

Michał Pilipczuk

Lista publikacji z dnia 31 października 2014

Prace oryginalne w czasopismach

Przy publikacjach, które miały wcześniejszą wersję konferencyjną, uwzględniana jest informacja o tej wersji (punkt **Konf.**).

- [1] Stefan Kratsch, Marcin Pilipczuk, Michał Pilipczuk, Magnus Wahlström,
Fixed-parameter tractability of Multicut in directed acyclic graphs,
Praca przyjęta do publikacji w SIAM Journal on Discrete Mathematics
Konf.: Proceedings of the 39th International Colloquium on Automata, Languages, and Programming, ICALP 2012
Volume 7391 of Lecture Notes in Computer Science (LNCS), Springer, 2012
- [2] Fedor V. Fomin, Petr A. Golovach, Jesper Nederlof, Michał Pilipczuk,
Minimizing Rosenthal potential in multicast games,
Theory of Computing Systems, Springer, 2014 (online first)
Konf.: Proceedings of the 39th International Colloquium on Automata, Languages, and Programming, ICALP 2012
Volume 7392 of Lecture Notes in Computer Science (LNCS), Springer, 2012
- [3] Fedor V. Fomin, Archontia C. Giannopoulou, Michał Pilipczuk,
Computing tree-depth faster than 2^n ,
Algorithmica, Springer, 2014 (online first)
Konf.: Proceedings of the 8th International Symposium on Parameterized and Exact Computation, IPEC 2013
Volume 8246 of Lecture Notes in Computer Science (LNCS), Springer, 2013
- [4] Marek Cygan, Marcin Pilipczuk, Michał Pilipczuk, Jakub Onufry Wojtaszczyk,
Sitting closer to friends than enemies, revisited,
Theory of Computing Systems, Springer, 2014 (online first)
Konf.: Proceedings of the 37th International Symposium on Mathematical Foundations of Computer Science, MFCS 2012
Volume 7464 of Lecture Notes in Computer Science (LNCS), Springer, 2012
- [5] Fedor V. Fomin, Stefan Kratsch, Marcin Pilipczuk, Michał Pilipczuk, Yngve Villanger,
Tight bounds for parameterized complexity of Cluster Editing with a small number of clusters,
Journal of Computer and System Sciences 80(7), pp. 1430–1447, Elsevier, 2014
Konf.: Proceedings of the 30th International Symposium on Theoretical Aspects of Computer Science, STACS 2013
Volume 20 of LIPIcs, Schloß Dagstuhl — Leibniz-Zentrum für Informatik, 2013
- [6] Fedor V. Fomin, Bart M. P. Jansen, Michał Pilipczuk,
Preprocessing subgraph and minor problems: when does a small vertex cover help?,
Journal of Computer and System Sciences 80(2), pp. 468–495, Elsevier, 2014
Konf.: Proceedings of the 7th International Symposium on Parameterized and Exact Computation, IPEC 2012
Volume 7535 of Lecture Notes in Computer Science (LNCS), Springer, 2012
- [7] Marek Cygan, Stefan Kratsch, Marcin Pilipczuk, Michał Pilipczuk, Magnus Wahlström,
Clique cover and graph separation: New incompressibility results,
ACM Transactions on Computation Theory 6(2):6, ACM, 2014
Konf.: Proceedings of the 39th International Colloquium on Automata, Languages, and Programming, ICALP 2012
Volume 7391 of Lecture Notes in Computer Science (LNCS), Springer, 2012

