

## René van Bevern

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## Curriculum vitae

**January 8, 2021**

- Birth place** Saalfeld/Saale, German Democratic Republic.
- Citizenship** Russian Federation, Germany.
- Degree** Doctor of the natural sciences (Dr. rer. nat.), 2014, TU Berlin, Germany.
- Languages** Russian, German, English.

## Work experience

- since 2016** laboratory head, Algorithmics Laboratory, Department of Mechanics and Mathematics, Novosibirsk State University, Novosibirsk, Russian Federation.
- since 2015** senior lecturer, Chair of Theoretical Cybernetics, Department of Mechanics and Mathematics, Novosibirsk State University, Novosibirsk, Russian Federation.
- 2011–2015** researcher, research group of Algorithmics and Complexity Theory, TU Berlin, Germany.
- 2010** researcher, research group of Theoretical Computer Science and Computational Complexity Theory, Friedrich-Schiller-Universität Jena, Germany.

## Research

### Research projects

- 2018–2021** leader of project RFBR 18-501-12031 (joint project with German Research Foundation, DFG): “Trade-offs in parameterized approaches to data reduction”, Novosibirsk State University, Novosibirsk, Russian Federation.
- 2019–2020** stipend of the President of the Russian Federation: “Parameterized algorithms for hard discrete optimization problems in optimizing the effectivity of wireless communication networks”, Novosibirsk State University, Novosibirsk, Russian Federation.
- 2016–2018** leader of project RFBR 16-31-60007: “Parameterized algorithms for NP-hard routing and scheduling problems”, Novosibirsk State University, Novosibirsk, Russian Federation.

- 2016–2018** employee in project RSCF 16-11-10041: “Discrete optimization problems in computer technologies for analyzing high-dimensional data”, Sobolev Institute of Mathematics, Novosibirsk, Russian Federation.
- 2011–2015** employee in project DFG NI 369/12: “Data-driven parameterized algorithms for graph modification problems”, TU Berlin, Berlin, Germany.
- 2010–2011** employee in project DFG NI 369/9: “Parameterized algorithms for generating quasi-regular structures in graphs”, TU Berlin, Berlin, Germany.

### **Organization of events**

- since 2019** Series of courses “Computer Science Club” at Novosibirsk State University.
- 2019** Chair of the 14th International Computer Science Symposium in Russia (CSR 2019), July 1–5th, 2019, Novosibirsk, Russian Federation.
- 2018** Member of organizing committee at the International Conference and PhD-Master Summer School on Graphs and Groups, Representations and Relations (G2R2), August 6–19th, 2018, Novosibirsk, Russian Federation.
- 2016** Member of organizing committee at the International Conference and PhD-Master Summer School on Graphs and Groups, Spectra and Symmetries (G2S2), August 15–28th, 2016, Novosibirsk, Russian Federation.
- 2007** Member of organizing committee at the 33rd International Workshop on Graph-Theoretic Concepts in Computer Science (WG 2007), June 21–23rd, Dornburg, Germany.

### **Awards and invited talks**

- 2019** Invited talk at the workshop “Scheduling meets Fixed-Parameter Tractability”, Leiden, The Netherlands.
- 2017** Best paper award at the 13th International Symposium on Algorithms and Experiments for Wireless Networks (ALGOSENSORS 2017), Vienna, Austria.
- 2016** Invited talk at the 12th International Asian School-Seminar “Problems in Complex System Optimization”, Novosibirsk, Russian Federation.
- 2016** Invited talk at the 6th International Conference on Network Analysis (NET 2016), Nizhni Novgorod, Russian Federation.
- 2015** Best paper award at the 15th International Conference on Algorithmic Approaches to Transportation Modeling, Optimization, and Systems (ATMOS 2015), Patras, Greece.

