Robert Šámal – List of publications

in preparation

1. Chris Godsil, David E. Roberson, Brendan Rooney, Robert Šámal, and Antonios Varvitsiotis: *Least eigenvalue frameworks, universal completability and uniquely vector colorable graphs*

2. Chris Godsil, David E. Roberson, Brendan Rooney, Robert Šámal, and Antonios Varvitsiotis: *Rigidity and Graph Theory III: Categorical Products and Unique Homomorphisms*

3. Hana Bílková, Robert Šámal: *Two thirds of Jaeger's Petersen coloring conjecture*

4. Matt Devos, Edita Rolleová, Robert Šámal: *A new proof of Seymour's 6-flow theorem*

5. Matt Devos, Edita Rolleová, Robert Šámal: *Counting Flows on Signed Graphs*

submitted

1. Robert Šámal: *Cycle-continuous mappings – order structure*, submitted to JGT, arXiv:1212.6909

accepted and published

1. Robert Šámal: *Cubical coloring — fractional covering by cuts and semidefinite programming*, accepted to DMTCS, arXiv:0911.2589.

2. Chris Godsil, David E. Roberson, Robert Šámal and Simone Severini: *Sabidussi Versus Hedetniemi for Three Variations of the Chromatic Number*, accepted to Combinatorica, First online: 16 January 2015, arXiv:1305.5545

3. Robert Šámal, Tomáš Valla: *The guarding game is E-complete*, Theoretical Computer Science 521 (2014), pp. 92-106

4. Matt DeVos, Bojan Mohar, Robert Šámal: *Highly arc-transitive digraphs – structure and counterexamples*, accepted to Combinatorica, First online: 05 August 2014, DOI: 10.1007/s00493-014-3040-4 arXiv:1110.2945.

5. Jaroslav Nešetřil, Robert Šámal: *Flow-continuous mappings – influence of the group*, European Journal of Combinatorics 36 (2014), pp. 342-347.

6. Zdeněk Dvořák, Bojan Mohar, Robert Šámal: *Star chromatic index*, Journal of Graph Theory 72 (2013), no.3, 313-326.

7. Jaroslav Nešetřil, Robert Šámal: *Tension continuous maps—their structure and applications*, European Journal of Combinatorics 33 (2012), pp. 1207–1225.

8. Tomáš Kaiser, Daniel Kráľ, Bernard Lidický, Pavel Nejedlý, Robert Šámal: *Short Cycle Covers of Cubic Graphs and Graphs with Minimum Degree Three*, SIAM J. Discrete Math. 24 (2010), no. 1, 330-355.

9. Matt DeVos, Bojan Mohar, Robert Šámal: *Unexpected behaviour of crossing sequences*, Journal of Combinatorial Theory, Series B 101 (2011) no. 6, 448-463.

10. Matt DeVos, Agelos Georgakopoulos, Bojan Mohar, Robert Šámal: *An Eberhard-like theorem for pentagons and heptagons*, Discrete Comput Geom (2010) 44: 931-945.

11. Matt DeVos, Luis Goddyn, Bojan Mohar, and Robert Šámal: *Cayley sum graphs and eigenvalues of* $(3, 6)$*-fullerenes*, Journal of Combinatorial Theory B 99 (2009), no.2, 358–369.

12. Matt DeVos, Robert Šámal: *High-Girth Cubic Graphs are Homomorphic to the Clebsch Graph*, Journal of Graph Theory 66 (2011), 241–259.

13. Jiři Matoušek, Robert Šámal: *Induced trees in triangle-free graphs*, Electronic Journal of Combinatorics, **15** (2008), no.1, R41

14. Jaroslav Nešetřil, Robert Šámal: *On tension continuous mapings*, European Journal of Combinatorics **29** (2008), no. 4, 1025–1054.

15. Matt DeVos, Luis Goddyn, Bojan Mohar, and Robert Šámal: *A quadratic lower bound for subset sums*, Acta Arithmetica **129** (2007), no. 2, 187–195.

