

## Publications

1. *Values for Markovian coalition processes* (with M. Grabisch), to appear: Economic Theory.
2. *A ranking model for the greedy algorithm and discrete convexity* (with W. Kern and B. Peis), Mathematical Programming 132 (2012), 393-407.
3. *On greedy and submodular matrices* (with W. Kern and B. Peis), TAPAS 2011, A. Marchetti-Spaccamela and M. Segal (eds.) LNCS 6595, 116-126, Springer-Verlag Berlin Heidelberg 2011.
4. *Coalition formation in societies* (with M. Heyne, Th. Kleefisch and J.Voss), Scientific Research Journal of South-West University 2 (2009), 13-18.
5. *Efficient tests for equivalence of hidden Markov processes and quantum random walks* (with A. Schoenhuth), IEEE Transactions on Information Theory 57 (2011), 1746-1753.
6. *A discrete Choquet integral for ordered systems* (with M. Grabisch), Fuzzy Sets and Systems 168 (2011), 3-17, doi:10.1016/j.fss.2010.10.003
7. *A system-theoretic model for cooperation, interaction and allocation* (with J. Voss), Discrete Applied Mathematics 159 (2011), 1736-1750.
8. *Choquet integration on set systems* (with M. Grabisch and M. Heyne), in: *Computational Intelligence for Knowledge-Based Systems* (E. Hüllermeier *et al.* eds.), Lecture Notes in Computer Science 6178, Springer-Verlag, 2010, 512-520.
9. *Monge extensions of cooperation and communication structures* (with M. Grabisch and M. Heyne), European J. Operational Research 206 (2010), 104-110.
10. *A general model for matroids and the greedy algorithm* (with S. Fujishige), Math. Programming A 119 (2009), 353-369.
11. *Modelling and simulation of nitrogen regulation in Corynebacterium glutamicum* (with J. Gebert, N. Radde, J. Strösser and A. Burkovski), Discrete Applied Mathematics 157 (2009), 2232-2243, doi:10.1016/j.dam.2008.06.055 .
12. *Two-phase greedy algorithms for some classes of combinatorial linear programs* (with B. Peis), Proceedings Symposium on Discrete Algorithms 2008, San Francisco CA, 161-166.
13. *A hierarchical model for cooperative games* (with B. Peis), in: *Algorithmic Game Theory*, Proceedings SAGT 2008 Paderborn, Springer LNCS 4997/2008, 230-241.
14. *Sensory gating revisited: Relation between brain oscillations and auditory evoked potentials in schizophrenia* (with A. Brockhaus-Dumke, R. Müller and J. Klosterkötter), Schizophrenia Research 99 (2008), 238-249.

15. *EEG-Oszillationen: Ein wichtiger Schlüssel zum Verständnis von Störungen in der frühen Informationsverarbeitung* (with R. Müller, A. Brockhaus-Dumke, S. Popovych, T. Küpper and J. Klosterkötter), to appear: Sonderband der Nordrhein-Westfälischen Akademie der Wissenschaften – Neuro-Visionen 4.
16. *Note on pseudolattices, lattices and submodular linear programs* (with B. Peis), *Discrete Optimization* 5 (2008), 489-500
17. *Modeling feedback loops in the H-NS-mediated regulation of the Escherichia coli bgl operon* (with J. Gebert, N. Radde, R. Schrader and K. Schnetz), *J. Theor. Biology* 250 (2008), 298-306.
18. *Identifying genes of gene regulatory networks using formal concept analysis* (with J. Gebert, S. Motameny, N. Radde, C.V. Forst and R. Schrader), *J. of Computational Biology* 15 (2008), 185-194.
19. *Asymptotic mean stationarity of sources with finite evolution dimension* (with A. Schoenhuth), *IEEE Transactions on Information Theory* 53 (2007), 2342-2348.
20. *Note on maximal split-stable subgraphs* (with B. Fuchs and B. Peis), *Discrete Applied Mathematics* 155 (2007), 2031-2038.
21. *Computing an element in the lexicographic kernel of a game* (with W. Kern and J. Kuipers), *Mathematical Methods of Operations Research* 63 (2006).
22. *CASPAR: A hierarchical Bayesian approach to predict survival times in cancer from gene expression data* (with L. Kaderali, Th. Zander, J. Wolf, J.L. Schultze, R. Schrader), *Bioinformatics* 22 (2006), 1495-1502.
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24. *Note on negative probabilities and observable processes* (with A. Schönhuth), *Dagstuhl Seminar Proceedings 05031* (<http://drops.dagstuhl.de/volltexte/2005/108>).
25. *Note on the game chromatic index of trees* (with P.L. Erdős, W. Hochstättler and W. Kern), *Theoretical Computer Science* 313 (2004), 371-376.
26. *Protein fold class prediction using neural networks reconsidered* (with J. Gebert, C. Igel, D. Schomburg, G.-W. Weber and T. Wiebringhaus), in: *Currents in Computational Molecular Biology*, 7th Annual Int. Conference on Research in Computational Molecular Biology (RECOMB 2003), 225-226.
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28. *A Lagrangian relaxation approach to the edge-weighted clique problem* (with M. Hunting and W. Kern) *European Journal of Operational Research* 131 (2001), 119-131.
29. *On the computation of the nucleolus of a cooperative game* (with W. Kern and J. Kuipers), *Int. J. Game Theory* 30 (2001), 79-98.

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34. *On approximately fair cost allocation in Euclidean TSP games*, (with S.P. Fekete, W. Hochstättler, and W. Kern), *OR Spektrum* 20 (1998), 29-37.
35. *The nucleon of cooperative games and an algorithm for matching games* (with S.P. Fekete, W. Hochstättler, and W. Kern), *Mathematical Programming* 83 (1998), 195-211.
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39. *On the complexity of testing membership in the core of min-cost spanning tree games* (with S.P. Fekete, W. Hochstättler and W. Kern), *International Journal of Game Theory* 26 (1997), 361-366.
40. *Packing a bin online to maximize the total number of items* (with W. Kern), in: *Operations Research Proceedings 1996*, U. Zimmermann *et al.* eds., Springer-Verlag, Berlin, 1997, 61-65
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50. *Some recent results in the analysis of greedy algorithms for assignment problems*, *OR Spektrum* 15 (1994), 181-188
51. *Approximating the core of euclidean TSP games* (with S. Fekete, W. Hochstättler, and W. Kern), in: *Operations Research '93*, A. Bachem *et al.* (eds.), Physica-Verlag, Heidelberg, 1994, 153-156
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## Editorial Work

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