Michał Pilipczuk

Lista publikacji

z dnia 31 października 2015

Książki i monografie

1. Marek Cygan, Fedor V. Fomin, Łukasz Kowalik, Daniel Lokshtanov, Daniel Marx, Marcin Pilipczuk, Michał Pilipczuk, Saket Saurabh, ***Parameterized Algorithms,*** *Springer*, 2015, ISBN 978-3-319-21275-3

Publikacje w czasopismach

W przypadku prac posiadających wcześniejszą wersję konferencyjną, jej miejsce publikacji jest podane jako Konf..

1. Daniel Lokshtanov, Marcin Pilipczuk, Michał Pilipczuk, Saket Saurabh, ***Fixed-parameter tractable canonization and isomorphism test for graphs ofbounded treewidth***, Praca przyjęta do publikacji w SIAM Journal on Computing

Konf.: Proceedings of the 55th Annual IEEE Symposium on Foundations of Computer Science, FOCS 2014

2. Tatjana V. Abramovskaya, Fedor V. Fomin, Petr A. Golovach, Michał Pilipczuk, ***How to hunt an invisible rabbit on a graph***, European Journal of Combinatorics 52(A), pp. 16-26, Elsevier, 2016

3. Ivan Bliznets, Fedor V. Fomin, Marcin Pilipczuk, Michał Pilipczuk, ***A subexponential parameterized algorithmfor Proper Interval Completion***, Praca przyjęta do publikacji w SIAM Journal on Discrete Mathematics

Konf.: Proceedings of the 22nd Annual European Symposium on Algorithms, ESA 2014 Volume 8737 of Lecture Notes in Computer Science (LNCS), Springer, 2014

4. Ivan Bliznets, Fedor V. Fomin, Michał Pilipczuk, Yngve Villanger, ***Largest chordal and interval subgraphs faster than 2n, Algorithmica,*** Springer, 2015

Konf.: Proceedings of the 21st Annual European Symposium on Algorithms, ESA 2013 Volume 8125 of Lecture Notes in Computer Science (LNCS), Springer, 2013

5. Pal Gronas Drange, Fedor V. Fomin, Michał Pilipczuk, Yngve Villanger, ***Exploring subexponential parameterized complexity of completion problems,*** *ACM Transactions on Computation Theory* 7(4):14, ACM, 2015

Konf.: Proceedings of the 31st International Symposium on Theoretical Aspects of Computer Science, STACS 2014 Volume 25 of LIPIcs, Schlofi Dagstuhl — Leibniz-Zentrum fur Informatik, 2013

6. Marek Cygan, Marcin Pilipczuk, Michał Pilipczuk, ***On Group Feedback Vertex Set parameterized by the size of the cutset, Algorithmica,*** *Springer,* 2014

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

7. Stefan Kratsch, Marcin Pilipczuk, Michał Pilipczuk, Magnus Wahlstrom, ***Fixed-parameter tractability ofMulticut in directed acyclic graphs,*** *SIAM Journal on Discrete Mathematics* 29(1), pp. 122-144, SIAM, 2015

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. Fedor V. Fomin, Petr A. Golovach, Jesper Nederlof, Michał Pilipczuk, ***Minimizing Rosenthal potential in multicast games,*** *Theory of Computing Systems* 57(1), pp. 81-96, Springer, 2015.

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

9. Fedor V. Fomin, Archontia C. Giannopoulou, Michał Pilipczuk, ***Computing tree-depth faster than 2n,*** *Algorithmica* 73(1), pp. 202-216, Springer, 2015

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

10. Marek Cygan, Marcin Pilipczuk, Michał Pilipczuk, Jakub Onufry Wojtaszczyk, ***Sitting closer to friends than enemies, revisited, Theory of Computing Systems 56(2), pp. 394-405,*** *Springer,* 2015

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

11. Fedor V. Fomin, Stefan Kratsch, Marcin Pilipczuk, Michał Pilipczuk , Yngve Villanger, ***Tight boundsfor 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, Schlofi Dagstuhl — Leibniz-Zentrum fur Informatik, 2013

12. 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

13. Marek Cygan, Stefan Kratsch, Marcin Pilipczuk, Michał Pilipczuk, Magnus Wahlstrom, ***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

14. Marek Cygan, Marcin Pilipczuk, Michał Pilipczuk , Jakub Onufry Wojtaszczyk, ***Solving the 2-Disjoint Connected Subgraphs problem faster than 2n,*** *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 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

15. Marek Cygan, Marcin Pilipczuk, Michał Pilipczuk, Jakub Onufry Wojtaszczyk*, Scheduling partially ordered jobs faster than 2n*, Algorithmica 68(3), pp. 692-714, Springer, 2014

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16. Marek Cygan, Daniel Marx, Marcin Pilipczuk, Michał Pilipczuk , *Ildikó Schlotter, Parameterized complexity ofEulerian deletion problems,* Algorithmica 68(1), pp. 41-61, Springer, 2014

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17. 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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18. Petr A. Golovach, Pinar Heggernes, Pim van 't Hof, Fredrik Manne, Daniel Paulusma, Michał Pilipczuk, *Modifying a graph using vertex elimination,* Algorithmica 72(1), pp. 99-125, Springer, 2015

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22. Marek Cygan, Marcin Pilipczuk, Michał Pilipczuk , Jakub Onufry Wojtaszczyk, ***Improved FPT algorithm and quadratic kernel for Pathwidth One Vertex Deletion,*** *Algorithmica* 64(1), pp. 170-188, Springer, 2012

