Monday — Outline Programme

8.00 – 8.50   **Registration**

8.50 – 9.00   **Welcome**
Main Auditorium

9.00 – 10.00   **Plenary lecture**   Chair: Bridget Webb
Daniel Horsley
Switching techniques for edge decompositions of graphs
Main Auditorium

10.00 – 10.30   **Coffee break**

10.30 – 11.15   **Contributed talks**

11.15 – 12.15   **Plenary lecture**   Chair: Simon Blackburn
Rosemary Bailey
Relations among partitions
Main Auditorium

12.15 – 12.20   Announcements

12.20 – 1.45   **Lunch**

1.45 – 3.00   **Contributed talks**

3.00 – 3.30   **Tea break**

3.30 – 6.00   **Contributed talks**

7.00 – 8.00   **Civic reception**
City Hall

Monday

Main Auditorium   Chair: Trent Marbach

10.30 – 10.50   **Alia Sajjad**
                 Optimal incomplete block designs

10.55 – 11.15   **Douglas Stinson**
                 Optimal Ramp Schemes and Related Combinatorial Objects

Level 1 Auditorium   Chair: Gleb Nenashev

10.30 – 10.50   **Sandra Kingan**
                 Characterizing excluded minor classes using the Strong Splitter Theorem

10.55 – 11.15   **Criel Merino**
                 Extremal multicomplexes

Contributed talks   Monday 1.45 – 3.00

Auditorium A   Chair: Susana-Clara López

1.45 – 2.05   **Ann Trenk**
                 Finding Balance: Split Graphs and Related Classes

2.10 – 2.30   **Elizabeth Jonck**
                 (1,1,2,3)-Colourings of Subcubic Graphs

2.35 – 2.55   **Liam Harris**
                 Domination and Independence of Bishop Graphs

Auditorium B   Chair: Vincent Vajnovszki

1.45 – 2.05   **Nicola Pace**
                 On the existence and construction of PD-sets for linear codes

2.10 – 2.30   **Simon Blackburn**
                 Non-overlapping codes

2.35 – 2.55   **Diane Donovan**
                 Difference covering arrays delivering high rate LDPC codes

Monday

Auditorium C   Chair: Graham Farr

1.45 – 2.05   **Kiyoshi Ando**
                       A new forbidden subgraph for 5-contractible edges

2.10 – 2.30   **Tariq Chishti**
                       On mark sequences in bipartite multidigraphs

2.35 – 2.55   **Kai Siong Yow**
                       Tutte Invariants for Alternating Dimaps

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Level 1 Auditorium   Chair: Anum Khalid

1.45 – 2.05   **Michael Weiner**
                       Rational Dyck paths and factor-free Dyck words

2.10 – 2.30   **Svante Linusson**
                       Inverse of the Pak-Stanley bijection for k-Shi arrangement

2.35 – 2.55   **Nicholas Korpelainen**
                       Variations on parking functions

Conference Room 6   Chair: Jessica McDonald

1.45 – 2.05   **Sergey Kitaev**
                       Crown graphs and their representation numbers

2.10 – 2.30   **Morimasa Tsuchiya**
                       On strict-double-bound numbers of graphs and cut sets

2.35 – 2.55   **Rinovia Simanjuntak**
                       Distance Magic Labelings of Distance Regular Graphs

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Contributed talks   Monday 3.30 – 5.30

Auditorium A   Chair: Terry Griggs

3.30 – 3.50   **Anna Taranenko**
                       On transversals in intercalated latin squares and in the Cayley table of the group $\mathbf{Z}_2^m$

3.55 – 4.15   **Trent Marbach**
                       Intersection of transversals in the Latin square B_n, with applications to Latin trades

4.20 – 4.40   **Anthony Hilton**
                       A variation of Ryser's theorem for partial $(v_1, \dots, v_n)$-latinized squares

4.45 – 5.05   **Ian Wanless**
                       Partial latin squares that embed in an infinite group but not into any finite group

5.10 – 5.30   **Vladimir Potapov**
                       Construction of Pairs of Orthogonal Latin Cubes

Monday

3.30 – 3.50   **Mikhail Isaev**
Subgraph counts for dense graphs with specified degrees

3.55 – 4.15   **Peter Allen**
A simple proof of Shamir's conjecture

4.20 – 4.40   **Jack Bartley**
The emergence of the square of a Hamilton cycle in random geometric graphs

4.45 – 5.05   **Fiona Skerman**
Inversions in random node labelings of random trees