**Reviewing for journals** (quartiles according to SJR)

<b>Q1</b>	Algorithmica
<b>Q1</b>	Annals of Operations Research
<b>Q1</b>	Computational Optimization and Applications
<b>Q1</b>	Journal of Computer and System Sciences
<b>Q1</b>	Journal of Scheduling
<b>Q1</b>	Operations Research
<b>Q1</b>	SIAM Journal on Discrete Mathematics
<b>Q1</b>	Transportation Research Part E: Logistics and Transportation Review
<b>Q2</b>	ACM Transactions on Algorithms
<b>Q2</b>	Computing
<b>Q2</b>	Discrete Applied Mathematics
<b>Q2</b>	Discrete Optimization
<b>Q2</b>	Information Processing Letters
<b>Q2</b>	Journal of Combinatorial Optimization
<b>Q2</b>	Theory of Computing Systems

**Program committee member at conferences:**

<b>AAAI</b>	The AAAI Conference on Artificial Intelligence, online (2021), New York (2020).
<b>CSR</b>	The International Computer Science Symposium in Russia, Moscow (2018), Novosibirsk (2019).
<b>IJCAI</b>	The International Joint Conference on Artificial Intelligence, Yokohama (2020), Macao (2019), Stockholm (2018), New York (2016).
<b>MOTOR</b>	The International Conference on Mathematical Optimization Theory and Operations Research, Irkutsk (2021), Novosibirsk (2020), Ekaterinburg (2019).
<b>OPCS</b>	The International Asian School-Seminar on Optimizing Complex Systems, Novosibirsk (2016).
<b>OPTA</b>	The International Conference on Optimization Problems and Their Applications, Omsk (2018).
<b>OPTIMA</b>	The International Conference Optimization and Applications, Petrovac, Montenegro (2019).
<b>WG</b>	The International Workshop on Graph-Theoretic Concepts in Computer Science, Eindhoven (2017).

## Teaching experience

### Design of educational programs

- since 2020** Curator of the Theoretical Computer Science program at Computer Science Center, Novosibirsk, Russian Federation.
- 2017** Participant in the project on designing the master program “Logic in Computer Science” under support of the Vladimir Potanin Foundation.

### Courses (design and teaching)

- since 2019** Complexity theory.
- since 2017** Randomized algorithms.
- since 2016** Parameterized algorithms.

### Student supervision

- since 2020** Daniel Skachkov (Moscow Institute of Physics and Technology), Bachelor thesis.
- since 2017** Pavel Smirnov (Novosibirsk State University), Bachelor, Master, and PhD theses.
- 2013** Vincent Froese (TU Berlin), Master thesis.
- 2011** Manuel Sorge (Friedrich-Schiller-Universität Jena), Diploma thesis.

## Volunteer work

- 2004–2010** Debian GNU/Linux Developer.
- 1999–2004** Author at Pro-Linux.de, the largest German news portal on Linux at that time.

## Education

- 2014** Dr. rer. nat. degree, TU Berlin, Berlin, Germany.
- 2010** Diploma in computer science, Friedrich-Schiller-Universität Jena, Jena, Germany.

## Publications

- [1] M. Bentert, R. van Bevern, A. Nichterlein, R. Niedermeier, P. V. Smirnov (**2021**). Parameterized algorithms for power-efficiently connecting wireless sensor networks: Theory and experiments. *INFORMS Journal on Computing*. Accepted for publication.
- [2] R. van Bevern, O. Tsidulko, P. Zschoche (**2021**). Fixed-parameter algorithms for maximum-profit facility location under matroid constraints. *Discrete Applied Mathematics*. Accepted for publication.

