Curriculum Vitæ

Personal Information

Name and surname	Michał Pilipczuk
Date and place of birth	June 25th, 1988, Warsaw, Poland
Citizenship	Polish
Address	Institute of Informatics, Faculty of Mathematics, Informatics, and Mechanics of the University of Warsaw, ul. Banacha 2, 02-097 Warsaw, Poland
Phone number	+48 22 5544458
E-mail	michal.pilipczuk@mimuw.edu.pl
Website	http://www.mimuw.edu.pl/~mp248287
Research interests	parameterized complexity, structural graph theory, logic in computer science

Education

2011 — 2013	PhD Studies in Theoretical Computer Science under supervision of prof. Fedor V. Fomin, University of Bergen, Norway. PhD thesis defended in November 2013.
2006 — 2013	Double Degree Program in Computer Science and Mathematics, Faculty of Mathematics, Informatics and Mechanics, University of Warsaw, Poland. Master thesis in computer science defended with honours in June 2011, and master thesis in mathematics defended in April 2013.

Academic career

since October 2015	Assistant professor (*pol.* adiunkt) at the Institute of Informatics at the Faculty of Mathematics, Informatics, and Mechanics of the University of Warsaw, Poland.
2014 — 2015	Postdoc of Warsaw Centre of Mathematics and Computer Science, affiliated with the Institute of Informatics, Faculty of Mathematics, Informatics, and Mechanics of the University of Warsaw, Poland.
2011 — 2014	*Stipendiat* (doctoral research fellow, a PhD position) at the Institute of Informatics of the University of Bergen, Norway, working under the supervision of prof. Fedor Fomin.

Theses

Tournaments and Optimality: New Results in Parameterized Complexity,
PhD thesis in computer science, prepared under supervision of prof. Fedor V. Fomin and defended in November 2013 at the University of Bergen;

Comparing Randić index with other graph parameters,
master thesis in mathematics, prepared under supervision of dr hab. Łukasz Kowalik and defended in April 2013 at the University of Warsaw;

Problems parameterized by treewidth tractable in single exponential time: a logical approach,
master thesis in computer science, prepared under supervision of prof. Mikołaj Bojańczyk and defended with honours in June 2011 at the University of Warsaw;

Leadership and participation in grants

since Oct 2017	Researcher in ERC grant TOTAL "Technology transfer between modern algorithmic paradigms", led by Marek Cygan.
2016 — 2018	Research partner in POLONEZ grant "Algorithmic Structure Theory for Sparse Graphs", led by Sebastian Siebertz and funded by the National Science Center of Poland from the Horizon 2020 programme funds, Marie Skłodowska-Curie actions.
2014 — 2017	Principal investigator of SONATA grant "Optimality in Parameterized Complexity", funded by the National Science Center of Poland. Total amount of funding: 386 320 PLN (around 90 000 EUR).
2011 — 2014	*Stipendiat* (doctoral research fellow, a PhD position) in the ERC Advanced Investigator Project "Rigorous Theory of Preprocessing", led by prof. Fedor V. Fomin.

Scientific awards and stipends

2018	Zdzisław Pawlak prize for the book *Parameterized Algorithms*. Prize awarded annually by the Informatics Committee of the Polish Academy of Sciences for monographs in computer science.
2016	ERCIM Cor Baayen Award 2016. Prize awarded annually to one promising young researcher in computer science and applied mathematics.
2016	START stipend granted by the Foundation for Polish Science (FNP), awarded with a distinguishment for the highest ranked applications.
2015	Witold Lipski Prize for the best young researchers working in computer science in Poland.
2015	Stipend of the Ministry of Science and Higher Education of the Republic of Poland for outstanding young researchers.
2015	START stipend granted by the Foundation for Polish Science (FNP), awarded with a distinguishment for the highest ranked applications.
2014	Meltzer Prize for Young Researchers (Meltzerprisen for yngre forskere), awarded for the achievements in 2013. Prize awarded annually by the University of Bergen to two young researchers working at this university among all the disciplines.

