

# Fourth Slovene International Conference in Graph Theory

## Monday, 28th June

9:00 – 9:30 **Opening**

9:30 – 10:15 *C. St. J. A. Nash-Williams*: An application of network flows to rearrangement of series

10:15 – 11:00 *C. H. Li*: On finite  $s$ -arc transitive graphs

11:00 – 11:20 **Coffee break**

11:20 – 12:05 *N. Robertson*: Some thoughts on Hadwiger's Conjecture

### Session 1

12:15 – 12:35 *B. Mohar*:  $K_{3,k}$  minors in 7-connected graphs

12:40 – 13:00 *D. Marušič*: On transitive permutation groups with a non-self-paired suborbit of length 2 and their graphs

13:00 – 14:30 **Lunch time**

14:30 – 14:50 *S. Zhou*: Symmetric graphs, 2-arc transitive graphs and near-polygonal graphs

14:55 – 15:15 *P. Hliněný*: On possible counterexamples to Negami's planar cover conjecture

15:20 – 15:40 *M. Voigt*: Polyhedral graphs with restricted number of faces of the same type

15:40 – 16:00 **Coffee break**

16:00 – 16:20 *T. Böhme*: Labeled  $K_{2,t}$  minors in plane graphs

16:25 – 16:45 *H. Harbort*: Special numbers of crossings for complete graphs

16:50 – 17:10 *A. Pruchnewski*: On the domination number of a graph

17:15 – 17:35 *M. Muzychuk*: On isomorphism criteria for circulant graphs

### Session 2

12:15 – 12:35 *D. Fronček*: Scheduling Czech national basketball league

12:40 – 13:00 *S. Hartmann*: On supersimple graph designs

13:00 – 14:30 **Lunch time**

14:30 – 14:50 *C. Little*: Towards a characterisation of Pfaffian graphs

14:55 – 15:15 *A. Kotlov*: Matchings and Hadwiger's conjecture

15:20 – 15:40 *M. Kriesell*: Local spanning trees in graphs and hypergraph decomposition with respect to edge connectivity

15:40 – 16:00 **Coffee break**

16:00 – 16:20 *V. Kabanov*: On locally claw-free graphs

16:25 – 16:45 *A. Nakamoto*: Generating triangulations on closed surfaces with minimum degree at least 4

16:50 – 17:10 *A. Vesel*: Recognizing pseudo-median graphs

17:15 – 17:35 *O. Serra*: A local-global principle for vertex isoperimetric problems

18:30 – 19:00 **Welcoming - Aperitiv Bar in Hotel Golf**

# Fourth Slovene International Conference in Graph Theory

Tuesday, 29th June

- 9:00 – 9:15 *Pisanski Day*: Tom Tucker  
9:15 – 10:00 *T. Pisanski*: Configurations and graphs  
10:00 – 10:45 *A. T. White*: Modelling finite geometries on surfaces  
10:45 – 11:05 **Coffee break**  
11:05 – 11:50 *T. Tucker*: Asymptotic growth in graphs of bounded valence  
11:50 – 12:35 *R. Nedela*: Half-arc transitive group actions on graphs of valency four

## Session 1

- 12:40 – 13:00 *R. B. King*: Novel highly symmetrical trivalent graphs which lead to negative curvature carbon and boron nitride chemical structures  
13:00 – 14:30 **Lunch time**  
14:30 – 14:50 *J. Žerovnik*: An algorithm for  $k$ -convex closure  
14:55 – 15:15 *H. Groppe*: Configurations between geometry and combinatorics  
15:20 – 15:40 *K. T. Huber*: Some new aspects of the Buneman graph  
15:40 – 16:00 **Coffee break**  
16:00 – 16:20 *A. Malnič*: Action graphs and coverings  
16:25 – 16:45 *M. Petkovšek*: Letter graphs  
16:50 – 17:10 *B. Zgrablić*: Highly arc-transitive digraphs with no homomorphism onto  $\mathbb{Z}$   
17:15 – 17:35 *A. Žitnik*: Plane graphs with Eulerian Petrie walks

## Session 2

- 12:40 – 13:00 *J. Harant*: On the independence number of a graph  
13:00 – 14:30 **Lunch time**  
14:30 – 14:50 *L. Cai*: Game chromatic index of  $k$ -degenerate graphs  
14:55 – 15:15 *R. E. Giudici*: On quadratic modulo  $2^n$  Cayley graphs  
15:20 – 15:40 *G. Loerincs*: Cayley graphs of order 10  
15:40 – 16:00 **Coffee break**  
16:00 – 16:20 *J. Koolen*:  $k$ -cross-free set systems  
16:25 – 16:45 *A. Jurišić*: Krein parameters of antipodal distance-regular graphs of diameter 4  
16:50 – 17:10 *J. M. Thomson*: Excluding minors in nonplanar graphs of girth at least five  
17:15 – 17:35 *V. Batagelj*: Analyses of Erdős graph  
18:00 – 19:00 **Problem Session**

