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1. Leitung

Prof. Dr. rer. nat. habil. Volker Kaibel (geschäftsführender Leiter)

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2. Veröffentlichungen

Begutachtete Zeitschriftenaufsätze

Averkov, Gennadiy

Constructive Proofs of some Positivstellensätze for Compact Semialgebraic Subsets of \mathbb{R}^d

In: Journal of optimization theory and applications. - Dordrecht [u.a.]: Springer Science + Business Media, Bd. 158.2013, 2, S. 410-418;

[Imp.fact.: 1,423]

Averkov, Gennadiy

On maximal S-free sets and the helly number for the family of S-convex sets

In: SIAM journal on discrete mathematics. - Philadelphia, Pa: Soc, Bd. 27.2013, 3, S. 1610-1624;

[Imp.fact.: 0,662]

Averkov, Gennadiy; Conforti, Michelle; Del Pia, Alberto; Di Summa, Marco; Faenza, Yuri

On the convergence of the affine hull of the Chvátal-Gomory closures

In: SIAM journal on discrete mathematics. - Philadelphia, Pa: Soc, Bd. 27.2013, 3, S. 1492-1502;

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A proof of Lovászs theorem on maximal lattice-free sets

In: Beiträge zur Algebra und Geometrie. - Berlin: Springer, Bd. 54.2013, 1, S. 105-109;

Carballo, Lester; Vakhania, Nodari; Werner, Frank

A comparative computational study of the effect of the preliminary reduction for the classical and multiprocessor job-shop scheduling problems

In: Magdeburg: Univ., Fak. für Mathematik, 2013; 23 S. - (Preprint / Fakultät für Mathematik, Otto-von-Guericke-Universität Magdeburg; 2013,5);

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Reducing efficiently the search tree for multiprocessor job-shop scheduling problems

In: International journal of production research. - London [u.a.]: Taylor & Francis, Bd. 51.2013, 23/24, S. 7105-7119; [Imp.fact.: 1,460]

Engelhart, Michael; Funke, Joachim; Sager, Sebastian

A decomposition approach for a new test-scenario in complex problem solving

In: Journal of computational science. - Amsterdam [u.a.]: Elsevier, Bd. 4.2013, 4, S. 245-254;

Fiorini, Samuel; Kaibel, Volker; Pashkovich, Kanstantsin; Theis, Dirk Oliver

Combinatorial bounds on nonnegative rank and extended formulations

In: Discrete mathematics. - Amsterdam: Elsevier Science, Bd. 313.2013, 1, S. 67-83;

[Imp.fact.: 0,578]

Gafarov, Evgeny R.; Dolgui, Alexandre; Lazarev, Alexander A.; Werner, Frank

Solving an investment optimization problem by an improved graphical approach

In: Magdeburg: Univ., Fak. für Mathematik, 2013; 20 S. - (Preprint / Fakultät für Mathematik, Otto-von-Guericke-Universität Magdeburg; 2013,2);

Gafarov, Evgeny R.; Lazarev, Alexander A.; Werner, Frank

Single machine total tardiness maximization problems - complexity and algorithms

In: Annals of operations research. - Dordrecht [u.a.]: Springer Science + Business Media B.V, Bd. 207.2013, 1, S. 121-136; [Imp.fact.: 1,029]

Gholami, Omid; Sotskov, Yuri; Werner, Frank

Fast edge-orientation heuristics for job-shop scheduling problems with applications to train scheduling

In: International journal of operational research/Nepal. - Kathmandu: ORSN, Bd. 2.2013, 1, S. 19-32;

Gouveia, João; Grappe, Roland; Kaibel, Volker; Pashkovich, Kanstantsin; Robinson, Richard Z.; Thomas, Rekha R.

Which nonnegative matrices are slack matrices?

In: Linear algebra and its applications. - New York, NY: American Elsevier Publ, Bd. 439.2013, 10, S. 2921-2933;

Hante, F. M.; Sager, Sebastian

Relaxation methods for mixed-integer optimal control of partial differential equations

In: Computational optimization and applications. - New York, NY [u.a.]: Springer Science + Business Media B.V, Bd. 55.2013, 1, S. 197-225;

[Imp.fact.: 1,278]

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Block models for scheduling jobs on two parallel machines with a single server

In: Magdeburg: Univ., Fak. für Mathematik, 2013; 9 S. - (Preprint / Fakultät für Mathematik, Otto-von-Guericke-Universität Magdeburg; 2013,1);

Joseph-Duran, Bernat; Jung, Michael; Ocampo-Martinez, Carlos; Sager, Sebastian; Cembrano, Gabriela

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[Imp.fact.: 2,259]

Kirches, Christian; Potschka, Andreas; Bock, Hans Georg; Sager, Sebastian

A parametric active set method for quadratic programs with vanishing constraints

In: Pacific journal of optimization. - Yokohama: Yokohama Publishers, Bd. 9.2013, 2, S. 275-299;

