

Tuesday July 2, 2024

18:00 - 19:00 Welcome reception and registration
(Philosophers' Courtyard of the main university building)

Wednesday July 3, 2024

8:00 - 9:00 Registration (Venue, Architecture School)

9:00 - 9:30 Opening (room B)

9:30 - 10:30 Invited talk (room B): Graph universality
Julia Böttcher

10:30 - 11:00 Coffee break (room C)

Session 1.A (room A)

Session 1.B (room B)

11:00 - 11:20 Regular polytopes, sphere packings and Apollonian sections
Iván Rasskin

The Four-Color Ramsey Multiplicity of Triangles.
Aldo Kiem, Sebastian Pokutta and Christoph Spiegel

11:20 - 11:40 A covering problem for zonotopes and Coxeter permutahedra
Gyula Károlyi

Disconnected common graphs via supersaturation
Jae-Baek Lee and Jonathan Noel

11:40 - 12:00 On the sum of several finite subsets in \mathbb{R}^2
Mario Huicochea, René González-Martínez, Amanda Montejano and David Suárez

Limit theorems for the Erdős-Rényi random graph conditioned on being a cluster graph
Marc Noy, Martijn Gösgens, Lukas Luchtrath, Elena Magnanini and Élie de Panafieu

12:00 - 12:20 Classification of Edge-to-edge Monohedral Tilings of the Sphere
Hoi Ping Luk, Ho Man Cheung and Min Yan

Random lifts of very high girth and their applications to frozen colourings
Guillem Perarnau and Giovanne Santos

12:20 - 12:30 Short break

Session 2.A (room A)

Session 2.B (room B)

12:30 - 12:50 Bicolored point sets admitting non-crossing alternating Hamiltonian paths
Jan Soukup

The flexibility among 3-decompositions
Irene Heinrich and Lena Volk

12:50 - 13:10 Three-term arithmetic progressions in two-colorings of the plane
Gabriel Currier, Kenneth Moore and Chi Hoi Yip

Expressing the coefficients of the chromatic polynomial in terms of induced subgraphs: a systematic approach
Kerri Morgan and Lluis Vena

13:10 - 13:30 The algorithmic fried potato problem in two dimensions
Francisco Criado Gallart and Francisco Santos Leal

d -regular graph on n vertices with the most k -cycles
Arturo Ortiz San Miguel and Gabor Lippner

13:30 - 15:30 Lunch (self-arranged)

15:30 - 16:30 Invited talk (room B): Counting polytopes
Arnau Padrol

16:30 - 17:00 Coffee break (room C)

17:00 - 18:00 Poster session

Thursday July 4, 2024

9:00 - 10:00	Invited talk (room B): Recent work on the Erdős-Hajnal Conjecture <i>Alex Scott</i>	
10:00 - 10:10	Short break	
	Session 3.A (room A)	Session 3.B (room B)
10:10 - 10:30	The weight spectrum of the Reed-Muller codes $RM(m-5, m)$ <i>Claude Carlet</i>	Separating Cycle Systems <i>Fábio Botler and Tássio Naia</i>
10:30 - 10:50	Geometric quasi-cyclic low density parity check codes <i>Simeon Ball and Tomàs Ortega</i>	Switching methods for the construction of cospectral graphs <i>Aida Abiad, Nils van de Berg and Robin Simoens</i>
10:50 - 11:20	Coffee break (room C)	
	Session 4.A (room A)	Session 4.B (room B)
11:20 - 11:40	Computing edge-colored ultrahomogeneous graphs <i>Irene Heinrich, Eda Kaja and Pascal Schweitzer</i>	Ranges of polynomials control degree ranks of Green and Tao over finite prime fields <i>Thomas Karam</i>
11:40 - 12:00	Multi-objective Linear Integer Programming based in Test Sets <i>José María Ucha, María Isabel Hartillo and Haydee Jiménez</i>	A short proof of an inverse theorem in bounded torsion groups <i>Pablo Candela, Diego Gonzalez-Sanchez and Balázs Szegedy</i>
12:00 - 12:20	Integer programs with nearly totally unimodular matrices: the cographic case <i>M. Aprile, S. Fiorini, G. Joret, S. Kober, M.T. Seweryn, S. Weltge and Y. Yuditsky</i>	Enumeration of unlabelled chordal graphs with bounded tree-width <i>Jordi Castellví and Clément Requilé</i>
12:20 - 12:30	Short break	
	Session 5.A (room A)	Session 5.B (room B)
12:30 - 12:50	On a conjecture concerning the roots of Ehrhart polynomials of symmetric edge polytopes from complete multipartite graphs <i>Max Kölbl</i>	On homogeneous matroid ports <i>Jaume Martí-Farré and Anna de Mier</i>
12:50 - 13:10	On Ewald's and Nill's Conjectures about smooth polytopes <i>Luis Crespo Ruiz, Álvaro Pelayo and Francisco Santos</i>	Complexity measures of trilean functions <i>Sara Asensio, Ignacio García-Marco and Kolja Knauer</i>
13:10 - 13:30	Polytope Neural Networks <i>Juan L. Valerdi</i>	The Borsuk number of a graph <i>José Cáceres, Delia Garijo, Alberto Marquez and Rodrigo Silveira</i>
13:30 - 15:30	Lunch (self-arranged)	
15:30 - 16:30	Invited talk (room B) Ramon Llull prize. TBA	
16:30 - 17:00	Coffee break (room C)	
17:00 - 18:00	Business meeting (room B)	
19:00 - 19:45	Guided tour (Colegio de San Ildefonso, main university building)	
20:30 - ...	Gala dinner (Parador de Alcalá de Henares)	

