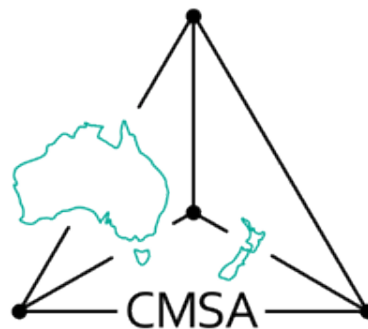# Combinatorial Mathematics Society of Australasia

Newsletter 71: October 2024

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 72: 31 March 2025.

Old newsletters can be found here.

Workshop and conference announcements

46ACC December 2024

The 46th Australasian Combinatorics Conference (46ACC) will be held at The University of Queensland, Brisbane, Australia, 2–6 December 2024.

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 46ACC are:

- Alice Devillers (University of Western Australia)
- Melissa Lee (Monash University)
- Florian Lehner (University of Auckland)
- Anita Liebenau (UNSW Sydney)
- Jie Ma (University of Science and Technology of China)
- Sam Mattheus (Vrije Universiteit Brussel)
- Anita Pasotti (Università degli Studi di Brescia)
- David Wood (Monash University)

Organising Committee: Sara Davies, Barbara Maenhaut, Darryn Bryant.

Early bird registration deadline: 1 November 2024.
Deadline for submission of abstracts: 15 November 2024.

Contact: 46acc@uq.edu.au

Website: https://46acc.github.io

More combinatorics conferences

[35th Midwestern Conference on Combinatorics and Combinatorial Computing (MCCCC 35)](),
Duluth, Minnesota, USA, 18–20 October 2024

[6th Workshop on Enumeration Problems and Applications (WEPA 2024)](),
Kinugawa-onsen, Nikko, Japan, 19–22 October 2024

[11th Latin American Workshop on Cliques in Graphs (LAWCG 2024)](),
Ceará, Brazil, 20–23 October 2024

[The 35th International Symposium on Algorithms and Computation (ISAAC'24)](),
Sydney, Australia, 8–11 December 2024

[Workshop on Mathematical Cryptography](),
Auckland, New Zealand, 16–18 December 2024

[ACM-SIAM Symposium on Discrete Algorithms (SODA25)](),
New Orleans, Louisiana, USA, 12–15 January 2025

[13th EAI International Conference on Game Theory for Networks](),
Magdalene College, University of Cambridge, UK, 17–18 March 2025

[Algebraic and Analytic Methods in Combinatorics](),
Simons Laufer Mathematical Sciences Institute, California, USA, 17–21 March 2025

[8th Workshop on Design Theory, Hadamard Matrices and Applications (Hadamard 2025)](),
Universidad de Sevilla, Seville, Spain, 26–30 May 2025

[Canadian Discrete and Algorithmic Mathematics Conference (CanaDAM2025)](),
Ottawa, Canada, 26–29 May 2025

[14th International Conference on Algorithms and Complexity (CIAC 2025)](),
LUISS University, Rome, Italy, 10–12 June 2025

[20th Workshop on Modelling and Mining Networks (WAW 2025)](),
Vilnius University, Vilnius, Lithuania, 30 June–3 July 2025

[International Conference on Enumerative Combinatorics and Applications (ICECA 2025)](),
on line, 25–27 August 2025

47th Australasian Combinatorics Conference (47ACC),
Victoria University of Wellington, New Zealand, December 2025. Dates TBD.

Recent news

Parabola Plus

Parabolic Problems: 60 Years of Mathematical Puzzles in Parabola by David Angell and Thomas Britz (A K Peters/CRC Press, 2024) celebrates the 60th anniversary of the outreach journal *Parabola*, which is published by the School of Mathematics and Statistics UNSW Sydney. This collection features the very best of nearly 1800 captivating puzzles, re-mastered with 240 fresh illustrations and a bonus chapter on essential problem-solving techniques. Requiring only high-school mathematics, these challenges in geometry, combinatorics, number theory, logic, and algebra have been carefully chosen to entertain, surprise, and most importantly, to be fun!

In celebration of Parabola's 60th anniversary, it has been given a prettier, and much faster, [website](). Please enjoy Parabola, and feel very welcome to submit your own articles and problems too!

Joint tri-society Meeting

There will be a joint meeting of the New Zealand, Australian, and American Mathematical Societies in Auckland NZ, 9–13 December 2024. The program includes several plenary speakers, several general contribured talks, and 42 special sessions including one on Algebraic Combinatorics and Matroids. For more information visit [https://ms-meet-2024.blogs.auckland.ac.nz/]()

International Congress of Mathematicians 2026

The International Mathematical Union is holding [ICM2026]() at Philadelphia, USA, 23–30 July 2026. The ICM Structure Committee (chaired by Terence Tao) has proposed a program of 20 sections, including one on Combinatorics. Nominations are sought for plenary and sectional speakers. They should be sent by 1 Nov 2024 to the Program Committee chair [Claire Voisin, chair@pc26.mathunion.org]().

An Outreach Opportunity

Maths Challenge is a unique open style annual problem-solving program designed to support and encourage mathematically gifted students from years 3 to 10 and their teachers. It is produced by the Australian Mathematics Trust and has been running for 34 years. There are over 15000 entries in a typical year. The problems and teacher guides are prepared by a committee of up to 16 committed volunteer teachers, educationalists, and mathematicians. More details are available in my ZDM paper Mathematics Challenge for Young Australians. There is currently a vacancy on the committee for a mathematician who is keen to foster enthusiasm for mathematics amongst our future analytical thinkers. If interested, please contact the Committee Chair kevin.mcavaney@ozemail.com.au

CMSA Seminars

Recent seminars in this online series were by:

- Nemanja Draganić, Oxford University, 31 Jul 2024, *Hamiltonicity in Expanders*
- David Wood, Monash University, 14 Aug 2024, *Graph Product Structure: Theory and Applications*
- Hong Liu, Institute for Basic Science, South Korea, 28 Aug 2024, *Beyond chromatic threshold via the (p,q)-theorem, and a sharp blow-up phenomenon*
- Anurag Bishnoi, Delft University of Technology, 11 Sep 2024, *Oddtowns, partial ovoids, and the rank-Ramsey problem*
- Kalina Petrova, ETH Zürich, 25 Sep 2024, *Odd-Ramsey numbers of complete bipartite graphs*

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

The Australasian Journal of Combinatorics

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 90, 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.

Submissions to the Australasian Journal of Combinatorics may be sent to ajc@maths.uq.edu.au. Only pdf files are required at submission stage.

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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