

The Webmasters, Carmine Monetta and Marialaura Noce, both of University of Salerno, Italy, did brilliant work in ensuring the smooth running of all the technical aspects of the conference.

The conference organizers would like to thank the following sponsors:

- NSF, National Science Foundation.
- ICA, Institute of Combinatorics and Applications.
- FAU, Florida Atlantic University.
- Universities of Salerno and Milan (Italy).

34th Midwestern Conference on Combinatorics and Combinatorial Computing

MCCCC34

Normal, October 21 – 23, 2022
COMMUNICATED BY HEATHER JORDON

The 34th Midwestern Conference on Combinatorics and Combinatorial Computing (MCCCC34) was held in person October 21-23, 2022, on the campus of Illinois State University (ISU) in Normal, Illinois. There were six invited speakers and 48 contributed talks and a total of 96 registered participants. The conference coincided with a celebration of Saad El-Zanati on the occasion of his retirement after 30 years of teaching at Illinois State.

The MCCCC began as the Carbondale Combinatorics Conferences which were held (1986-1990) at Southern Illinois University in Carbondale. From its beginning, the Conference focused on gathering researchers with similar interests and providing opportunities for collaboration and feedback while spotlighting the work of internationally known keynote presenters. Most of the early participants were design theorists from the United States and Canada. The conference has since evolved to a prestigious national conference in all areas of combinatorics and combinatorial computing and has achieved recognition and attracted scholars and researchers of various backgrounds from national and international institutions. A recent trend in the MCCCC series is the increased participation of graduate and undergraduate student researchers. This trend continued with MCCCC34 with a significant number of presentations by graduate students, high school teachers and Research Experiences for Undergraduates (REU) participants.



Saad's former students at the social dinner

The participants included about 20 veterans of Saad’s REU for pre-service and in-service secondary math teachers.

ORGANIZING COMMITTEE

Amin Bahmanian; Ryan Bunge; Craig Cullen; Heather Jordon;
Michael Plantholt; Dan Roberts; Songling Shan; Papa Sissokho



Saad and seven-eighths of the organizers. From left to right: Amin, Dan, Heather, Papa, Saad, Michael, Ryan and Songling.



Saad and the Italian delegation. From left to right: Anita, Saad, Tommaso Traetta and Simone Costa.

There was a perfect gender equality of the invited speakers; three “boys” and three “girls”.

INVITED SPEAKERS

Brian Alspach (University of Newcastle, Australia)

*The current state of the exploration
of $F(1, 2)$ -invariant Graphs*

Marijn Heule (Carnegie Mellon University, USA)

*Computer-aided mathematics:
successes, advances, and trust*

Mariusz Meszka (AGH University of Science and Technology, Poland)

Maximal partial designs

Anita Pasotti (University of Brescia, Italy)

On graphs with prescribed edge-lengths

Wannasiri Wannasit (Chiang Mai University, Thailand)

On cyclic G -designs for classes of cubic graphs

Anna Weigandt (Massachusetts Institute of Technology, USA)

Derivatives and Schubert calculus



Saad and two-thirds of the invited speakers. From left to right: Mariusz, Anita, Saad, Wannasiri and Anna.

It is worth mentioning that on Saturday 22, some conference attendees and organizers proved their singing skills on a karaoke night.



The conference picture

The conference was supported by a grant from the National Science Foundation. Additional Support was provided by the Institute for Combinatorics and its Applications, and by the Department of Mathematics, the College of Arts and Sciences, and the Office of Research and Graduate Studies at Illinois State University.

For further information about **MCCCC34** with a complete list of abstracts please visit

<https://about.illinoisstate.edu/mcccc34/>