Friday July 5, 2024

Session 6.A (room A)

Session 6.B (room B)

9:30 - 9:50	Creating trees with high maximum degree <i>Grzegorz Adamski, Małgorzata Bednarska-Bzdęga, Sylwia Antoniuk, <u>Dennis Clemens</u>, Fabian Hamann and Yannick Mogge</i>	Product representation of perfect cubes <i>Zsigmond György Fleiner, Márk Hunor Juhász, Blanka Kövér, <u>Péter Pál Pach</u> and Csaba Sándor</i>
9:50 - 10:10	Speed and size of dominating sets in domination games <i>Ali Deniz Bagdas, Dennis Clemens, Fabian Hamann and <u>Yannick Mogge</u></i>	An Approximate Counting Version of the Multidimensional Szemerédi Theorem <i>Natalie Behague, Joseph Hyde, Natasha Morrison, <u>Jonathan Noel</u> and Ashna Wright</i>
10:10 - 10:30	Extending the Continuum of Six-Colorings <i>Konrad Mundiger, Sebastian Pokutta, <u>Christoph Spiegel</u> and Max Zimmer</i>	Rainbow connectivity of multilayered random geometric graphs <i>Josep Diaz, <u>Oznur Yasar Diner</u>, Maria Serna and Oriol Serra</i>
10:30 - 10:50	Betti numbers of monomial curves <i>Ignacio García Marco, Philippe Gimenez and <u>Mario González-Sánchez</u></i>	Increasing paths in the temporal stochastic block model <i><u>Sofiya Burova</u>, Gabor Lugosi and Guillem Perarnau</i>
10:50 - 11:20	Coffee break (room C)	

Session 7.A (room A)

Session 7.B (room B)

11:20 - 11:40	On additive codes over finite fields <i>Simeon Ball, Michel Lavrauw and <u>Tabriz Popatia</u></i>	Bounding the balanced upper chromatic number <i>Gabriela Araujo-Pardo, Silvia Fernández-Merchant, Adriana Hansberg, Dolores Lara, <u>Amanda Montejano</u> and Déborah Oliveros</i>
11:40 - 12:00	On the solutions of linear systems over additively idempotent semirings <i><u>Alvaro Otero Sanchez</u>, Daniel Camazón Portela and Juan Antonio López Ramos</i>	A canonical van der Waerden theorem in random sets <i>José D. Alvarado, Yoshiharu Kohayakawa, Patrick Morris, Guilherme O. Mota and <u>Miguel Ortega</u></i>
12:00 - 12:20		Rainbow loose Hamilton cycles in Dirac hypergraphs <i>Amarja Kathapurkar, <u>Patrick Morris</u> and Guillem Perarnau</i>
12:30 - 13:30	Invited talk (room B) Coboundary expansion, codes, and agreement tests <i><u>Irit Dinur</u></i>	