Hauptseminar Diskrete Optimierung (S2C1)

Wintersemester 2013/2014

Das Max-Flow-Problem

Vortragsthemen:

1) D. Sleator, R. Tarjan [1983]: *A data structure for dynamic trees*
2) A. Benczúr, D. Karger [1996]:
   Approximating s-t minimum cuts in $\tilde{O}(n^2)$ time
3) V. King, S. Rao, R. Tarjan [1994]:
   A faster deterministic maximum flow algorithm (I)
4) V. King, S. Rao, R. Tarjan [1994]:
   A faster deterministic maximum flow algorithm (II)
5) A. Goldberg, S. Rao [1998]: *Beyond the flow decomposition barrier*
6) J. Orlin [2013]: *Max flows in O(nm) time, or better*
7) P. Christiano, J. Kelner, Mądry, D. Spielman, S.-H. Teng [2010]:
   *Electrical flows, laplacian systems, and faster approximation
   of maximum flow in undirected graphs* (I)
8) P. Christiano, J. Kelner, Mądry, D. Spielman, S.-H. Teng [2010]:
   *Electrical flows, laplacian systems, and faster approximation
   of maximum flow in undirected graphs* (II)
9) Y. Lee, S. Rao, N. Srivastava [2013]: *A new approach to computing
   maximum flows using electrical flows*   und
   D. Karger, M. Levine [2002]: *Random sampling in residual graphs*
10) A. Mądry [2013]: *Navigating central path with electrical flows:
    from flows to matching, and back* (I)
11) A. Mądry [2013]: *Navigating central path with electrical flows:
    from flows to matching, and back* (II)