

1 Linear Ordering Problem

- [BKG99] G. Bolotashvili, M. Kovalev, and E. Girlich. New facets of the linear ordering polytope. *SIAM Journal of Discrete Mathematics*, 12(3), 1999.
- [DLM11] A. Duarte, M. Laguna, and R. Martí. Tabu search for the linear ordering problem with cumulative costs. *Computational Optimization and Applications*, 48(3), 2011.
- [GJR84] M. Grötschel, M. Jünger, and G. Reinelt. A cutting plane algorithm for the linear ordering problem. *Operations Research*, 32(6), 1984.
- [GJR85] M. Grötschel, M. Jünger, and G. Reinelt. Facets of the linear ordering polytope. *Mathematical Programming*, 33, 1985.
- [GPBCM06] C. G. Garcia, D. Pérez-Brito, V. Campos, and R. Martí. Variable neighborhood search for the linear ordering problem. *Computers and Operations Research*, 33(12), 2006.
- [MR01] R. Martí and G. Reinelt. *The linear ordering problem: exact and heuristic methods in combinatorial optimization*. Springer, 2001.
- [MRD12] R. Martí, G. Reinelt, and A. Duarte. A benchmark library and a comparison of heuristic methods for the linear ordering problem. *Computational optimization and applications*, 51(3), 2012.
- [Rei93] G. Reinelt. A note on small linear-ordering polytopes. *Discrete and Computational Geometry*, 10(1), 1993.
- [TE09] R. Tromble and J. Eisner. Learning linear ordering problems for better translation. In *Proceedings of the Conference on Empirical Methods in Natural Language Processing*, 2009.

2 Multicut and Multiway Cut Problem

- [BM86] F. Barahona and A. R. Mahjoub. On the cut polytope. *Mathematical Programming*, 36, 1986.
- [CR91] S. Chopra and M. R. Rao. On the multiway cut polyhedron. *Networks*, 22(1), 1991.
- [CR93] S. Chopra and M. R. Rao. The partition problem. *Mathematical Programming*, 59, 1993.
- [CR95] S. Chopra and M. R. Rao. Facets of the k -partition polytope. *Discrete Applied Mathematics*, 61(1), 1995.
- [DEFI06] E. D. Demaine, D. Emanuel, A. Fiat, and N. Immerlica. Correlation clustering in general weighted graphs. *Theoretical Computer Science*, 361(2–3), 2006.

- [DGL92] M. Deza, M. Grötschel, and M. Laurent. Clique-web facets for multicut polytopes. *Mathematics of Operations Research*, 17(4), 1992.
- [DL11] M. Deza and M. Laurent. *Geometry of Cuts and Metrics*. Springer, 2011. Reprint of the first edition from 1997.
- [GW89] M. Grötschel and Y. Wakabayashi. A cutting plane algorithm for a clustering problem. *Mathematical Programming*, 45, 1989.
- [GW90] M. Grötschel and Y. Wakabayashi. Facets of the clique partitioning polytope. *Mathematical Programming*, 47, 1990.
- [KSRS13] J. H. Kappes, M. Speth, G. Reinelt, and C. Schnörr. Higher-order segmentation via multicuts. Technical report, 2013. <http://arxiv.org/abs/1305.6387>.

3 k -Cut Problem

- [GH94] O. Goldschmidt and D. S. Hochbaum. A polynomial algorithm for the k -Cut Problem for fixed k . *Mathematics of Operations Research*, 19(1), 1994.

4 Maximum Flow Problem

4.1 In Directed Graphs

- [Mad13] Aleksander Madry. Navigating Central Path with Electrical Flows: From Flows to Matchings, and Back. In *FOCS*, pages 253–262. IEEE Computer Society, 2013.
- [Orl13] James B. Orlin. Max Flows in $O(nm)$ Time, or Better. In *Proceedings of the Forty-fifth Annual ACM Symposium on Theory of Computing*, STOC '13, pages 765–774, New York, NY, USA, 2013. ACM.

