

Themenliste für das Bachelor Seminar MAT.352, SS 2016

Diskrete Mathematik und Algorithmentheorie (Gruppe Optimierung)

Die Themen 1-6 werden von Eranda Dragoti-Çela betreut, die Themen 8-16 von Bettina Klinz, für Thema 7 kann die Betreuerin frei gewählt werden.

Literatur

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- [2] Christoph Buchheim und Jannis Kurtz, Min-max-min Robust Combinatorial Optimization under Uncertainty Based on Multiple Solutions, *International Network Optimization Conference INOC 2015*, to appear. <http://www.mathematik.tu-dortmund.de/lsv/people/kurtz/>
- [3] Leah Epstein, Asaf Levin, und Gerhard J. Woeginger, The (Weighted) Metric Dimension of Graphs: Hard and Easy Cases, in *Graph Theoretic Concepts in Computer Science, 38th International Workshop (WG 2012)*, LNCS 7551, Springer, 2012, S. 114–125. https://link.springer.com/chapter/10.1007%2F978-3-642-34611-8_14#page-1
- [4] Isabella Hoffmann, Sascha Kurz, and Jörg Rambau, The Maximum Scatter TSP on a Regular Grid, <http://arxiv.org/abs/1512.02054>
- [5] László Kozma, Tobias Mömke, A PTAS for Euclidean Maximum Scatter TSP ¹ <http://arxiv.org/abs/1512.02963>
- [6] (VERGEBEN) Pierre-Louis Poirion, Sonia Toubaline, Claudia D’Ambrosio, und Leo Liberti, The Power Edge Set problem, *The 9th Annual International Conference on Combinatorial Optimization and Applications (COCOA 2015)*. http://www.optimization-online.org/DB_HTML/2015/09/5122.html
- [7] Jannik Matuschke, Thomas McCormick, Gianpaolo Oriolo, Britta Peis, and Martin Skutella, Protection of flows under targeted attacks, <http://arxiv.org/abs/1601.03603>
- [8] D. Altner, L. Vasko, D. Klamm, Reconstructing complete paths from segment and origin-destination data, Preprint, January 2016, http://www.optimization-online.org/DB_HTML/2016/01/5288.html.
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- [10] C. Büsing, S. Kirchner, A. Koster, A. Thome, The budgeted minimum cost flow problem with unit upgrading cost, Preprint, October 2015, http://www.optimization-online.org/DB_HTML/2015/10/5173.html.
- [11] P. Creszenci, G. D’Angelo, L. Severini, Y. Velaj, Greedily improving our own centrality in a network, in: *Springer Lecture Notes in Computer Science*, Volume 9125, 2015, Proceedings of the 14-th International Symposium, SEA 2015, Paris, pp. 43-55, http://link.springer.com/chapter/10.1007/978-3-319-20086-6_4.

¹Dieses Paper und das Paper von Hoffman et al. sollten beide zum them „Maximum Scatter TSP“ ausgearbeitet werden.

- [12] M. Holzhauser, S.O. Krumke, C. Thielen, Budget-constrained minimum cost flows, *Journal of Combinatorial Optimization*, in press, published online March 2015, <http://link.springer.com/article/10.1007%2Fs10878-015-9865-y>.
- [13] J.B. Orlin, A. Sedeño-Noda, An $O(mn)$ time algorithm for finding the min length directed cycle in a graph, MIT Report, February 2016, http://www.optimization-online.org/DB_HTML/2016/02/5321.html.
- [14] D. Reyes, M. Savelsberg, A. Toriello, Vehicle routing with roaming delivery locations, Preprint, H. Milton Stewart School of Industrial and Systems Engineering, December 2015, http://www.optimization-online.org/DB_HTML/2016/01/5281.html.
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- [16] C. Thielen, M. Tiedemann, S. Westphal, The online knapsack problem with incremental capacity, *Mathematical Methods of Operations Research*, in press, published online December 2015, <http://link.springer.com/article/10.1007%2Fs00186-015-0526-9#page-1>.