5.10 – 5.30   **Shohei Satake**
Erdös-Rényi Theory for asymmetric tournaments

5.35 – 5.55   **Izolda Gorgol**
On lower bound for induced Ramsey numbers

3.30 – 3.50   **Jan van den Heuvel**
Improper Colourings inspired by Hadwiger's Conjecture

3.55 – 4.15   **Daniel Quiroz**
Colouring exact distance graphs of chordal graphs

4.20 – 4.40   **Martin Škoviera**
Smallest snarks with oddness 4

4.45 – 5.05   **Edita Máčajová**
Snarks that cannot be covered with four perfect matchings

5.10 – 5.30   **Jason Brown**
Recent Results on Chromatic Polynomials

3.30 – 3.50   **Sergi Elizalde**
The structure of the consecutive pattern poset

3.55 – 4.15   **Christian Bean**
Creating a Virtual Combinatorist

4.20 – 4.40   **Yan Zhuang**
Shuffle-Compatible Permutation Statistics

4.45 – 5.05   **Brian Miceli**
Statistics on Set Partitions

5.10 – 5.30   **Shishuo Fu**
On 1212-avoiding Restricted Growth Functions

5.35 – 5.55   **Klas Markström**
Condorcet domains and Turán type problems for permutations

Conference Room 6   Chair: David Roberson

3.30 – 3.50   **Soňa Pavlíková**
                   Negatively invertible graphs

3.55 – 4.15   **Kiki Sugeng**
                   On Antiadjacency Matrix Properties

4.20 – 4.40   **Shariefuddin Pirzada**
                   On the sum of Laplacian spectra of graphs

4.45 – 5.05   **Ferenc Bencs**
                   Some results on the roots of the independence polynomial of graphs

5.10 – 5.30   **Yotsanan Meemark**
                   Perfect state transfer in Cayley graphs over finite chain rings

5.35 – 5.55   **Robert Bailey**
                   A database of distance-regular graphs

Tuesday — Outline Programme

9.00 – 10.00	**Plenary lecture**	Chair: David Bevan
	Julia Böttcher	
	Large-scale structures in random graphs	
	Main Auditorium	

10.00 – 10.30	**Coffee break**

10.30 – 11.15	**Contributed talks**

11.15 – 12.15	**Plenary lecture**	Chair: Keith Edwards
	Robert Morris	
	Monotone cellular automata	
	Main Auditorium	
12.15 – 12.20	Announcements	

12.20 – 1.45	**Lunch**

1.45 – 3.00	**Mini-symposia**

3.00 – 3.30	**Tea break**

3.30 – 5.00	**Mini-symposia**

5.00 – 6.00	**BCC business meeting**
	Livingstone Tower 1415

7.00 – 9.00	**Concert**	Compère: Thomas Selig
	Level 1 Auditorium	

Tuesday

Contributed talks	Tuesday 10.30 – 11.15

Main Auditorium	Chair: Liam Harris

| 10.30 – 10.50 | **Jessica Enright** |
| | *Adversarial games on interval and permutation graph representations* |

| 10.55 – 11.15 | **Laura Mančinska** |
| | *Quantum and non-signalling graph isomorphism* |

Level 1 Auditorium	Chair: Yoshimi Egawa

| 10.30 – 10.50 | **Susana-Clara López** |
| | *Characterizing path-like trees from linear configurations* |

| 10.55 – 11.15 | **Behrooz Bagheri Gh.** |
| | *Compatible Cycle Decomposition of bad K_5-minor-free eulerian graphs* |

Mini-symposia	Tuesday 1.45 – 3.00 & 3.30 – 5.00

Auditorium A	Chair: Andrew Treglown

Emerging methods in Extremal Combinatorics

1.45 – 1.50	Introduction

| 1.50 – 2.20 | **Peter Keevash** |
| | *Forbidden vector-valued intersections* |

| 2.25 – 2.55 | **Mathias Schacht** |
| | *The three edge theorem* |

| 3.30 – 4.00 | **Daniel Král'** |
| | *Uniqueness of optimal configurations in extremal combinatorics* |

| 4.05 – 4.35 | **Jan Hladký** |
| | *Tilings in graphons* |

| 4.40 – 5.00 | **Eoin Long** (contributed talk) |
| | *Tournament Quasirandomness from counting* |

Tuesday

Graph Colouring

1.45 – 1.50	Introduction

1.50 – 2.20   **Maya Stein**
Cycle partitioning in hypergraphs

2.25 – 2.55   **Jessica McDonald**
List edge-colouring graphs with restricted odd cycles

