.

Recent news

New PhD

Congratulations to John Fitzgerald who has been recently awarded a PhD at the University of NSW, Sydney, for his thesis Mathematization of statutory interpretation - will it help?, supervised by Thomas Britz (UNSW), Ben Hachey (University of Sydney) and Bennett Moses (UNSW). It explores the use of graph theory and probability theory in the significant challenge of aligning legislative drafting with judicial interpretation.

Combinatorics at MATRIX

In June this year, several CMSA members participated in the Combinatorics of McKay and Wormald research program at MATRIX, organised by Jane Gao, Catherine Greenhill, Mikhail Isaev, Anita Liebenau, and Ian Wanless. This event celebrated the lives and mathematics of Brendan McKay and Nick Wormald, two cute photos of whom are included on the program website.

New Appointment

Bertille Granet has joined the Monash University Research Group in Discrete Mathematics as a postdoctoral research fellow, working with Daniel Horsley. Bertille was awarded a PhD by the University of Birmingham for her thesis *Path and cycle decompositions of graphs and digraphs*, which won the British Combinatorial Committee PhD Prize in July 2024. She subsequently held a research position at the Institute of Informatics, Heidelberg University.

IMU Grant

CMSA member Tariq Rahim at the Abbottabad University of Science & Technology, Pakistan, advises that they have been awarded an International Mathematical Union grant under its Volunteer Lecture Program to support the organization of a specialised short course, *Machine Learning with Graphs*. It is aimed at introducing graduate students and early-career researchers to cutting-edge intersections between graph theory and machine learning. The course will be led by Furqan Aziz from the University of Leicester, UK, a recognized expert in applied graph algorithms and data science.

CMSA Seminars

Recent seminars in this online series were:

- Stephen Glasby, University of WA, 5 August 2025, *Counting the number of tournaments and "even" graphs*
- Hao Huang, National University of Singapore, 19 August 2025, *A d-degree generalisation of the Erdős-Ko-Rado Theorem*
- Natalie Behague, University of Warwick, 2 September 2025, *Colour-biased Hamilton cycles in subgraphs of the random graph*
- Simona Boyadzhiyska, Alfréd Rényi Institute), 16 September 2025, *Almost-perfect colourful matchings in three-edge-coloured bipartite graphs*

For abstracts and forthcoming seminars visit http://combinatorics-australasia.org/seminars.html

The Australasian Journal of Combinatorics

Editor-in-Chief Michael Albert wishes to remind all colleagues across Australasia that the Australasian Journal of Combinatorics AJC, published by the CMSA, is an active and well-regarded venue for original research in all areas of combinatorics. Submissions are welcome from established researchers, early-career academics, and students. AJC has a rigorous peer-review process and there are no page charges for authors. Submission guidelines and further information are available on the journal's website: ajc.maths.uq.edu.au.

If you have recent or ongoing work suitable for publication, please consider the AJC as a home for your research. All who are involved in AJC look forward to receiving your work and continuing to showcase high-quality combinatorics particularly from researchers based in the Australasian region. Submissions may be sent to ajc@maths.uq.edu.au. Only pdf files are required at submission stage.

AJC is a 'diamond open access' journal: online and free for readers and authors. There are three volumes per year, closing in about February, June and October. Each volume has three parts. Volume 93, Part 1 is now available, as are all volumes back to Volume 1.

Visit here to register for email notices whenever new papers are published.

The Journal is now indexed by Scopus from Volume 13 (1996) onwards, and by Clarivate Analytics 'Emerging Sources Citation Index' from 2015 on.