- [3] R. van Bevern, T. Fluschnik, O. Tsidulko (2020). On approximate data reduction for the Rural Postman Problem: Theory and experiments. *Networks*, 76(4):485–508. doi:[10.1002/net.21985](https://doi.org/10.1002/net.21985).
- [4] R. van Bevern, T. Fluschnik, O. Tsidulko (2020). Parameterized algorithms and data reduction for the short secluded  $s$ - $t$ -path problem. *Networks*, 75(1):34–63. doi:[10.1002/net.21904](https://doi.org/10.1002/net.21904).
- [5] R. van Bevern, C. Komusiewicz, H. Molter, R. Niedermeier, M. Sorge, T. Walsh (2020). H-index manipulation by undoing merges. *Quantitative Science Studies*, 1(4):1529–1552. doi:[10.1162/qss\\_a\\_00093](https://doi.org/10.1162/qss_a_00093).
- [6] R. van Bevern, V. A. Slugina (2020). A historical note on the  $3/2$ -approximation algorithm for the metric traveling salesman problem. *Historia Mathematica*, 53:118–127. doi:[10.1016/j.hm.2020.04.003](https://doi.org/10.1016/j.hm.2020.04.003).
- [7] R. van Bevern, P. V. Smirnov (2020). Optimal-size problem kernels for  $d$ -hitting set in linear time and space. *Information Processing Letters*, page 105998. doi:[10.1016/j.ipl.2020.105998](https://doi.org/10.1016/j.ipl.2020.105998).
- [8] M. Bentert, R. van Bevern, R. Niedermeier (2019). Inductive  $k$ -independent graphs and  $c$ -colorable subgraphs in scheduling: A review. *Journal of Scheduling*, 22(1):3–20. doi:[10.1007/s10951-018-0595-8](https://doi.org/10.1007/s10951-018-0595-8).
- [9] R. van Bevern, T. Fluschnik, O. Tsidulko (2019). On  $(1 + \epsilon)$ -approximate data reduction for the Rural Postman Problem. In M. Khachay, Y. Kochetov, P. Pardalos, editors, *MO-TOR 2019*, volume 11548 of *Lecture Notes in Computer Science*, pages 279–294. Springer. doi:[10.1007/978-3-030-22629-9\\_20](https://doi.org/10.1007/978-3-030-22629-9_20).
- [10] R. van Bevern, G. Kucherov, editors (2019). *CSR 2019*, volume 11532 of *Lecture Notes in Computer Science*. Springer. doi:[10.1007/978-3-030-19955-5](https://doi.org/10.1007/978-3-030-19955-5).
- [11] R. van Bevern, O. Tsidulko, P. Zschoche (2019). Fixed-parameter algorithms for maximum-profit facility location under matroid constraints. In P. Heggernes, editor, *CIAC 2019*, volume 11485 of *Lecture Notes in Computer Science*, pages 62–74. Springer. doi:[10.1007/978-3-030-17402-6\\_6](https://doi.org/10.1007/978-3-030-17402-6_6).
- [12] R. A. van Bevern, A. V. Pyatkin, S. V. Sevastyanov (2019). An algorithm with parameterized complexity of constructing the optimal schedule for the routing open shop problem with unit execution times. *Siberian Electronic Mathematical Reports*, 16:42–84. doi:[10.33048/semi.2019.16.003](https://doi.org/10.33048/semi.2019.16.003).
- [13] R. van Bevern, T. Fluschnik, G. B. Mertzios, H. Molter, M. Sorge, O. Suchý (2018). The parameterized complexity of finding secluded solutions to some classical optimization problems on graphs. *Discrete Optimization*, 30:20–50. doi:[10.1016/j.disopt.2018.05.002](https://doi.org/10.1016/j.disopt.2018.05.002).
- [14] R. van Bevern, T. Fluschnik, O. Tsidulko (2018). Parameterized algorithms and data reduction for safe convoy routing. In R. Borndörfer, S. Storandt, editors, *ATMOS 2018*, volume 65 of *OpenAccess Series in Informatics (OASIcs)*, pages 10:1–10:19. Schloss Dagstuhl–Leibniz-Zentrum fuer Informatik. doi:[10.4230/OASIcs.ATMOS.2018.10](https://doi.org/10.4230/OASIcs.ATMOS.2018.10).
- [15] R. van Bevern, V. Froese, C. Komusiewicz (2018). Parameterizing edge modification problems above lower bounds. *Theory of Computing Systems*, 62(3):739–770. doi:[10.1007/s00224-016-9746-5](https://doi.org/10.1007/s00224-016-9746-5).