Organization and invited participation in scientific events

Nov 2018	Lecturer during the DocCourse programme on Sparsity at Charles University. Prague, Czech Republic.
Dec 2017	Lecturer at the School on Recent Advances in Parameterized Complexity. Tel Aviv, Israel.
Sep 2017	Lecturer at the Parameterized Complexity Summer School, a satellite event of ALGO 2017. Vienna, Austria.
Jul 2017	Co-organizer (with Sebastian Siebertz) of a satellite workshop of ICALP 2018 on algorithms and structure for sparse graphs. Warsaw, Poland.
Jun 2016	Co-organizer (with Marek Cygan and Marcin Pilipczuk) of sessions on parameterized complexity during SIAM Conference on Discrete Mathematics 2016. Atlanta, USA.
Mar 2016	Lecturer at the ELC School on Parameterized Algorithms. Osaka, Japan.
Apr 2015	Lecturing a mini-course on parameterized complexity at Insitute of Informatics, University of Wrocław, Poland.
Aug 2014	Organizer and lecturer at the International School on Parameterized Algorithms. Będlewo, Poland.

Invited talks

Oct 2019	Invited seminar *Structural sparsity in graphs: overview and some applications* at Theory Seminar at EPFL. Lausanne, Switzerland.
Jun 2019	Invited talk *A structural theory for classes of sparse graphs* at workshop DIMEA Days. Brno, Czech Republic.
Jun 2018	Invited talk *Parameterized algorithms for planar packing and covering problems using Voronoi diagrams* at workshop *Fine-grained complexity of hard geometric problems*, a satellite event of SoCG 2018. Budapest, Hungary.
May 2018	Invited talk *From approximate to parameterized and back again: algorithms for geometric packing and covering problems using Voronoi diagrams* at workshop *Fixed-Parameter Computational Geometry*. Lorentz Center, Leiden, Netherlands.
Aug 2017	Invited talk *On definable and recognizable properties of graphs of bounded treewidth* at the 42nd International Symposium on Mathematical Foundations of Computer Science (MFCS 2017). Aarhus, Denmark.
May 2016	Invited seminar *Bidimensionality and beyond: parameterized algorithm design on planar graphs* at the joint seminar "Methods for Discrete Structures" of Theoretical Computer Science research groups in Berlin. Berlin, Germany.
Jan 2016	Invited talk *On tree-like graphs* at the Polish Forum of Theoretical Computer Science (FIT 2016). Warsaw, Poland.
Jun 2015	Invited talk *Kernelization algorithms on sparse graph classes* at the 5th Workshop on Kernels. Nordfjordeid, Norway.
Feb 2015	Invited talk *New results on computing tree decompositions of graphs* at the ELC/B01 Workshop on Parameterized Algorithms. Tokyo, Japan.
Dec 2014	Invited talks *Algorithmic Lower Bounds based on ETH and SETH* and *Graph Isomorphism is FPT Parameterized by Treewidth* at workshop *Exact Algorithms and Lower Bounds*, a satellite event of FSTTCS 2014. Delhi, India.
Sep 2012	Invited tutorial *Lower bounds for polynomial kernelization* at the 7th International Symposium on Parameterized and Exact Computation, IPEC 2012. Ljubljana, Slovenia.

Community service

Supervised PhD students: Marcin Wrochna (2014–18)

Program Committee member of:

- 4th Highlights of Algorithms, HALG 2020.
- 8th Highlights of Logic, Games, and Automata, Highlights 2020.
- 31st International Symposium on Algorithms and Computation, ISAAC 2019.
- 17th Scandinavian Symposium and Workshops on Algorithm Theory, SWAT 2020.
- 47th International Colloquium on Automata, Languages, and Programming, ICALP 2020; track A.
- 44th International Symposium on Mathematical Foundations of Computer Science, MFCS 2019.
- 13th International Symposium on Parameterized and Exact Computation, IPEC 2018 (co-chair).
- 45th International Colloquium on Automata, Languages, and Programming, ICALP 2018; track A.
- 50th Annual ACM Symposium on the Theory of Computing, STOC 2018.
- 35th International Symposium on Theoretical Aspects of Computer Science, STACS 2018.
- 12th International Symposium on Parameterized and Exact Computation, IPEC 2017.
- 24th Annual European Symposium on Algorithms, ESA 2016; track A (design and analysis).
- 42nd International Workshop on Graph-Theoretic Concepts in Computer Science, WG 2016.
- 42nd International Colloquium on Automata, Languages, and Programming, ICALP 2015; track A.
- 9th International Workshop on Algorithms and Computation, WALCOM 2015.
- 34th Foundations of Software Technology and Theoretical Computer Science, FSTTCS 2014.

Reviewed for:

Conferences	FOCS, STOC, LICS, SODA, SoCG, ICALP, STACS, IPCO, CSL, APPROX, ESA, FSTTCS, ISAAC, WG, MFCS, CSR, CIAC, IPEC
Journals	SICOMP, TALG, JCTA, JCTB, JCSS, SIDMA, ToCS, Algorithmica, EuJC, TCS, DAM, IPL

Achievements in olympiads and championships

2011	7th place in the second category at the 21st Vojtěch Jarník International Mathematical Competition (Ostrava, Czech Republic)
2010	Second prize at the 17th International Mathematical Competition (Blagoevgrad, Bulgaria)
2010	7th place in the second category at the 20th Vojtěch Jarník International Mathematical Competition (Ostrava, Czech Republic)
2010	Silver medal (8th place) at the World Finals of the ACM International Collegiate Programming Contest (Harbin, China)
2009	First place at the ACM ICPC Central Europe Regional Contest, CERC 2009 (Wrocław, Poland)
2009	9th place at the 14th Collegiate Championship of Poland in Team Programming (Poznań, Poland)
2009	Second prize at the 16th International Mathematical Competition (Budapest, Hungary)
2009	First place in the second category at the 19th Vojtěch Jarník International Mathematical Competition (Ostrava, Czech Republic)
2008	19th place at the ACM ICPC Central Europe Regional Contest, CERC 2008 (Wrocław, Poland)
2008	Second place at the 13th Collegiate Championship of Poland in Team Programming (Poznań, Poland)
2008	First prize at the 15th International Mathematical Competition (Blagoevgrad, Bulgaria)
2008	First place in the first category at the 18th Vojtěch Jarník International Mathematical Competition (Ostrava, Czech Republic)
2007	First prize at the 14th International Mathematical Competition (Blagoevgrad, Bulgaria)
2006	9th place at the ACM ICPC Central Europe Regional Contest, CERC 2006 (Budapest, Hungary)
2006	6th place at the 11th Collegiate Championship of Poland in Team Programming (Poznań, Poland)
2006	Silver medal at the 18th International Olympiad in Informatics (Merida, Mexico)
2006	Silver medal at the 47th International Mathematical Olympiad (Ljubljana, Slovenia)
2006	Bronze medal at the 13th Central European Olympiad in Informatics (Vrsar, Croatia)
2005	Bronze medal at the 46th International Mathematical Olympiad (Merida, Mexico)
2004	Gold medal at the 45th International Mathematical Olympiad (Athens, Greece)
2003	Third place at the 26th Austrian-Polish Mathematical Competition (Graz, Austria)