3.30 – 4.00   **Marthe Bonamy**
Tight lower bounds for the complexity of multicoloring

4.05 – 4.35   **Maria Axenovich**
Planar graphs - improper colorings and coverings with induced forests

4.40 – 5.00   **Carl Johan Casselgren** (contributed talk)
Coloring graphs from random lists

Patterns in Permutations and Words

1.45 – 1.50   Introduction

1.50 – 2.20   **Vincent Vajnovszki**
The equidistribution of some descent set based statistics on words

2.25 – 2.55   **Jeff Remmel**
Block Patterns in Generalized Euler Permutations and the Generalized Cluster Method

3.30 – 4.00   **Alexander Burstein**
Unimodal inversion sequences and pattern-avoiding classes

4.05 – 4.35   **Bruce Sagan**
Descent and peak polynomials

4.40 – 5.00   **David Bevan** (contributed talk)
Prolific permutations and permuted packings

Wednesday — Outline Programme

9.00 – 10.00   **Tutte Centenary Lecture**   Chair: Iain Moffatt
Graham Farr
W. T. Tutte: Graph theory as he had grown it
Main Auditorium

10.00 – 10.30   **Coffee break**

10.30 – 11.15   **Contributed talks**

11.15 – 12.15   **Plenary lecture**   Chair: Kitty Meeks
Julia Wolf
Some Applications of Relative Entropy in Additive Combinatorics
Main Auditorium

12.15 – 12.20   Announcements

12.20 – 1.45   **Lunch**

1.00 – 7.00   **Excursion to Culzean Castle**

Wednesday

Contributed talks	Wednesday 10.30 – 11.15

Main Auditorium	Chair: Allan Lo

10.30 – 10.50   **Terry Griggs**
Pentagonal Geometries

10.55 – 11.15   **Sandro Rajola**
On maximal partial ovoids of the elliptic quadric $Q^-(5, q)$ of $PG(5, q)$

Level 1 Auditorium	Chair: Nicholas Korpelainen

10.30 – 10.50   **Anum Khalid**
Counting Generalised Dyck Paths

10.55 – 11.15   **Boris Granovsky**
Asymptotic enumeration by Khintchine-Meinardus probabilistic method: Necessary and sufficient conditions for exponential growth

Thursday — Outline Programme

9.00 – 10.00	**Plenary lecture**	Chair: David Manlove
	Benny Sudakov	
	Robustness of graph properties	
	Main Auditorium	

10.00 – 10.30	**Coffee break**

10.30 – 11.15	**Contributed talks**

11.15 – 12.15	**Plenary lecture**	Chair: Sergey Kitaev
	Gi-Sang Cheon	
	New applications of Riordan arrays	
	Main Auditorium	
12.15 – 12.20	Announcements	

12.20 – 1.45	**Lunch**

1.45 – 3.00	**Contributed talks**

3.00 – 3.30	**Tea break**

3.30 – 5.10	**Contributed talks**

5.10 – 6.00	**Open problem session**	Chair: Peter Cameron
	Level 1 Auditorium	

6.30 – 10.30	**Conference dinner**
	Barony Hall

Thursday

Main Auditorium   Chair: Tomas Nilson

10.30 – 10.50   **Maura Paterson**
                     Nonexistence results for strong external difference families

10.55 – 11.15   **Aleen Sheikh**
                     The Davenport constant of finite abelian groups

Level 1 Auditorium   Chair: Sandra Kingan

10.30 – 10.50   **Gleb Nenashev**
                     Hypergraphical Matroids

10.55 – 11.15   **Andrzej Żak**
                     Generalized transversals, generalized vertex covers and node-fault-tolerance in graphs

Auditorium A   Chair: Ferenc Bencs

1.45 – 2.05   **Sophie Huczynska**
                     Graph classes under homomorphic image order

2.10 – 2.30   **David Roberson**
                     Homomorphisms of Strongly Regular Graphs

2.35 – 2.55   **Rueiher Tsaur**
                     Contractibility of Graphs

Auditorium B   Chair: Bruce Sagan

1.45 – 2.05   **Jakub Sliačan**
                     Juxtaposing Catalan permutation classes with monotone ones

2.10 – 2.30   **Timothy Alland**
                     Pattern Avoidance and Fiber Bundle Structures on Schubert Varieties

2.35 – 2.55   **Dominic Searles**
                     Stanley symmetric functions and the slide product on weak compositions