- [16] M. Mnich, R. van Bevern (2018). Parameterized complexity of machine scheduling: 15 open problems. *Computers & Operations Research*, 100:254–261. doi:[10.1016/j.cor.2018.07.020](https://doi.org/10.1016/j.cor.2018.07.020).
- [17] M. Bentert, R. van Bevern, A. Nichterlein, R. Niedermeier (2017). Parameterized algorithms for power-efficient connected symmetric wireless sensor networks. In A. F. Anta, T. Jurdzinski, M. A. Mosteiro, Y. Zhang, editors, *ALGOSENSORS 2017*, volume 10718 of *Lecture Notes in Computer Science*, pages 26–40. Springer. doi:[10.1007/978-3-319-72751-6\\_3](https://doi.org/10.1007/978-3-319-72751-6_3).
- [18] R. van Bevern, R. Bredebeck, L. Bulteau, J. Chen, V. Froese, R. Niedermeier, G. J. Woeginger (2017). Partitioning perfect graphs into stars. *Journal of Graph Theory*, 85(2):297–335. doi:[10.1002/jgt.22062](https://doi.org/10.1002/jgt.22062).
- [19] R. van Bevern, R. Bredebeck, M. Chopin, S. Hartung, F. Hüffner, A. Nichterlein, O. Suchý (2017). Fixed-parameter algorithms for DAG partitioning. *Discrete Applied Mathematics*, 220:134–160. doi:[10.1016/j.dam.2016.12.002](https://doi.org/10.1016/j.dam.2016.12.002).
- [20] R. van Bevern, T. Fluschnik, G. B. Mertzios, H. Molter, M. Sorge, O. Suchý (2017). Finding secluded places of special interest in graphs. In J. Guo, D. Hermelin, editors, *IPEC 2016*, volume 63 of *Leibniz International Proceedings in Informatics (LIPIcs)*, pages 5:1–5:16. Schloss Dagstuhl–Leibniz-Zentrum fuer Informatik. doi:[10.4230/LIPIcs.IPEC.2016.5](https://doi.org/10.4230/LIPIcs.IPEC.2016.5).
- [21] R. van Bevern, C. Komusiewicz, M. Sorge (2017). A parameterized approximation algorithm for the mixed and windy capacitated arc routing problem: theory and experiments. *Networks*, 70(3):262–278. doi:[10.1002/net.21742](https://doi.org/10.1002/net.21742).
- [22] R. van Bevern, R. Niedermeier, O. Suchý (2017). A parameterized complexity view on non-preemptively scheduling interval-constrained jobs: few machines, small looseness, and small slack. *Journal of Scheduling*, 20(3):255–265. doi:[10.1007/s10951-016-0478-9](https://doi.org/10.1007/s10951-016-0478-9).
- [23] R. van Bevern, R. Bredebeck, L. Bulteau, C. Komusiewicz, N. Talmon, G. J. Woeginger (2016). Precedence-constrained scheduling problems parameterized by partial order width. In Y. Kochetov, M. Khachay, V. Beresnev, E. Nurminski, P. Pardalos, editors, *DOOR 2016*, volume 9869 of *Lecture Notes in Computer Science*, pages 105–120. Springer. doi:[10.1007/978-3-319-44914-2\\_9](https://doi.org/10.1007/978-3-319-44914-2_9).
- [24] R. van Bevern, V. Froese, C. Komusiewicz (2016). Parameterizing edge modification problems above lower bounds. In A. S. Kulikov, G. J. Woeginger, editors, *CSR 2016*, volume 9691 of *Lecture Notes in Computer Science*, pages 57–72. Springer. doi:[10.1007/978-3-319-34171-2\\_5](https://doi.org/10.1007/978-3-319-34171-2_5).
- [25] R. van Bevern, I. Kanj, C. Komusiewicz, R. Niedermeier, M. Sorge (2016). Twins in subdivision drawings of hypergraphs. In Y. Hu, M. Nöllenburg, editors, *GD 2016*, volume 9801 of *Lecture Notes in Computer Science*, pages 67–80. Springer. doi:[10.1007/978-3-319-50106-2\\_6](https://doi.org/10.1007/978-3-319-50106-2_6).
- [26] R. van Bevern, C. Komusiewicz, H. Molter, R. Niedermeier, M. Sorge, T. Walsh (2016). H-index manipulation by undoing merges. In G. A. Kaminka, M. Fox, P. Bouquet, E. Hüllermeier, V. Dignum, F. Dignum, F. van Harmelen, editors, *ECAI 2016*, volume 285 of *Frontiers in Artificial Intelligence and Applications*, pages 895–903. IOS Press. doi:[10.3233/978-1-61499-672-9-895](https://doi.org/10.3233/978-1-61499-672-9-895).