4.2 In Undirected Graphs

- [KLOS14] Jonathan A. Kelner, Yin Tat Lee, Lorenzo Orecchia, and Aaron Sidford. An Almost-Linear-Time Algorithm for Approximate Max Flow in Undirected Graphs, and its Multicommodity Generalizations. In Chandra Chekuri, editor, *SODA*, pages 217–226. SIAM, 2014.
- [She13] Jonah Sherman. Nearly Maximum Flows in Nearly Linear Time. In *FOCS*, pages 263–269. IEEE Computer Society, 2013.

4.3 In Planar Graphs

- [BKM⁺11] Glencora Borradaile, Philip N. Klein, Shay Mozes, Yahav Nussbaum, and Christian Wulff-Nilsen. Multiple-Source Multiple-Sink Maximum Flow in Directed Planar Graphs in Near-Linear Time. In Rafail Ostrovsky, editor, *FOCS*, pages 170–179. IEEE, 2011.

- [EK13] David Eisenstat and Philip N. Klein. Linear-time Algorithms for Max Flow and Multiple-source Shortest Paths in Unit-weight Planar Graphs. In *Proceedings of the Forty-fifth Annual ACM Symposium on Theory of Computing*, STOC '13, pages 735–744, New York, NY, USA, 2013. ACM.
- [INSWN11] Giuseppe F. Italiano, Yahav Nussbaum, Piotr Sankowski, and Christian Wulff-Nilsen. Improved algorithms for min cut and max flow in undirected planar graphs. In Lance Fortnow and Salil P. Vadhan, editors, *STOC*, pages 313–322. ACM, 2011.
- [LNSWN12] Jakub Lacki, Yahav Nussbaum, Piotr Sankowski, and Christian Wulff-Nilsen. Single Source - All Sinks Max Flows in Planar Digraphs. In *FOCS*, pages 599–608. IEEE Computer Society, 2012.

5 Multicommodity Flow Problem

- [KMP12] Jonathan A. Kelner, Gary L. Miller, and Richard Peng. Faster approximate multicommodity flow using quadratically coupled flows. In Howard J. Karloff and Toniann Pitassi, editors, *STOC*, pages 1–18. ACM, 2012.

6 Electrical Flows and SDD Systems

- [CKM⁺11] Paul Christiano, Jonathan A. Kelner, Aleksander Madry, Daniel A. Spielman, and Shang-Hua Teng. Electrical flows, laplacian systems, and faster approximation of maximum flow in undirected graphs. In Lance Fortnow and Salil P. Vadhan, editors, *STOC*, pages 273–282. ACM, 2011.
- [KMP11] Ioannis Koutis, Gary L. Miller, and Richard Peng. A Nearly- $m \log n$ Time Solver for SDD Linear Systems. In *Proceedings of the 2011 IEEE 52Nd Annual Symposium on Foundations of Computer Science*, FOCS '11, pages 590–598, Washington, DC, USA, 2011. IEEE Computer Society.
- [KOSZ13] Jonathan A. Kelner, Lorenzo Orecchia, Aaron Sidford, and Zeyuan Allen Zhu. A Simple, Combinatorial Algorithm for Solving SDD Systems in Nearly-linear Time. In *Proceedings of the Forty-fifth Annual ACM Symposium on Theory of Computing*, STOC '13, pages 911–920, New York, NY, USA, 2013. ACM.
- [LRS13] Yin Tat Lee, Satish Rao, and Nikhil Srivastava. A New Approach to Computing Maximum Flows Using Electrical Flows. In *Proceedings of the Forty-fifth Annual ACM Symposium on Theory of Computing*, STOC '13, pages 755–764, New York, NY, USA, 2013. ACM.
- [PS14] Richard Peng and Daniel A. Spielman. An Efficient Parallel Solver for SDD Linear Systems. *CoRR*, abs/1311.3286, 2013, accepted at STOC 2014.