- [8] Marek Cygan, Marcin Pilipczuk, Michał Pilipczuk, Jakub Onufry Wojtaszczyk, *Solving the 2-Disjoint Connected Subgraphs problem faster than 2^n* , *Algorithmica* 70(2), pp. 195–207, Springer, 2014
Konf.: Proceedings of the 10th Latin American Symposium on Theoretical Informatics, LATIN 2012
 Volume 7256 of Lecture Notes in Computer Science (LNCS), Springer, 2012
- [9] Marek Cygan, Daniel Lokshtanov, Marcin Pilipczuk, Michał Pilipczuk, Saket Saurabh, *On cutwidth parameterized by vertex cover*, *Algorithmica* 68(4), pp. 940–953, Springer, 2014
Konf.: Proceedings of the 6th International Symposium on Parameterized and Exact Computation, IPEC 2011
 Volume 7112 of Lecture Notes in Computer Science (LNCS), Springer, 2011
- [10] Marek Cygan, Marcin Pilipczuk, Michał Pilipczuk, Jakub Onufry Wojtaszczyk, *Scheduling partially ordered jobs faster than 2^n* , *Algorithmica* 68(3), pp. 692–714, Springer, 2014
Konf.: Proceedings of the 19th Annual European Symposium on Algorithms, ESA 2011
 Volume 6942 of Lecture Notes in Computer Science (LNCS), Springer, 2011
- [11] Marek Cygan, Dániel Marx, Marcin Pilipczuk, Michał Pilipczuk, Ildikó Schlotter, *Parameterized complexity of Eulerian deletion problems*, *Algorithmica* 68(1), pp. 41–61, Springer, 2014
Konf.: Proceedings of the 37th International Workshop on Graph-Theoretic Concepts in Computer Science, WG 2011
 Volume 6986 of Lecture Notes in Computer Science (LNCS), Springer, 2011
- [12] Marek Cygan, Daniel Lokshtanov, Marcin Pilipczuk, Michał Pilipczuk, Saket Saurabh, *On the hardness of losing width*, *Theory of Computing Systems* 54(1), pp. 73–82, Springer, 2014
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 Volume 7112 of Lecture Notes in Computer Science (LNCS), Springer, 2011
- [13] Petr A. Golovach, Pinar Heggernes, Pim van 't Hof, Fredrik Manne, Daniël Paulusma, Michał Pilipczuk, *Modifying a graph using vertex elimination*, *Algorithmica*, Springer, 2013 (online first)
Konf.: Proceedings of the 38th International Workshop on Graph-Theoretic Concepts in Computer Science, WG 2012
 Volume 7551 of Lecture Notes in Computer Science (LNCS), Springer, 2012
- [14] Marek Cygan, Marcin Pilipczuk, Michał Pilipczuk, Jakub Onufry Wojtaszczyk, *Subset Feedback Vertex Set is fixed-parameter tractable*, *SIAM Journal on Discrete Mathematics* 27(1), pp. 290–309, SIAM, 2013
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- [15] Marek Cygan, Marcin Pilipczuk, Michał Pilipczuk, Jakub Onufry Wojtaszczyk, *On Multiway Cut parameterized above lower bounds*, *ACM Transactions on Computation Theory* 5(1):3, ACM, 2013
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- [16] Marek Cygan, Marcin Pilipczuk, Michał Pilipczuk, Jakub Onufry Wojtaszczyk, *A polynomial algorithm for 3-Compatible Coloring and the stubborn list partition problem (the stubborn problem is stubborn no more)*, *SIAM Journal on Computing* 41(4), pp. 815–828, SIAM, 2012
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 Volume 6478 of Lecture Notes in Computer Science (LNCS), Springer, 2010
- [18] Marcin Pilipczuk, Michał Pilipczuk, Riste Škrekovski, *Some results on Vizing's conjecture and related problems*, *Discrete Applied Mathematics* 160(16-17), pp. 2484–2490, Elsevier, 2012
- [19] Marek Cygan, Marcin Pilipczuk, Michał Pilipczuk, Jakub Onufry Wojtaszczyk, *Kernelization hardness of connectivity problems in d -degenerate graphs*, *Discrete Applied Mathematics* 160(15), pp. 2131–2141, Elsevier, 2012
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 Volume 6410 of Lecture Notes in Computer Science (LNCS), Springer, 2010
- [20] Marek Cygan, Michał Pilipczuk, Riste Škrekovski, *On the inequality between radius and Randić index for graphs*, *MATCH Communications in Mathematical and in Computer Chemistry* 67(2), pp. 451–466, 2012
- [21] Marek Cygan, Geevarghese Philip, Marcin Pilipczuk, Michał Pilipczuk, Jakub Onufry Wojtaszczyk, *Dominating Set is fixed parameter tractable in claw-free graphs*, *Theoretical Computer Science* 412(50), pp. 6982–7000, Elsevier, 2011
- [22] Marek Cygan, Michał Pilipczuk, Riste Škrekovski, *Relation between Randić index and average distance of trees*, *MATCH Communications in Mathematical and in Computer Chemistry* 66(2), pp. 605–612, 2011