- [27] R. van Bevern, C. Komusiewicz, R. Niedermeier, M. Sorge, T. Walsh (2016). H-index manipulation by merging articles: Models, theory, and experiments. *Artificial Intelligence*, 240:19–35. doi:[10.1016/j.artint.2016.08.001](https://doi.org/10.1016/j.artint.2016.08.001).
- [28] R. van Bevern, A. V. Pyatkin (2016). Completing partial schedules for open shop with unit processing times and routing. In A. S. Kulikov, G. J. Woeginger, editors, *CSR 2016*, volume 9691 of *Lecture Notes in Computer Science*, pages 73–87. Springer. doi:[10.1007/978-3-319-34171-2\\_6](https://doi.org/10.1007/978-3-319-34171-2_6).
- [29] V. Froese, R. van Bevern, R. Niedermeier, M. Sorge (2016). Exploiting hidden structure in selecting dimensions that distinguish vectors. *Journal of Computer and System Sciences*, 82(3):521–535. doi:[10.1016/j.jcss.2015.11.011](https://doi.org/10.1016/j.jcss.2015.11.011).
- [30] R. van Bevern, R. Bredereck, J. Chen, V. Froese, R. Niedermeier, G. J. Woeginger (2015). Network-based vertex dissolution. *SIAM Journal on Discrete Mathematics*, 29(2):888–914. doi:[10.1137/140978880](https://doi.org/10.1137/140978880).
- [31] R. van Bevern, J. Chen, F. Hüffner, S. Kratsch, N. Talmon, G. J. Woeginger (2015). Approximability and parameterized complexity of multicover by  $c$ -intervals. *Information Processing Letters*, 115(10):744–749. doi:[10.1016/j.ipl.2015.03.004](https://doi.org/10.1016/j.ipl.2015.03.004).
- [32] R. van Bevern, R. G. Downey, M. R. Fellows, S. Gaspers, F. A. Rosamond (2015). Myhill-nerode methods for hypergraphs. *Algorithmica*, 73(4):696–729. doi:[10.1007/s00453-015-9977-x](https://doi.org/10.1007/s00453-015-9977-x).
- [33] R. van Bevern, A. E. Feldmann, M. Sorge, O. Suchý (2015). On the parameterized complexity of computing balanced partitions in graphs. *Theory of Computing Systems*, 57(1):1–35. doi:[10.1007/s00224-014-9557-5](https://doi.org/10.1007/s00224-014-9557-5).
- [34] R. van Bevern, C. Komusiewicz, R. Niedermeier, M. Sorge, T. Walsh (2015). H-index manipulation by merging articles: Models, theory, and experiments. In Q. Yang, M. J. Wooldridge, editors, *IJCAI 2015*, pages 808–814. AAAI Press. URL <http://ijcai.org/Abstract/15/119>.
- [35] R. van Bevern, C. Komusiewicz, M. Sorge (2015). Approximation algorithms for mixed, windy, and capacitated arc routing problems. In G. F. Italiano, M. Schmidt, editors, *ATMOS 2015*, volume 48 of *OpenAccess Series in Informatics (OASISs)*, pages 130–143. Schloss Dagstuhl–Leibniz-Zentrum fuer Informatik. doi:[10.4230/OASISs.ATMOS.2015.130](https://doi.org/10.4230/OASISs.ATMOS.2015.130).
- [36] R. van Bevern, M. Mnich, R. Niedermeier, M. Weller (2015). Interval scheduling and colorful independent sets. *Journal of Scheduling*, 18(5):449–469. doi:[10.1007/s10951-014-0398-5](https://doi.org/10.1007/s10951-014-0398-5).
- [37] R. van Bevern, R. Niedermeier, M. Sorge, M. Weller (2015). Complexity of arc routing problems. In Á. Corberán, G. Laporte, editors, *Arc Routing*, volume 20 of *MOS-SIAM Series on Optimization*, chapter 2, pages 19–52. SIAM. doi:[10.1137/1.9781611973679.ch2](https://doi.org/10.1137/1.9781611973679.ch2).
- [38] R. van Bevern (2014). Towards optimal and expressive kernelization for  $d$ -hitting set. *Algorithmica*, 70(1):129–147. doi:[10.1007/s00453-013-9774-3](https://doi.org/10.1007/s00453-013-9774-3).
- [39] R. van Bevern, R. Bredereck, L. Bulteau, J. Chen, V. Froese, R. Niedermeier, G. J. Woeginger (2014). Star partitions of perfect graphs. In J. Esparza, P. Fraigniaud, T. Husfeldt, E. Koutsoupias, editors, *ICALP 2014*, volume 8572 of *Lecture Notes in Computer Science*, pages 174–185. Springer. doi:[10.1007/978-3-662-43948-7\\_15](https://doi.org/10.1007/978-3-662-43948-7_15).

