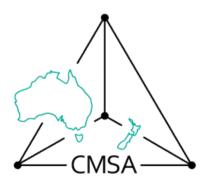
# Combinatorial Mathematics Society of Australasia

Newsletter 63: April 2022



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 64: 30 June 2022.

Old newsletters can be found here.

# Workshop and conference announcements

#### 44ACC December 2022

The 44th Australasian Combinatorics Conference (44ACC) will be held virtually and hosted by the University of Otago, New Zealand, in December 2022. Exact dates and times are yet to be determined

The conference programme will include invited talks, contributed talks, a presentation of the CMSA Anne Penfold Street Student Prize for the best student talk at the conference, and the CMSA Annual General Meeting. Researchers in any area of discrete mathematics and its applications are warmly invited to attend and contribute a talk.

Organising Committee: Michael Albert, Nick Cavenagh, Marston Condor, Jeanette McLeod.

Contact: michael.albert@otago.ac.nz

### More combinatorics conferences (COVID-19 permitting)

Combinatorial and Algebraic Enumeration,

University of Waterloo, Waterloo, Canada, 24–27 May 2022.

9th Cracow Conference on Graph Theory,

Rytro, Poland, 5-10 June 2022.

14th Nordic Combinatorial Conference (Norcom 2022),

The Arctic University of Norway, Tromsø, Norway, 7–9 June 2022.

SIAM Conference on Discrete Mathematics (DM22),

Pittsburg, USA, 13-16 June 2022.

Permutation Patterns 2022,

Valparaiso University, Valparaiso, USA, 20–24 June 2022.

Algorithmic and Enumerative Combinatorics (AEC 2022),

Technical University of Vienna, Vienna, Austria, 4–8 July 2022.

29th British Combinatorial Conference,

Lancaster University, Lancaster, UK, 11-15 July 2022.

8th Czech-Slovak International Symposium on Graph Theory, Combinatorics, Algorithms and Applications, Charles University, Prague, Czechia, 25–29 July 2022.

20th International Conference on Random Structures and Algorithms,

Gniezno, Poland, 1-5 August 2022.

Maribor Graph Theory Conference (MGTC 2022),

University of Maribor, Maribor, Slovenia, 11–15 September 2022.

30th International Symposium on Graph Drawing and Network Visualisation,

Tokyo, Japan, 14–16 September 2022.

9th Polish Combinatorial Conference,

Bedlewo, Poland, 18–24 September 2022.

# Recent news

#### CMSA Council elections

The CMSA Council for 2022, elected at the AGM in December last year, is as follows.

President: Thomas Britz Vice-President: John Bamberg

Immediate Past President: Brendan McKay

Secretary: Darryn Bryant Treasurer: Sara Herke

Other Council Members: Michael Albert, Daniel Horsley, Dillon Mayhew, Jeanette McLeod, Jeroen Schillewaert,

Gabriel Verret, Binzhou Xia

#### **CMSA** Seminars

This virtual seminar series is organised by Anita Liebenau (UNSW) and Nina Kamčev (Monash University). It is delivered roughly every two weeks via Zoom. Information on past and future seminars can be obtained here.

#### **MATRIX**

The Mathematical Research Institute MATRIX recently hosted the research workshop Structural Graph Theory Downunder II. It was wonderful to do face-to-face mathematics again. Participants included seven international visitors, six of whom stayed on at Monash University for another week.

Participants: Rutger Campbell, Pascal Gollin, Kevin Hendrey (Institute for Basic Science, Korea); Jane Tan, Youri Tamitegama, Freddie Illingworth (University of Oxford, UK); Bojan Mohar (Simon Fraser University, Canada); Katie Clinch (University of Melbourne); Daniel Harvey (Ballarat); Thomas Lesgourges (UNSW, Sydney); Marc Distel, Robert Hickingbotham, Tony Huynh, Jackson Goerner, David Wood (Monash University, Melbourne).

All CMSA members are encouraged to submit proposals for MATRIX workshops. It is great way to kick-start research collaborations. David Wood.

#### Student Symposium

Supported by MATRIX and AMSI, the Student Symposium in Combinatorics, is an online conference organised by combinatorics students for all students. It provides a friendly environment for students to discuss problems and present their research to other students around the world. Students in any area of combinatorics, as well as anyone who uses combinatorics in their research, are invited and encouraged to attend and to give a talk on their research. For those who are earlier in their studies, we welcome you to talk about your field and the research you plan to do! The symposium will be held virtually from 30 May to 3 June 2022. Contact: sscombinatorics2022@gmail.com

#### Grants awarded

Congratulations to the following who were recently awarded Australian Research Council Discovery Projects 2022 research grants.

Daniel Horsley (Monash University): The Zarankiewicz problem through linear hypergraphs and designs.

Nick Wormald (Monash University) and Anita Liebenau (UNSW): Enumeration and random generation of contingency tables with given margins.

#### New PhD

Congratulations to Nemanja Poznanović who was awarded a PhD by The University of Melbourne in February 2022 for his thesis entitled Tetravalent Vertex- and Edge-Transitive Graphs, which was supervised by Cheryl Praeger (UWA), Lawrence Reeves (Melbourne) and Sanming Zhou (Melbourne).

#### Job Vacancies

1. Lecturer/Senior Lecturer in Algebra, School of Mathematics, Monash University, Melbourne.

Exceptional candidates in any area of algebra (interpreted broadly) will be considered. Research areas in algebra that are of specific interest include group theory, representation theory, computational algebra, Lie theory, and algebraic aspects of topology, geometry, graph theory, combinatorics, number theory, dynamical systems, artificial intelligence or data science. Relevant research groups at Monash are: Discrete Mathematics, Topology, and Analysis & Geometry. Applications close 28 April 2022.

2. A postdoctoral position is available in the School of Computer Science at the University of Auckland to work on a project concerning the development of algorithms with performance guarantee to reconstruct phylogenetic networks from biological data. The position is for 18 months, to commence in early 2023. Applicants will be expected to have a strong background in theoretical computer science or discrete mathematics. Contact Dr Simone Linz for more information on the position and application process. Applications will be reviewed starting 15 April 2022 and continue until the position is filled.

## 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 82, Parts 1, 2, 3 are 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.

ISSN: 2202-3518 (online only, after 2013); 1034-4942 (paper, before 2014).

We welcome onboard a new co-Editor-in-Chief, Michael Albert, and thank Sanming Zhou very much for his great contributions in that role over more than four years.