28TH LJUBLJANA – LEOBEN GRAPH THEORY SEMINAR, SEPTEMBER 2014 – TIMETABLE

Wednesday, September 3

12:00 – 14:00	*Registration*
14:00 – 14:10	*Opening remarks* (S. Klavžar, K. Kutnar, T. Pisanski)
14:10 – 16:10	**Session 1**, chair: W. Imrich
14:10 – 15:10	F. Lehner: *Symmetry breaking in graphs and groups* (invited talk)
15:10 – 15:40	G. Verret: *Semiregular automorphisms of cubic vertex-transitive graph*
15:40 – 16:10	M. Orel: *Some examples of cores*
16:10 – 16:30	Coffee break
16:30 – 18:30	**Session 2**, chair: T. Pisanski
16:30 – 17:30	I. Kovács: *Finite CI-groups and Schur rings* (invited talk)
17:30 – 18:00	D. Stevanović: *On trees with extremal values of Zagreb indices*
18:00 – 18:30	R. Škrekovski: *On Wiener index of iterated lines graphs of trees*

Thursday, September 4

9:00 – 10:30	**Session 3**, chair: N. Seifter
9:00 – 10:00	A. Ivanov: *Revisiting Goldschmidt's amalgams* (invited talk)
10:00 – 10:30	F. Belardo: *The Laplacian spectral theory of signed graphs*
10:30 – 10:50	Coffee break
10:50 – 12:20	**Session 4**, chair: S. Klavžar
10:50 – 11:20	W. Imrich: *The Cartesian product of graphs with loops*
11:20 – 11:50	M. Hellmuth: *On the Cartesian skeleton of hypergraphs and digraphs*
11:50 – 12:20	M. Jakovac: *The partition dimension of some graph products*
12:20 – 14:00	Lunch break (lunch on your own)
14:00 – 16:00	**Session 5**, chair: K. Kutnar
14:00 – 15:00	E. Konstantinova: *Hamiltonicity of graphs and Gray codes* (invited talk)
15:00 – 15:30	A. Hinz: *The Frame-Stewart Conjecture*
15:30 – 16:00	N. Haug: *The minimum number of subtrees of trees*
16:00 – 16:20	Coffee break
16:20 – 17:20	**Session 6**, chair: B. Brešar
16:20 – 16:50	I. Peterin: *Toll convexity*
16:50 – 17:20	J. Azarija: *Moore graphs and cycles are extremal graphs for convex cycles*
17:20 – 19:20	Research discussions
from 19:30	Conference dinner *(location: Skipper Restaurant, Koper)*

Friday, September 5

9:00 – 11:00	**Session 7**, chair: M. Milanič
9:00 – 10:00	R. Rizzi: *Covering the edges of a graph by matchings of bounded size* (invited talk)
10:00 – 10:30	T. Pisanski: *Cubic graphs with one-factor and the associated quartic graphs*
10:30 – 11:00	S. Bonvicini: *Palette index of* 4*-regular graphs*
11:00 – 11:20	Coffee break
11:20 – 12:50	**Session 8**, chair: Š. Miklavič
11:20 – 12:20	T. Ekim: *Minimum Maximal Matching: old problem, new challenges* (invited talk)
12:20 – 12:50	G: Gévay: *Regular maps whose* 1*-skeleton is a generalized Petersen graph*
13:00 – 14:00	Research discussions

Note: the talk by Wilfried Imrich (on Thursday, September 4 at 10:50) has been modified compared to the content in the book of abstracts. The new abstract follows.

The Cartesian product of graphs with loops

Wilfried Imrich
Montanuniversität Leoben, Austria
imrich@unileoben.ac.at

We extend the definition of the Cartesian product to graphs with loops and show that the Sabidussi-Vizing unique prime factorization theorem for connected finite simple graphs still holds in this context for all connected finite graphs with at least one unlooped vertex.

We also prove that the prime factorization can be computed in $O(m)$ time, where m is the size of the given graph.

Joint work with Tetiana Boiko (TU Graz), Johannes Cuno (TU Graz), Florian Lehner (TU Graz), and Christiaan E. van de Woestijne (MU Leoben).