Professional activities in olympiads and championships

2018	Chairman of the Jury of the 12th Middle European Mathematical Olympiad (Bielsko-Biała, Poland)
2018	Leader of the Polish team for the 59th International Mathematical Olympiad (Cluj-Napoca, Romania)
2017	Leader of the Polish team for the 58th International Mathematical Olympiad (Rio de Janeiro, Brazil)
2016 – 2019	Chairman of the Problem Selection Committee of the Polish Mathematical Olympiad
2016	Leader of the Polish team for the 57th International Mathematical Olympiad (Hong Kong)
2016	Leader of the Polish team for the 5th European Girls' Mathematical Olympiad (Bușteni, Romania)
2015	Leader of the Polish team for the 56th International Mathematical Olympiad (Chiang Mai, Thailand)
2015	Leader of the Polish team for the 4th European Girls' Mathematical Olympiad (Minsk, Belarus)
2014 – 2019	Member of the Polish Mathematical Olympiad Committee and of the Problem Selection Committee (again)
2014	Head of the Jury of the Nordic Collegiate Programming Contest, NCPC 2014 (together with Lukáš Poláček, KTH)
2014	Leader of the Polish team for the 55th International Mathematical Olympiad (Cape Town, South Africa)
2013	Member of the Jury of the Nordic Collegiate Programming Contest, NCPC 2013
2013	Leader of the Polish team for the 54th International Mathematical Olympiad (Santa Marta, Colombia)
2012	Member of the Jury of the Nordic Collegiate Programming Contest, NCPC 2012
2012	Leader of the Polish team for the 1st European Girls' Mathematical Olympiad (Cambridge, UK)
2011	Coaching teams from the University of Bergen at the ACM ICPC Northwestern European Regional Contest, NWERC 2011 (Bremen, Germany)
2011	Deputy leader of the Polish team for the 52nd International Mathematical Olympiad (Amsterdam, Netherlands)
2011	Leader of the Polish team for the competition *Romanian Master in Mathematics* (Bucharest, Romania)
2010	Deputy leader of the Polish team for the 51st International Mathematical Olympiad (Astana, Kazakhstan)
2009 – 2011	Member of the Polish Mathematical Olympiad Committee and of the Problem Selection Committee
2008	Deputy leader of the Polish team for the 49th International Mathematical Olympiad (Madrid, Spain)
2007 – 2009	Informal member of the Problem Selection Committee of the Polish Mathematical Olympiad
2007 – 2012	Member of the Jury and contributor to the problem sets at the Polish Olympiad in Informatics

Publications

For journal publications that had a preliminary conference version, the latter one is given under **Conf.**

Books

[1]   Marek Cygan, Fedor V. Fomin, Łukasz Kowalik, Daniel Lokshtanov, Dániel Marx, Marcin Pilipczuk, Michał Pilipczuk, Saket Saurabh,
Parameterized Algorithms,
Springer, 2015

Articles in journals

[2]   O-joung Kwon, Michał Pilipczuk, Sebastian Siebertz,
On low rank-width colourings,
European Journal of Combinatorics 83, Elsevier, 2020

Conf.: Proceedings of the 43rd International Workshop on Graph-Theoretic Concepts in Computer Science, WG 2017
Volume 10520 of Lecture Notes in Computer Science (LNCS), Springer, 2017

[3]   Fedor V. Fomin, Michał Pilipczuk,
On width measures and topological problems on semi-complete digraphs,
Journal of Combinatorial Theory, Series B, 138, pp. 78–165, Elsevier, 2019

Conf.: Joint journal version of conference papers [91,93,94]

[4]   Dmitry Chistikov, Wojciech Czerwiński, Piotr Hofman, Michał Pilipczuk, Michael Wehar,
Shortest paths in one-counter systems,
Logical Methods in Computer Science 15(1), 2019

Conf.: Proc. of the 19th Int. Conference on Foundations of Software Science and Computation Structures, FoSSaCS 2016
Volume 9634 of Lecture Notes in Computer Science (LNCS), Springer, 2016

[5]   Marek Cygan, Daniel Lokshtanov, Marcin Pilipczuk, Michał Pilipczuk, Saket Saurabh,
Minimum Bisection is fixed parameter tractable,
SIAM Journal on Computing 48(2), pp. 417–450, SIAM, 2019

Conf.: Proceedings of the 46th ACM Symposium on Theory of Computing, STOC 2014

[6]   Marthe Bonamy, Łukasz Kowalik, Michał Pilipczuk, Arkadiusz Socała, Marcin Wrochna,
Tight lower bounds for the complexity of Multicoloring,
ACM Transactions on Computation Theory 11(3):13, ACM, 2019