Thursday

Auditorium C Chair: Soňa Pavlíková

1.45 – 2.05   **James Tuite**
Diregularity of extremal networks

2.10 – 2.30   **James Fraser**
Automorphisms of the Gómez Graphs

2.35 – 2.55   **Grahame Erskine**
Large Cayley graphs of diameter three

Level 1 Auditorium Chair: Ian Wanless

1.45 – 2.05   **Noam Zeilberger**
Some bridges between lambda calculus and graphs on surfaces

2.10 – 2.30   **Iain Moffatt**
The Tutte polynomial and its extensions

2.35 – 2.55   **Jozef Širáň**
Regular and bi-rotary maps of negative prime Euler characteristic

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Conference Room 6 Chair: Cian O'Brien

1.45 – 2.05   **Rachel Quinlan**
Counting matrices over finite fields

2.10 – 2.30   **Viktor Zamaraev**
Specifying a positive threshold function via extremal points

2.35 – 2.55   **Vadim Levit**
Violator spaces vs closure spaces

Contributed talks Thursday 3.30 – 5.10

Auditorium A Chair: Anthony Hilton

3.30 – 3.50   **Yujie Gu**
Bounds on traceability schemes

3.55 – 4.15   **Casey Tompkins**
An upper bound on the size of diamond-free families of sets

4.20 – 4.40   **Jie Zheng**
Bounds of the sizes of families with uncomplemented and mutually incomparable conditions

4.45 – 5.05   **Adam Mammoliti**
The Erdös-Ko-Rado Theorem, Generalisations and Beyond

Thursday

Auditorium B   Chair: David Pike

3.30 – 3.50   **Allan Lo**
                   Designs beyond quasirandomness

3.55 – 4.15   **Peter Cameron**
                   Synchronization, association schemes and Steiner systems

4.20 – 4.40   **Andrea Burgess**
                   Colourings of group divisible designs

4.45 – 5.05   **Tomas Nilson**
                   A new family of triple arrays

Auditorium C   Chair: Julia Böttcher

3.30 – 3.50   **Andrew Treglown**
                   An improved lower bound for Folkman's Theorem

3.55 – 4.15   **Robert Johnson**
                   Ramsey Problems for Odd Cycles

4.20 – 4.40   **Johannes Hattingh**
                   *Some multicolor bipartite Ramsey numbers involving cycles and a
                   small number of colors*

4.45 – 5.05   **Robert Hancock**
                   *Independent sets in hypergraphs and Ramsey properties of graphs and
                   the integers*

Level 1 Auditorium   Chair: Rachel Quinlan

3.30 – 3.50   **Olga O'Mahony**
                   Edge-minimal graphs of exponent 2

3.55 – 4.15   **Cian O'Brien**
                   Alternating Signed Bipartite Graphs

4.20 – 4.40   **Jonas Granholm**
                   Some cyclic properties of graphs with a local Ore-type condition

4.45 – 5.05   **Khawaja Fahd**
                   Shortest Path in Inner Dualist of Hexagonal Graph

Conference Room 6   Chair: Fiona Skerman

3.30 – 3.50   **Kitty Meeks**
                     The parameterised complexity of computing the maximum modularity of a graph

3.55 – 4.15   **Paul Ouvrard**
                     Dominating set reconfiguration

4.20 – 4.40   **HongPhong Pham**
                     Tropical paths in vertex-colored graphs

4.45 – 5.05   **David Tankus**
                     Generating subgraphs in chordal graphs

Friday — Outline Programme

9.00 – 10.00	**Plenary lecture**	Chair: Peter Cameron
	Bill Chen	
	The spt-Function of Andrews	
	Main Auditorium	
10.00 – 10.30	**Coffee break**	
10.30 – 11.15	**Contributed talks**	
11.15 – 12.15	**Richard Rado Lecture**	Chair: Sophie Huczynska
	Vít Jelínek	
	Ramsey-Type Problems in Permutations	
	Main Auditorium	
12.15 – 12.20	Close of conference	
12.20 – 1.45	**Lunch**	

Friday

Contributed talks	Friday 10.30 – 11.15

Main Auditorium	Chair: Andrea Burgess

10.30 – 10.50	**David Pike**
	Twofold triple systems with 2-intersecting Gray codes
10.55 – 11.15	**Bridget Webb**
	Countably infinite homogeneous STS

Level 1 Auditorium	Chair: Behrooz Bagheri Gh.

10.30 – 10.50	**Yu-Fong Hsu**
	All graphs with degree 0 or 4 whose complements have 4-cycle systems
10.55 – 11.15	**Yoshimi Egawa**
	Path-factors and odd components