# Fourth Slovene International Conference in Graph Theory

**Wednesday, 30th June**

9:00 – 9:45 *B. Reed*: Colouring graphs with high chromatic number

9:45 – 10:30 *H. Glover*: Hamilton cycles in Cayley graphs

10:30 – 10:50 **Coffee break**

10:50 – 11:35 *R. B. Richter*: On orthogonal  $A$ -trails in medial graphs

11:35 – 12:20 *M. Conder*: Combinatorial group-theoretic methods in graph theory

13:30 – **Excursion to Vintgar, Bohinj, and Savica**

# Fourth Slovene International Conference in Graph Theory

Thursday, 1st July

- 9:00 – 9:15 *Sabidussi Day*: Wilfried Imrich  
9:15 – 10:00 *G. Sabidussi*: Connectivity of vertex-transitive graphs  
10:00 – 10:45 *W. Imrich*: Median graphs and triangle-free graphs  
10:45 – 11:05 **Coffee break**  
11:05 – 11:50 *X. Zhu*: Regular colouring of distance graphs and circulant graphs  
11:50 – 12:20 *H. Fleischner*: Bipartizing matchings and Sabidussi's compatibility conjecture

## Session 1

- 12:25 – 12:45 *C. Tardif*: A Hedetniemi-type problem for multicolourings  
12:50 – 13:10 *S. Klavžar*: Metric and other properties of benzenoid graphs  
13:10 – 14:30 **Lunch time**  
14:30 – 14:50 *R. C. Brewster*: Homomorphisms to powers of digraphs  
14:55 – 15:15 *J. Širan*: Coverings of graphs and maps, orthogonality, and eigenvectors  
15:20 – 15:40 *R. Jajcay*: Skew-morphisms of regular Cayley maps  
15:40 – 16:00 **Coffee break**  
16:00 – 16:20 *I. Schiermeyer*: Forbidden subgraphs and MIN-algorithm for independence number  
16:25 – 16:45 *Z. Ryjáček*: Clique covering and degree conditions in claw-free graphs  
16:50 – 17:10 *N. Cavenagh*: Minimal base sizes and proper  $k$ -covers  
17:15 – 17:35 *A. Breda D'Azevedo*: Chiral hypermaps

## Session 2

- 12:25 – 12:45 *A. A. Makhnev*: Regular graphs and their extensions  
12:50 – 13:10 *M. Morton*: Domination conditions for tournaments  
13:10 – 14:30 **Lunch time**  
14:30 – 14:50 *L. Milazzo*: Embedding partial bipartite directed cycle systems  
14:55 – 15:15 *B. Brešar*: The relational expansion on graphs  
15:20 – 15:40 *R. Škrekovski*: Relations between median graphs, semi-median graphs and partial cubes  
15:40 – 16:00 **Coffee break**  
16:00 – 16:20 *A. Lipovec*: On subgraphs of Cartesian product graphs  
16:25 – 16:45 *J. Marinček*: On computation of the local density of a graph  
16:50 – 17:10 *M. Kobeissi*: Embedding graphs into hypercubes  
17:15 – 17:35 *P. Potočnik*: On edge but not vertex transitive regular graphs

19:00 – **Conference Dinner at the Bled Castle**

# Fourth Slovene International Conference in Graph Theory

## Friday, 2nd July

- 9:00 – 9:45 *B. Alspach*: Cycle decomposition problems  
9:45 – 10:30 *D. Archdeacon*: The representativity of planar graphs  
10:30 – 10:50 **Coffee break**  
10:50 – 11:35 *J. P. Hutchinson*: Four-coloring Eulerian triangulations of surfaces

### Session 1

- 11:45 – 12:05 *S. Negami*: Re-embedding structures of 5-connected projective planar graphs  
12:10 – 12:30 *C. P. Bonnington*: Vertex accumulation points in infinite planar graphs  
12:35 – 12:55 *L. K. Jørgensen*: Directed strongly regular graphs: Cayley graph constructions  
12:55 – 14:30 **Lunch time**  
14:30 – 14:50 *K. Ota*: Choice number of complete multi-partite graphs  
14:55 – 15:15 *H. Servatius*: Dual Eulerian graphs  
15:20 – 15:40 *P. Stadler*: Relevant cycles in biopolymers and random graphs  
15:40 – 16:00 **Coffee break**  
16:00 – 16:20 *A. S. Llado*: Regular packings of regular graphs  
16:25 – 16:45 *H.-J. Voss*: Light subgraphs of multigraphs embedded in compact 2-manifolds  
16:50 – 17:10 *L. Petingi*: A new technique for the characterization of graphs with maximum number of spanning trees  
17:15 – 17:35 *M. Razpet*: A self-similarity structure generated by king's walk

### Session 2

- 11:45 – 12:05 *D. Cariolaro*: On the Ramsey number  $R(3, 6)$   
12:10 – 12:30 *U. Leck*: Orthogonal double covers of complete graphs by paths and cycles  
12:35 – 12:55 *J. Aleš*: Automorphism groups of Walecki tournaments  
12:55 – 14:30 **Lunch time**  
14:30 – 14:50 *B. Zmazek*: Factoring Cartesian graph bundles  
14:55 – 15:15 *M. Šajna*: Cycle decompositions of  $K_n$  and  $K_n - I$   
15:20 – 15:40 *D. J. Guan*: On optimal fault-tolerant message routing algorithm for double-loop networks  
15:40 – 16:00 **Coffee break**  
16:00 – 16:20 *F. Havet*: Channel assignment and multicoloring subgraphs of the triangular lattice  
16:25 – 16:45 *R. Rizzi*: Minimizing symmetric set functions  
16:50 – 17:10 *T. Fleiner*: Some applications of monotonic functions  
17:15 – 17:35 *S. Gravier*: Pentomino exclusion problem

**Later**      ...      **Survivors Party**