Conf.: Proceedings of the 25th Annual European Symposium on Algorithms, ESA 2017
Volume 87 of LIPIcs, Schloß Dagstuhl — Leibniz-Zentrum für Informatik, 2017

[7]   Florian Barbero, Christophe Paul, Michał Pilipczuk,
Strong immersion is a well-quasi-ordering for semi-complete digraphs,
Journal of Graph Theory 90(4), pp. 484–496, Wiley, 2019

[8]   Marcin Pilipczuk, Michał Pilipczuk, Marcin Wrochna,
Edge Bipartization faster than 2^k,
Algorithmica 81(2), pp. 917–966, Springer, 2019

Conf.: Proceedings of the 11th International Symposium on Parameterized and Exact Computation, IPEC 2016
Volume 63 of LIPIcs, Schloß Dagstuhl — Leibniz-Zentrum für Informatik, 2016

[9]   Archontia C. Giannopoulou, Michał Pilipczuk, Jean-Florent Raymond, Dimitrios M. Thilikos, Marcin Wrochna,
        Cutwidth: obstructions and algorithmic aspects,
        Algorithmica 81(2), pp. 557–588, Springer, 2019

        Conf.: Proceedings of the 11th International Symposium on Parameterized and Exact Computation, IPEC 2016
                Volume 63 of LIPIcs, Schloß Dagstuhl — Leibniz-Zentrum für Informatik, 2016
        Note: Article won the Best Paper Award at IPEC 2016

[10]   Pål Grønås Drange, Michał Pilipczuk,
        A polynomial kernel for Trivially Perfect Editing,
        Algorithmica 80(12), pp. 3481–3524, Springer, 2018

        Conf.: Proceedings of the 23rd Annual European Symposium on Algorithms, ESA 2015
                Volume 9294 of Lecture Notes in Computer Science (LNCS), Springer, 2015

[11]   Daniel Lokshtanov, Michał Pilipczuk, Saket Saurabh,
        Below all subsets for Minimal Connected Dominating Set,
        SIAM Journal on Discrete Mathematics 32(3), pp. 2332–2345, SIAM, 2018

[12]   Marcin Pilipczuk, Michał Pilipczuk, Erik Jan van Leeuwen, Piotr Sankowski,
        Network sparsification for Steiner problems on planar and bounded-genus graphs,
        ACM Transactions on Algorithms 14(4):53, ACM, 2018

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

[13]   Florian Barbero, Chrstophe Paul, Michał Pilipczuk,
        Exploring the complexity of layout parameters in tournaments and semi-complete digraphs,
        ACM Transactions on Algorithms 14(3):38, ACM, 2018

        Conf.: Proceedings of the 44th International Colloquium on Automata, Languages, and Programming, ICALP 2017
                Volume 80 of LIPIcs, Schloß Dagstuhl — Leibniz-Zentrum für Informatik, 2017

[14]   Fedor V. Fomin, Daniel Lokshtanov, Michał Pilipczuk, Saket Saurabh, Marcin Wrochna,
        Fully polynomial-time parameterized computations for graphs and matrices of low treewidth,
        ACM Transactions on Algorithms 14(3):34, ACM, 2018

        Conf.: Proceedings of the 28th Annual ACM-SIAM Symposium on Discrete Algorithms, SODA 2017

[15]   Ivan Bliznets, Fedor V. Fomin, Marcin Pilipczuk, Michał Pilipczuk,
        A subexponential parameterized algorithm for Interval Completion,
        ACM Transactions on Algorithms 14(3):35, ACM, 2018

        Conf.: Proceedings of the 27th Annual ACM-SIAM Symposium on Discrete Algorithms, SODA 2016

[16]   Ivan Bliznets, Marek Cygan, Paweł Komosa, Michał Pilipczuk,
        Hardness of approximation for H-free edge modification problems,
        ACM Transactions on Computation Theory 10(2):9, ACM, 2018

