

Graduate Seminar on Discrete Optimization

Integral Multiflows

Talks:

1. A. Gupta, I. Newman, Y. Rabinovich, and A. Sinclair [2004]: *Cuts, trees l_1 -embeddings of graphs*.
Combinatorica, 2004, 24 , 2, 233–269.
2. A. Chakrabarti, A. Jaffe, J.R. Lee, and J. Vincent [2008]: *Embeddings of topological graphs: Lossy invariants, linearization, and 2-sums*.
FOCS, 2008, 761–770.
3. J.R. Lee and P. Raghavendra [2010]: *Coarse differentiation and multi-flows in planar graphs*.
Discrete Computational Geometry, 2010, 43, 346–362.
4. C. Chekuri, A. Gupta, I. Newman, Y. Rabinovich, and A. Sinclair [2006]: *Embedding k -outerplanar graphs into l_1* .
SIAM Journal on Discrete Mathematics, 20, 1, 119–136.
5. C. Chekuri, F.B. Shepherd, and C. Weibel [2010]: *Flow-cut gaps for integer and fractional multiflows*.
SODA, 2010, 1198–1208.
6. N. Garg, V.V. Vazirani, and M. Yannakakis [1997]: *Primal-dual approximation algorithms for integral flow and multicut in trees*.
Algorithmica, 1997, 18, 3–20.
7. V. Guruswami, S. Khanna, R. Rajamaran, F.B. Shepherd, and M. Yannakakis [2003]: *Near-optimal hardness results and approximation algorithms for edge-disjoint paths and related problems*.
Journal of Computer and System Sciences, 2003, 67, 473–496.
8. C. Chekuri, S. Khanna, and F.B. Shepherd [2004]: *Edge-disjoint paths in planar graphs*.
FOCS, 2004, 71–80.

9. C. Chekuri, S. Khanna, and F.B. Shepherd [2006]: *Edge-disjoint paths in planar graphs with constant congestion*. STOC, 2006, 757–766.
10. J. Chuzhoi [2011]: *Routing in undirected graphs with constant congestion*.
11. L. Seguin-Charbonneau and F.B. Shepherd [2011]: *Maximum edge-disjoint paths in planar graphs with congestion 2*. FOCS, 2011, 200–209.
12. J. Chuzhoy, V. Guruswami, S. Khanna, and K. Talwar [2007]: *Hardness of routing with congestion in directed graphs*. STOC, 2007, 165–178.
13. M. Andrews, J. Chuzhoy, V. Guruswami, S. Khanna, K. Talwar, and L. Zhang [2010]: *Inapproximability of edge-disjoint paths and low congestion routing on undirected graphs*. *Combinatorica*, 2010, 30, 5, 485–520.