Kravchenko, Svetlana A.; Werner, Frank

Erratum to: Minimizing total tardiness on parallel machines with preemptions

In: Journal of scheduling. - Dordrecht [u.a.]: Springer Science + Business Media, Bd. 16.2013, 4, S. 439-441;

Metelsky, Yury; Shchamialiova, Kseniya; Werner, Frank

A finite characterization of intersection graphs of hypergraphs with a rank of at Most 3 and a multiplicity of at Most 2 in the class of threshold graphs

In: Magdeburg: Univ., Fak. für Mathematik, 2013; 13 S. - (Preprint / Fakultät für Mathematik, Otto-von-Guericke-Universität Magdeburg; 2013,3);

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Sampling decisions in optimum experimental design in the light of pontryagin's maximum principle

In: SIAM journal on control and optimization. - Philadelphia, Pa: Soc, Bd. 51.2013, 4, S. 3181-3207;

[Imp.fact.: 1,379]

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Scientific computing for the cognitive sciences

In: Journal of computational science. - Amsterdam [u.a.]: Elsevier, Bd. 4.2013, 4, S. 242-244;

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Measures of problem uncertainty for scheduling with interval processing times

In: OR spectrum. - Berlin: Springer, Bd. 35.2013, 3, S. 659-689;

[Imp.fact.: 1,410]

Vakhania, Nodari; Werner, Frank

Minimizing maximum lateness of jobs with naturally bounded job data on a single machine in polynomial time

In: Theoretical computer science. - Amsterdam [u.a.]: Elsevier, Bd. 501.2013, S. 72-81;

Walter, Matthias; Truemper, Klaus

Implementation of a unimodularity test

In: Mathematical programming computation. - Berlin: Springer, Bd. 5.2013, 1, S. 57-73;

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Angulo, Gustavo; Ahmed, Shabbir; Dey, Santanu S.; Kaibel, Volker

Forbidden vertices

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Minimizing mean flow time for the two-machine scheduling problem with a single server

In: Magdeburg: Univ., Fak. für Mathematik, 2013; 14 S. - (Preprint / Fakultät für Mathematik, Otto-von-Guericke-Universität Magdeburg; 2013,12);

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Minimizing total weighted completion time approximately for the parallel machine problem with a single server

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A dynamic model and an algorithm for flexible flow shop scheduling with continuous flows and discrete assignments
In: Magdeburg: Univ., Fak. für Mathematik, 2013; 26 S. - (Preprint / Fakultät für Mathematik, Otto-von-Guericke-Universität Magdeburg; 2013,16);

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Kaibel, Volker; Walter, Matthias

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A short proof that the extension complexity of the correlation polytope grows exponentially

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Lower bounds on the sizes of integer programs without additional variables

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An exact solution procedure for the total product rate variation problem

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In: Magdeburg: Univ., Fak. für Mathematik, 2013; 9 S. - (Preprint / Fakultät für Mathematik, Otto-von-Guericke-Universität Magdeburg; 2013,28);

Sotskov, Yuri N.; Werner, Frank

Using a stability method for scheduling and sequencing with interval data

In: Magdeburg: Univ., Fak. für Mathematik, 2013; 61 S. - (Preprint / Fakultät für Mathematik, Otto-von-Guericke-Universität Magdeburg; 2013,9);

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Gafarov, Evgeny R.; Dolgui, Alexandre; Lazarev, Alexander; Werner, Frank

A graphical approach for solving single machine scheduling problems approximately

In: 7th IFAC Conference on Manufacturing Modelling, Management, and Control, 2013. - IFAC, S. 1340-1345;
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Jung, Michael N.; Kirches, Christian; Sager, Sebastian

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Sager, Sebastian; Frasch, Janick; Gray, Andrew; Zanon, Mario; Ferreau, Hans Joachim; Borrelli, Francesco; Diehl, Moritz

An auto-generated nonlinear MPC algorithm for real-time obstacle avoidance of ground vehicles

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In: 7th IFAC Conference on Manufacturing Modelling, Management, and Control, 2013. - IFAC, S. 1352-1357;

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Makespan minimization for a two-machine scheduling problem with a single server

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Kongress: MIM 2013; (Saint Petersburg): 2013.06.19-21;

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Solving a job-shop problem by an adaptive algorithm based on learning

In: IFAC MIM '2013. - St. Peterburg, S. 1368-1373

Kongress: MIM 2013; (Saint Petersburg): 2013.06.19-21;

Abstracts

Gafarov, Evgeny R.; Lazarev, Alexander A.; Werner, Frank

A note on the paper Single machine scheduling problems with financial resource constraints: some complexity results and properties by E.R. Gafarov et al.

In: Mathematical social sciences. - Amsterdam: Elsevier Science, Bd. 65.2013, 3, S. 232;
[Imp.fact.: 0,452]