        Conf.: Proc. of the 19th Int. Workshop on Approximation Algorithms for Comb. Optimization Problems, APPROX 2016
                Volume 60 of LIPIcs, Schloß Dagstuhl — Leibniz-Zentrum für Informatik, 2016

[17]   Michał Pilipczuk, Marcin Wrochna,
        On space efficiency of algorithms working on structural decompositions of graphs,
        ACM Transactions on Computation Theory 9(4):18, ACM, 2018

        Conf.: Proceedings of the 33rd International Symposium on Theoretical Aspects of Computer Science, STACS 2016
                Volume 47 of LIPIcs, Schloß Dagstuhl — Leibniz-Zentrum für Informatik, 2016

[18] Marek Cygan, Dániel Marx, Marcin Pilipczuk, Michał Pilipczuk,
      Hitting forbidden subgraphs in graphs of bounded treewidth,
      Information and Computation 256 (Supplement C), pp. 62–82, Elsevier, 2017

      Conf.: 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

[19] Anna Adamaszek, Tomasz Kociumaka, Marcin Pilipczuk, Michał Pilipczuk,
      Hardness of approximation for strip packing,
      ACM Transactions on Computation Theory 9(3):14, ACM, 2017

[20] Marthe Bonamy, Łukasz Kowalik, Michał Pilipczuk, Arkadiusz Socała,
      Linear kernels for outbranching problems in sparse digraphs,
      Algorithmica 79(1), pp. 159–188, Springer, 2017

      Conf.: Proceedings of the 10th International Symposium on Parameterized and Exact Computation, IPEC 2015
           Volume 43 of LIPIcs, Schloß Dagstuhl — Leibniz-Zentrum für Informatik, 2016

[21] Marek Cygan, Marcin Pilipczuk, Michał Pilipczuk, Erik Jan van Leeuwen, Marcin Wrochna,
      Polynomial kernelization for removing induced claws and diamonds,
      Theory of Computing Systems 60(4), pp. 615–636, Springer, 2017

      Conf.: Proceedings of the 41st International Workshop on Graph-Theoretic Concepts in Computer Science, WG 2015
           Volume 9224 of Lecture Notes in Computer Science (LNCS), Springer, 2016

[22] Rajesh Chitnis, Marek Cygan, MohammadTaghi Hajiaghayi, Marcin Pilipczuk, Michał Pilipczuk,
      Designing FPT algorithms for cut problems using randomized contractions,
      SIAM Journal on Computing 45(4), pp. 1171–1229, 2016

      Conf.: Proceedings of the 53rd Annual IEEE Symposium on Foundations of Computer Science, FOCS 2012

[23] Michał Pilipczuk, Szymon Toruńczyk,
      On ultralimits of sparse graph classes,
      Electronic Journal of Combinatorics 23(2), P2.32, 2016

[24] Daniel Lokshtanov, Marcin Pilipczuk, Michał Pilipczuk, Saket Saurabh,
      Fixed-parameter tractable canonization and isomorphism test for graphs of bounded treewidth,
      SIAM Journal on Computing 46(1), pp. 161–189, SIAM, 2017

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

[25] Hans L. Bodlaender, Pål Grønås Drange, Markus Sortland Dregi, Fedor V. Fomin, Daniel Lokshtanov, Michał Pilipczuk,
      An $\mathcal{O}(c^k n)$ 5-approximation algorithm for treewidth,
      SIAM Journal on Computing 45(2), pp. 317–378, SIAM, 2016

      Conf.: Proceedings of the 54th Annual IEEE Symposium on Foundations of Computer Science, FOCS 2013

[26] 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, pp. 12–26, Elsevier, 2016

[27] Marek Cygan, Marcin Pilipczuk, Michał Pilipczuk,
      Known algorithms for Edge Clique Cover are probably optimal,
      SIAM Journal on Computing 45(1), pp. 67–83, SIAM, 2016

      Conf.: Proceedings of the 24th Annual ACM-SIAM Symposium on Discrete Algorithms, SODA 2013