16. Jørgen Bang-Jensen, Bruce Reed, Mathias Schacht, Robert Šámal, Bjarne Toft and Uli Wagner: *On six problems posed by Jarik Nešetřil*, Topics in discrete mathematics, Algorithms Combin., **26**, 613–627, Springer, Berlin, 2006,

17. Daniel Kráľ, Jana Maxová, Pavel Podbrdský, Robert Šámal: *Hamilton Cycles in Strong Products of Graphs*, Journal of Graph Theory **48**(4) (2005), 299-321

18. Daniel Kráľ, Jana Maxová, Pavel Podbrdský, Robert Šámal: *Pancyclicity of Strong Products of Graphs*, Graphs and Combinatorics **20**(1) (2004), 91-104.

19. Robert Šámal: *Antisymmetric flows and strong oriented coloring of planar graphs*, Discrete Mathematics **273**/1–3 (2003), 203–209

20. Robert Šámal: *Antiflows, Oriented and Strong Oriented Colorings of Graphs*, Archivum mathematicum **40**/4 (2004), 335-343

21. Jakub Černý, Jan Kára, Daniel Kráľ, Pavel Podbrdský, Miroslava Sotáková, Robert Šámal: *On the number of intersections of two polygons* Comment. Math. Univ. Carolinae **44**/2 (2003) 217-228

22. Pavel Pyrih, David Opěla, Robert Šámal: *Chain of Dendrites Openly Unbounded from Below*, Mathematica Pannonica **12**/1 (2001), 83–92

23. Robert Šámal, Jan Vondrák: *The limit checker number of a graph*, Discrete Mathematics 235 (2001) 343–347

24. Pavel Pyrih, Tomáš Bárta, David Opěla, Pavel Růžička, Robert Šámal: *Irreducible Mapping and The Lightness of Open Mappings*, Southwest Journal of Pure and Applied Mathematics, 2001, no. 2, 30–42

25. Pavel Pyrih, David Opěla, Robert Šámal: *An Example of Openly Minimal Dendrite*, Q & A in General Topology, **18** (2000), no. 2, 229–236

26. Pavel Pyrih, Tomáš Bárta, David Opěla, Pavel Růžička, Robert Šámal: *Irreducible Mappings and HU-Terminal Continua*, Southwest Journal of Pure and Applied Mathematics, 1999, no. 2, 31–41

27. Pavel Pyrih, Tomáš Bárta, David Opěla, Robert Šámal: *A Continuum where Absolute Terminality and HU-Terminality Coincide* (Q & A in General Topology, **17** (1999), no. 2, 233-235)

Refereed conferences

1. R. Šámal: *Cycle-continuous mappings – order structure*. Publications of the Scuola Normale Superiore, Vol. 16, CRM Series. Eurocomb 2013 – Pisa.

2. R. Šámal, R. Stolař, T. Valla: *Complexity of the cop and robber guarding game*, Proceedings IWOCA 2011, vyjde/vyslo? v LNCS Combinatorial Algorithms Lecture Notes in Computer Science, 2011, Volume 7056/2011, 361-373, Complexity of the Cop and Robber Guarding Game Costas S. Iliopoulos, William F. Smyth (Eds.): Combinatorial Algorithms - 22nd International Workshop, IWOCA 2011, Victoria, BC, Canada, July 20-22, 2011 ISBN 978-3-642-25010-1

3. R. Šámal: *New approach to Petersen coloring*, Electronic Notes in Discrete Mathematics 38: 755-760 (2011), Eurocomb 2011 – Budapest.

4. Jiří Matoušek, Robert Šámal: *Induced trees in triangle-free graphs*. Electronic Notes in Discrete Mathematics 29: 307-313 (2007). Eurocomb 2007 – Seville.

Given talks

1. Manifold Petersen coloring: Invited talk at CSGraphs 2011

Other

1. Radek Erban, Robert Šámal: *Mathematical correspondence seminar 96/97* (yearbook of the 16-th year of Prague math. correspondence seminar), Matfyzpress, Prague, 1997

2. Radek Erban, Robert Šámal: *Mathematical correspondence seminar 97/98* (yearbook of the 17-th year of Prague math. correspondence seminar), Matfyzpress, Prague, 1998

3. Radek Erban, Robert Šámal: *Mathematical correspondence seminar 98/99* (yearbook of the 18-th year of Prague math. correspondence seminar), Matfyzpress, Prague, 1999

4. Pavel Podbrdský, Robert Šámal: *Mathematical correspondence seminar 99/00* (yearbook of the 19-th year of Prague math. correspondence seminar), Matfyzpress, Prague, 2000