- [40] R. van Bevern, R. Bredereck, J. Chen, V. Froese, R. Niedermeier, G. J. Woeginger (2014). Network-based dissolution. In E. Csehaj-Varjú, M. Dietzfelbinger, Z. Ésik, editors, *MFCS 2014*, volume 8635 of *Lecture Notes in Computer Science*, pages 69–80. Springer. doi:[10.1007/978-3-662-44465-8\\_7](https://doi.org/10.1007/978-3-662-44465-8_7).
- [41] R. van Bevern, S. Hartung, A. Nichterlein, M. Sorge (2014). Constant-factor approximations for capacitated arc routing without triangle inequality. *Operations Research Letters*, 42(4):290–292. doi:[10.1016/j.orl.2014.05.002](https://doi.org/10.1016/j.orl.2014.05.002).
- [42] R. van Bevern, R. Bredereck, M. Chopin, S. Hartung, F. Hüffner, A. Nichterlein, O. Suchý (2013). Parameterized complexity of DAG partitioning. In P. G. Spirakis, M. Serna, editors, *CIAC 2013*, volume 7878 of *Lecture Notes in Computer Science*, pages 49–60. Springer. doi:[10.1007/978-3-642-38233-8\\_5](https://doi.org/10.1007/978-3-642-38233-8_5).
- [43] R. van Bevern, A. E. Feldmann, M. Sorge, O. Suchý (2013). On the parameterized complexity of computing graph bisections. In A. Brandstädt, K. Jansen, R. Reischuk, editors, *WG 2013*, volume 8165 of *Lecture Notes in Computer Science*, pages 76–87. Springer. doi:[10.1007/978-3-642-45043-3\\_8](https://doi.org/10.1007/978-3-642-45043-3_8).
- [44] R. van Bevern, M. R. Fellows, S. Gaspers, F. A. Rosamond (2013). Myhill-nerode methods for hypergraphs. In L. Cai, S.-W. Cheng, T.-W. Lam, editors, *ISAAC 2013*, volume 8283 of *Lecture Notes in Computer Science*, pages 372–382. Springer. doi:[10.1007/978-3-642-45030-3\\_35](https://doi.org/10.1007/978-3-642-45030-3_35).
- [45] V. Froese, R. van Bevern, R. Niedermeier, M. Sorge (2013). A parameterized complexity analysis of combinatorial feature selection problems. In K. Chatterjee, J. Sgall, editors, *MFCS 2013*, volume 8087 of *Lecture Notes in Computer Science*, pages 445–456. Springer. doi:[10.1007/978-3-642-40313-2\\_40](https://doi.org/10.1007/978-3-642-40313-2_40).
- [46] R. van Bevern (2012). Towards optimal and expressive kernelization for  $d$ -hitting set. In J. Gudmundsson, J. Mestre, T. Viglas, editors, *COCOON 2012*, volume 7434 of *Lecture Notes in Computer Science*, pages 121–132. Springer. doi:[10.1007/978-3-642-32241-9\\_11](https://doi.org/10.1007/978-3-642-32241-9_11).
- [47] R. van Bevern, S. Hartung, F. Kammer, R. Niedermeier, M. Weller (2012). Linear-time computation of a linear problem kernel for dominating set on planar graphs. In D. Marx, P. Rossmanith, editors, *IPEC 2011*, volume 7112 of *Lecture Notes in Computer Science*, pages 194–206. Springer. doi:[10.1007/978-3-642-28050-4\\_16](https://doi.org/10.1007/978-3-642-28050-4_16).
- [48] R. van Bevern, M. Mnich, R. Niedermeier, M. Weller (2012). Interval scheduling and colorful independent sets. In K.-M. Chao, T. sheng Hsu, D.-T. Lee, editors, *ISAAC 2012*, volume 7676 of *Lecture Notes in Computer Science*, pages 247–256. Springer. doi:[10.1007/978-3-642-35261-4\\_28](https://doi.org/10.1007/978-3-642-35261-4_28).
- [49] R. van Bevern, H. Moser, R. Niedermeier (2012). Approximation and tidying—a problem kernel for  $s$ -plex cluster vertex deletion. *Algorithmica*, 62(3-4):930–950. doi:[10.1007/s00453-011-9492-7](https://doi.org/10.1007/s00453-011-9492-7).
- [50] M. Sorge, R. van Bevern, R. Niedermeier, M. Weller (2012). A new view on rural postman based on eulerian extension and matching. *Journal of Discrete Algorithms*, 16:12–33. doi:[10.1016/j.jda.2012.04.007](https://doi.org/10.1016/j.jda.2012.04.007).