[28]   Marek Cygan, Marcin Pilipczuk, Michał Pilipczuk,
       On Group Feedback Vertex Set parameterized by the size of the cutset,
       Algorithmica 74(2), pp. 630–642, Springer, 2016

       Conf.: 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
       Note: Article won the Best Student Paper Award at WG 2012

[29]   Ivan Bliznets, Fedor V. Fomin, Marcin Pilipczuk, Michał Pilipczuk,
       A subexponential parameterized algorithm for Proper Interval Completion,
       SIAM Journal on Discrete Mathematics 29(4), pp. 1961–1987, SIAM, 2015

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

[30]   Stefan Kratsch, Marcin Pilipczuk, Michał Pilipczuk, Magnus Wahlström,
       Fixed-parameter tractability of Multicut in directed acyclic graphs,
       SIAM Journal on Discrete Mathematics 29(1), pp. 122-144, SIAM, 2015

       Conf.: Proceedings of the 39th International Colloquium on Automata, Languages, and Programming, ICALP 2012
               Volume 7391 of Lecture Notes in Computer Science (LNCS), Springer, 2012

[31]   Ivan Bliznets, Fedor V. Fomin, Michał Pilipczuk, Yngve Villanger,
       Largest chordal and interval subgraphs faster than 2^n,
       Algorithmica 76(2), pp. 569–594, Springer, 2016

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

[32]   Pål Grønås 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

       Conf.: Proceedings of the 31st International Symposium on Theoretical Aspects of Computer Science, STACS 2014
               Volume 25 of LIPIcs, Schloß Dagstuhl — Leibniz-Zentrum für Informatik, 2014

[33]   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

       Conf.: Proceedings of the 39th International Colloquium on Automata, Languages, and Programming, ICALP 2012
               Volume 7392 of Lecture Notes in Computer Science (LNCS), Springer, 2012

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

       Conf.: Proceedings of the 8th International Symposium on Parameterized and Exact Computation, IPEC 2013
               Volume 8246 of Lecture Notes in Computer Science (LNCS), Springer, 2013

[35]   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

       Conf.: 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

[36] Petr A. Golovach, Pinar Heggernes, Pim van 't Hof, Fredrik Manne, Daniël Paulusma, Michał Pilipczuk,
Modifying a graph using vertex elimination,
Algorithmica 72(1), pp. 99–125, 2015

   Conf.: 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

[37] 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

   Conf.: 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

[38] 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

   Conf.: Proceedings of the 7th International Symposium on Parameterized and Exact Computation, IPEC 2012
   Volume 7535 of Lecture Notes in Computer Science (LNCS), Springer, 2012

[39] 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

   Conf.: Proceedings of the 39th International Colloquium on Automata, Languages, and Programming, ICALP 2012
   Volume 7391 of Lecture Notes in Computer Science (LNCS), Springer, 2012

[40] 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

   Conf.: Proceedings of the 10th Latin American Symposium on Theoretical Informatics, LATIN 2012
   Volume 7256 of Lecture Notes in Computer Science (LNCS), Springer, 2012

[41] Marek Cygan, Daniel Lokshtanov, Marcin Pilipczuk, Michał Pilipczuk, Saket Saurabh,
On cutwidth parameterized by vertex cover,
Algorithmica 68(4), pp. 940–953, Springer, 2014

   Conf.: Proceedings of the 6th International Symposium on Parameterized and Exact Computation, IPEC 2011
   Volume 7112 of Lecture Notes in Computer Science (LNCS), Springer, 2011

[42] 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

   Conf.: Proceedings of the 19th Annual European Symposium on Algorithms, ESA 2011
   Volume 6942 of Lecture Notes in Computer Science (LNCS), Springer, 2011

[43] Marek Cygan, Dániel Marx, Marcin Pilipczuk, Michał Pilipczuk, Ildikó Schlotter,
Parameterized complexity of Eulerian deletion problems,
Algorithmica 68(1), pp. 41–61, Springer, 2014

   Conf.: 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

[44]   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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