Konf.: Proceedings of the 5th International Symposium on Parameterized and Exact Computation, IPEC 2010 Volume 6478 of Lecture Notes in Computer Science (LNCS), Springer, 2010

23. Marcin Pilipczuk, Michał Pilipczuk, Riste Skrekovski, ***Some results on Vizing's conjecture and related problems,*** *Discrete Applied Mathematics* 160(16-17), pp. 2484-2490, Elsevier, 2012

24. 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

Konf.: Proceedings of the 36th International Workshop on Graph-Theoretic Concepts in Computer Science, WG 2010 Volume 6410 of Lecture Notes in Computer Science (LNCS), Springer, 2010

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26. Marek Cygan, Geevarghese Philip, Marcin Pilipczuk, Michał Pilipczuk, Jakub Onufry Wojtaszczyk, ***Dominating Set isfixed parameter tractable in claw-free graphs,*** *Theoretical Computer Science* 412(50), pp. 6982-7000, Elsevier, 2011

27. Marek Cygan, Michał Pilipczuk, Riste Skrekovski, ***Relation between Randić index and average distance oftrees,*** *MATCH Communications in Mathematical and in Computer Chemistry* 66(2), pp. 605-612, 2011

Prace oryginalne konferencyjne

1. Ivan Bliznets, Marek Cygan, Paweł Komosa, Lukas Mach, Michał Pilipczuk, ***Lower bounds for the parameterized complexity of Minimum Fill-in and other completion problems,*** Praca przyjęta na *27th Annual ACM-SIAM Symposium on Discrete Algorithms,* SODA 2016

2. Ivan Bliznets, Fedor V. Fomin, Marcin Pilipczuk, Michał Pilipczuk, ***A subexponential parameterized algorithm for Interval Completion,*** Praca przyjęta na *27th Annual ACM-SIAM Symposium on Discrete Algorithms,* SODA 2016

3. Marthe Bonamy, Łukasz Kowalik, Michał Pilipczuk, Arkadiusz Socała, ***Linear kernels for outbranching problems in sparse digraphs,*** *Proceedings of the 10th International Symposium on Parameterized and Exact Computation,* IPEC 2015 LIPIcs, Schlofi Dagstuhl — Leibniz-Zentrum fur Informatik, w druku

4. Daniel Marx, Michał Pilipczuk, ***Optimal parameterized algorithms for planar facility location problems using Voronoi diagrams,*** *Proceedings of the 23rd Annual European Symposium on Algorithms,* ESA 2015 Volume 9294 of Lecture Notes in Computer Science (LNCS), Springer, 2015

5. Pal Granas Drange, Michał Pilipczuk, ***A polynomial kernelfor Trivially Perfect Editing,*** *Proceedings of the 23rd Annual European Symposium on Algorithms,* ESA 2015 Volume 9294 of Lecture Notes in Computer Science (LNCS), Springer, 2015

6. Ariel Gabizon, Daniel Lokshtanov, Michał Pilipczuk, ***Fast algorithms for parameterized problems with relaxed disjointness constraints,*** *Proceedings of the 23rd Annual European Symposium on Algorithms,* ESA 2015 Volume 9294 of Lecture Notes in Computer Science (LNCS), Springer, 2015

7. Marek Cygan, Marcin Pilipczuk, Michał Pilipczuk, Erik Jan van Leeuwen, Marcin Wrochna, ***Polynomial kernelization for removing induced claws and diamonds,*** *Proceedings of the 41st International Workshop on Graph-Theoretic Concepts in Computer Science,* WG 2015 Lecture Notes in Computer Science (LNCS), Springer, w druku

8. Marcin Pilipczuk, Michał Pilipczuk, Erik Jan van Leeuwen, Piotr Sankowski, ***Network sparsification for Steiner problems on planar and bounded-genus graphs,*** *Proceedings of the 55th Annual IEEE Symposium on Foundations of Computer Science,* FOCS 2014

9. Marek Cygan, Daniel 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 Volume 8635 of Lecture Notes in Computer Science (LNCS), Springer, 2014

10. 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

11. Daniel 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, Schlofi Dagstuhl — Leibniz-Zentrum fur Informatik, 2014 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

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13. Hans L. Bodlaender, Pal Grenas Drange, Markus Sortland Dregi, Fedor V. Fomin, Daniel Lokshtanov, Michał Pilipczuk, ***An O(ckn) 5-approximation algorithm for treewidth,*** *Proceedings of the 54th Annual IEEE Symposium on Foundations of Computer Science,* FOCS 2013

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15. Marcin Pilipczuk, Michał Pilipczuk, Piotr Sankowski, Erik Jan van Leeuwen, ***Subexponential-time parameterized algorithm for Steiner tree on planar graphs,*** *Proceedings of the 30th*

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16. 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, Schlofi Dagstuhl — Leibniz-Zentrum fur Informatik, 2013

17. Marek Cygan, Marcin Pilipczuk, Michał Pilipczuk, ***Known algorithms for Edge Clique Cover are probably optimal,*** *Proceedings of the 24th Annual ACM-SIAM Symposium on Discrete Algorithms,* SODA 2013

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21. Marek Cygan, Jesper Nederlof, Marcin Pilipczuk, Michał Pilipczuk, Johan M. M. van Rooij, Jakub Onufry Wojtaszczyk, ***Solving connectivity problems parameterized by treewidth in single exponential time,*** *Proceedings of the 52nd Annual IEEE Symposium on Foundations of Computer Science,* FOCS 2011

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