- [51] N. Betzler, R. van Bevern, M. R. Fellows, C. Komusiewicz, R. Niedermeier (2011). Parameterized algorithmics for finding connected motifs in biological networks. *IEEE/ACM Transactions on Computational Biology and Bioinformatics*, 8(5):1296–1308. doi:[10.1109/TCBB.2011.19](https://doi.org/10.1109/TCBB.2011.19).
- [52] M. Sorge, R. van Bevern, R. Niedermeier, M. Weller (2011). From few components to an eulerian graph by adding arcs. In P. Kolman, J. Kratochvíl, editors, *WG 2011*, volume 6986 of *Lecture Notes in Computer Science*, pages 307–318. Springer. doi:[10.1007/978-3-642-25870-1\\_28](https://doi.org/10.1007/978-3-642-25870-1_28).
- [53] R. van Bevern, C. Komusiewicz, H. Moser, R. Niedermeier (2010). Measuring indifference: Unit interval vertex deletion. In D. M. Thilikos, editor, *WG 2010*, volume 6410 of *Lecture Notes in Computer Science*, pages 232–243. Springer. doi:[10.1007/978-3-642-16926-7\\_22](https://doi.org/10.1007/978-3-642-16926-7_22).
- [54] R. van Bevern, H. Moser, R. Niedermeier (2010). Kernelization through tidying—a case study based on  $s$ -plex cluster vertex deletion. In A. López-Ortiz, editor, *LATIN 2010*, volume 6034 of *Lecture Notes in Computer Science*, pages 527–538. Springer. doi:[10.1007/978-3-642-12200-2\\_46](https://doi.org/10.1007/978-3-642-12200-2_46).