Prace konferencyjne

- [23] Daniel Lokshtanov, Marcin Pilipczuk, Michał Pilipczuk, Saket Saurabh, *Fixed-parameter tractable canonization and isomorphism test for graphs of bounded treewidth*, *Praca przyjęta do publikacji w Proceedings of the 55th Annual IEEE Symposium on Foundations of Computer Science, FOCS 2014*
- [24] Marcin Pilipczuk, Michał Pilipczuk, Erik Jan van Leeuwen, Piotr Sankowski, *Network sparsification for Steiner problems on planar and bounded-genus graphs*, *Praca przyjęta do publikacji w Proceedings of the 55th Annual IEEE Symposium on Foundations of Computer Science, FOCS 2014*
- [25] Ivan Bliznets, Fedor V. Fomin, Marcin Pilipczuk, Michał Pilipczuk, *A subexponential parameterized algorithm for Proper Interval Completion*, *Proceedings of the 22nd Annual European Symposium on Algorithms, ESA 2014*
 Volume 8737 of Lecture Notes in Computer Science (LNCS), Springer, 2014
- [26] Marek Cygan, Dániel Marx, Marcin Pilipczuk, Michał Pilipczuk, *Hitting forbidden subgraphs in graphs of bounded treewidth*, *Proceedings of the 39th International Symposium on Mathematical Foundations of Computer Science, MFCS 2014*
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- [27] Marek Cygan, Daniel Lokshtanov, Marcin Pilipczuk, Michał Pilipczuk, Saket Saurabh, *Minimum Bisection is fixed parameter tractable*, *Proceedings of the 46th ACM Symposium on Theory of Computing, STOC 2014*

- [28] Pål Grønås Drange, Fedor V. Fomin, Michał Pilipczuk, Yngve Villanger, *Exploring subexponential parameterized complexity of completion problems*, Proceedings of the 31st International Symposium on Theoretical Aspects of Computer Science, STACS 2014 Volume 25 of LIPIcs, Schloß Dagstuhl — Leibniz-Zentrum für Informatik, 2013
- [29] Dániel Marx, Michał Pilipczuk, *Everything you always wanted to know about the parameterized complexity of Subgraph Isomorphism (but were afraid to ask)*, Proceedings of the 31st International Symposium on Theoretical Aspects of Computer Science, STACS 2014 Volume 25 of LIPIcs, Schloß Dagstuhl — Leibniz-Zentrum für Informatik, 2013
- [30] Claire David, Piotr Hofman, Filip Murlak, Michał Pilipczuk, *Synthesizing transformations from XML schema mappings*, Proceedings of the 17th International Conference on Database Theory, ICDT 2014
- [31] Marek Cygan, Dániel Marx, Marcin Pilipczuk, Michał Pilipczuk, *The planar directed k -Vertex-Disjoint Paths problem is fixed-parameter tractable*, Proceedings of the 54th Annual IEEE Symposium on Foundations of Computer Science, FOCS 2013
- [32] Hans L. Bodlaender, Pål Grønås Drange, Markus Sortland Dregi, Fedor V. Fomin, Daniel Lokshtanov, Michał Pilipczuk, *An $O(c^k n)$ 5-approximation algorithm for treewidth*, Proceedings of the 54th Annual IEEE Symposium on Foundations of Computer Science, FOCS 2013
- [33] Ivan Bliznets, Fedor V. Fomin, Michał Pilipczuk, Yngve Villanger, *Largest chordal and interval subgraphs faster than 2^n* , Proceedings of the 21st Annual European Symposium on Algorithms, ESA 2013 Volume 8125 of Lecture Notes in Computer Science (LNCS), Springer, 2013
- [34] Fedor V. Fomin, Michał Pilipczuk, *Subexponential parameterized algorithm for computing the cutwidth of a semi-complete digraph*, Proceedings of the 21st Annual European Symposium on Algorithms, ESA 2013 Volume 8125 of Lecture Notes in Computer Science (LNCS), Springer, 2013
- [35] Marcin Pilipczuk, Michał Pilipczuk, Piotr Sankowski, Erik Jan van Leeuwen, *Subexponential-time parameterized algorithm for Steiner tree on planar graphs*, Proceedings of the 30th International Symposium on Theoretical Aspects of Computer Science, STACS 2013 Volume 20 of LIPIcs, Schloß Dagstuhl — Leibniz-Zentrum für Informatik, 2013
- [36] Michał Pilipczuk, *Computing cutwidth and pathwidth of semi-complete digraphs via degree orderings*, Proceedings of the 30th International Symposium on Theoretical Aspects of Computer Science, STACS 2013 Volume 20 of LIPIcs, Schloß Dagstuhl — Leibniz-Zentrum für Informatik, 2013
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- [39] Rajesh Chitnis, Marek Cygan, MohammadTaghi Hajiaghayi, Marcin Pilipczuk, Michał Pilipczuk, *Designing FPT algorithms for cut problems using randomized contractions*, Proceedings of the 53rd Annual IEEE Symposium on Foundations of Computer Science, FOCS 2012

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Finding a maximum induced degenerate subgraph faster than 2^n ,
Proceedings of the 7th International Symposium on Parameterized and Exact Computation, IPEC 2012
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- [41] Marek Cygan, Marcin Pilipczuk, Michał Pilipczuk,
On Group Feedback Vertex Set parameterized by the size of the cutset,
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