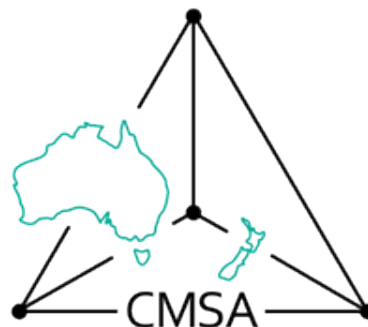# Combinatorial Mathematics Society of Australasia

Newsletter 73: July 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 74: 30 September 2025.

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 (UNSW, Sydney)
- Jim Geelen (University of Waterloo, Canada)
- Eunjung Kim (KAIST, South 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.
Deadline for submission of abstracts: 14 November 2025.

Contact: 47AustCombCon@gmail.com

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

More combinatorics conferences

[Algebraic Combinatorics, Special Functions, and Representation Theory](#),
University of Queensland, Brisbane, 14–18 July 2025

[37th International Conference on Formal Power Series and Algebraic Combinatorics (FPSAC 2025)](#),
Hokkaido University, Japan, 21–25 July 2025

[31st International Computing and Combinatorics Conference (COCOON 2025)](#),
Chengdu, China, 15–17 August 2025

[European Conference on Combinatorics, Graph Theory and Applications (EUROCOMB'25)](#),
Hungarian Academy of Sciences, Budapest, 25–29 August 2025

[Finite Geometries 2025, 7th Irsee Conference](#),
Irsee, Germany, 31 August–6 September 2025

[Finite Geometry & Friends 2025, A Brussels summer school on Finite Geometry](#),
Brussels, Belgium, 15–19 September 2025

[10th Cracow Conference on Graph Theory (10CCGT)](#),
Pieniny Mountains, Poland, 22–26 September 2025

[Workshop on Spectral Graph Theory 2025](#),
Gramado, Rio Grande do Sul, Brazil, 28–31 October 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 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 PhDs

Congratulations to the following students who recently completed their PhD.

Sam Bastida, School of Mathematics and Statistics, Victoria University of Wellington. Thesis: [Two Problems at the Second Level of the Polynomial Hierarchy](#), 2025. Supervised by Nick Brettell and Dillon Mayhew. School of Mathematics

Michael Gill, School of Mathematics, Monash University. Thesis: [Enumeration and Isomorphism for 1-Factorisations and Latin squares](#), 2025. Supervised by Ian Wanless.

Robert Hickingbotham, School of Mathematics, Monash University. Thesis: [Exploring sparse and hereditary graph classes via products and tree-decompositions](#), 2025. Supervised by David Wood. Robert won a prestigious Mollie Holman Award from Monash for his thesis. He now holds a post-doctoral position at École normale supérieure de Lyon, France.

Yuxuan Li, School of Mathematics and Statistics, University of Melbourne. Thesis: [The second largest eigenvalue of Cayley graphs on symmetric groups](#), 2025. Supervised by Sanming Zhou and Binzhou Xia.

Christopher Heyde Medal

Congratulations to Anita Liebenau (UNSW, Sydney) who has been awarded the 2025 Christopher Heyde Medal by the Australian Academy of Science. This medal recognises outstanding research in the mathematical sciences by researchers up to 10 years post-PhD. Quoting from Anita's citation: "Among her many achievements, she developed a breakthrough method for enumerating regular graphs, leading to the first progress since 1989. She has also proved important results on thresholds for games on graphs, and has made major contributions towards resolving the Erdős–Hajnal conjecture." Read more or watch a video about Anita's research [here](#).

New Appointment

At the University of Southern Mindanao, The Philippines, Dr Leonard M. Paleta, former Chairperson of the Mathematics and Statistics Department, has been appointed as University Director for Instruction, effective March 2025.

CMSA Seminars

Recent seminars in this online series were by:

- Ian Wanless, Monash University, 30 April 2025, *Subsquares of Latin squares*
- Liana Yepremyan, Emory University, 7 May 2025, *Long rainbow paths in graphs and digraphs*
- Mikhail Isaev, UNSW, 14 May 2025, *Counting Eulerian orientations*
- António Girão, University of Oxford, 28 May 2025, *Ordered Ramsey numbers*

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 92, Parts 1, 2 are 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.

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