MATH FAKULTÄT FÜR MATHEMATIK

Publikationsbericht 2022

Fakultät für Mathematik

FAKULTÄT FÜR MATHEMATIK

1. LEITUNG

Prof. Dr. Alexander Pott (Dekan)
Prof. Dr. Miles Simon (Prodekan und Studiendekan)

2. VERÖFFENTLICHUNGEN

BEGUTACHTETE ZEITSCHRIFTENAUFSÄTZE

Boege, Tobias; Kahle, Thomas; Kretschmer, Andreas; Röttger, Frank
The geometry of Gaussian double Markovian distributions
Scandinavian journal of statistics - Oxford: Wiley-Blackwell, 1974 . - 2022, insges. 32 S.;
[Imp.fact.: 1.04]

Brooksbank, Peter A.; Maglione, Joshua; Wilson, James B.
Tensor isomorphism by conjugacy of Lie algebras
Journal of algebra - San Diego, Calif.: Elsevier, Bd. 604 (2022), S. 790-807;
[Imp.fact.: 0.89]

Khodabandeh, Pouria; Kayvanfar, Vahid; Rafiee, Majid; Werner, Frank
Home health care planning with the consideration of flexible starting/ending points and service features
Axioms - Basel: MDPI, 2012, Bd. 11 (2022), 8, insges. 18 S.;
[Imp.fact.: 1.824]

HABILITATIONEN

Minakowski, Piotr; Richter, Thomas [AkademischeR BetreuerIn]
Selected aspects of complex flow problems - modelling, analysis, numerics
Magdeburg: Universitätsbibliothek, 2022, 1 Online-Ressource (x, 200 Seiten, 18,15 MB), Illustrationen;

DISSERTATIONEN

Boege, Tobias; Kahle, Thomas [AkademischeR BetreuerIn]; Kaibel, Volker [AkademischeR BetreuerIn]
The Gaussian conditional independence inference problem
Magdeburg: Universitätsbibliothek, 2022, 1 Online-Ressource (ii, 143 Seiten, 1,33 MB), Formeln;

Cheshire, James
Structured pure exploration bandit problems and extensions
Magdeburg: Universitätsbibliothek, 2022, 1 Online-Ressource (xiii, 158 Seiten, 1,88 MB), Illustrationen;

Klein, Philipp; Kirch, Claudia [AkademischeR BetreuerIn]
Scan statistics for data segmentation of stochastic processes and anomaly detection in large image data
Magdeburg: Universitätsbibliothek, 2022, 1 Online-Ressource (119 Seiten, 15,75 MB), Illustrationen;

Lobe, Elisabeth; Kaibel, Volker [AkademischeR BetreuerIn]
Combinatorial problems in programming quantum annealers
Magdeburg: Universitätsbibliothek, 2022, 1 Online-Ressource (II, 156, Seite III-X, 2,5 MB), Illustrationen;

Matern, Christoph; Warnecke, Gerald [AkademischeR BetreuerIn]
The Riemann problem for weakly hyperbolic two-phase flow model of a dispersed phase in a carrier fluid
Magdeburg: Universitätsbibliothek, 2022, 1 Online-Ressource (x, 125 Seiten, 1,74 MB), Diagramme;

Penke, Carolin; Benner, Peter [AkademischeR BetreuerIn]
Efficient algorithms for solving structured Eigenvalue problems arising in the description of electronic excitations
Magdeburg: Universitätsbibliothek, 2022, 1 Online-Ressource (xxi, 188 Seiten, 1,47 MB), Illustrationen;

Shat, Helmi; Schwabe, Rainer [AkademischeR BetreuerIn]; Gaffke, Norbert [AkademischeR BetreuerIn]
Optimal designs for accelerated degradation testing
Magdeburg: Universitätsbibliothek, 2022, 1 Online-Ressource (viii, 148 Blätter, 1,16 MB);

INSTITUT FÜR ALGEBRA UND GEOMETRIE

1. LEITUNG

Prof. Dr. Thomas Kahle
Prof. Dr. Benjamin Nill (Institutsleiter)
Prof. Dr. Alexander Pott
Prof. Dr. Stefanie Rach
Prof. Dr. Petra Schwer

2. VERÖFFENTLICHUNGEN

BEGUTACHTETE ZEITSCHRIFTENAUFSÄTZE

An, Xinghai; Hayat, Adnan; Lee, Ju Weon; Qamar, Shamsul; Warnecke, Gerald; Seidel-Morgenstern, Andreas
Analysis and experimental demonstration of temperature step gradients in preparative liquid chromatography
Journal of chromatography / A - New York, NY [u.a.]: Science Direct, Bd. 1665 (2022);
[Imp.fact.: 4.601]

Betken, Annika; Wendler, Martin
Rank-based change-point analysis for long-range dependent time series
Bernoulli - Aarhus, Bd. 28 (2022), 4, S. 2209-2233;
[Imp.fact.: 1.822]

Boege, Tobias; Kahle, Thomas; Kretschmer, Andreas; Röttger, Frank
The geometry of Gaussian double Markovian distributions
Scandinavian journal of statistics - Oxford: Wiley-Blackwell, 1974 . - 2022, insges. 32 S.;
[Imp.fact.: 1.04]

Borello, Martino; Willems, Wolfgang
On the algebraic structure of quasi-group codes
Journal of algebra and its applications - Singapore [u.a.]: World Scientific Publ. . - 2022;
[Imp.fact.: 0.762]

Borello, Martino; Willems, Wolfgang; Zini, Giovanni
On ideals in group algebras - an uncertainty principle and the Schur product
Forum mathematicum - Berlin [u.a.]: de Gruyter . - 2022;

Christoph, Gerd; Ulyanov, Vladimir V.; Bening, Vladimir E.
Second order expansions for sample median with random sample size
Alea - Beachwood, Ohio: Inst., Bd. 19 (2022), 1, S. 339-365;
[Imp.fact.: 0.732]

Dehling, Herold; Vuk, Kata; Wendler, Martin
Change-point detection based on weighted two-sample U-statistics
Electronic journal of statistics - Ithaca, NY: Cornell University Library, Bd. 16 (2022), 1, S. 862-891;
[Imp.fact.: 1.747]

Görlach, Paul; Ren, Yue; Zhang, Leon
Computing zero-dimensional tropical varieties via projections
Computational complexity - Cham (ZG): Springer International Publishing AG, Bd. 31 (2022), 1, insges. 33 S.;
[Imp.fact.: 0.962]

Hahn, Mirko; Leyffer, Sven; Sager, Sebastian
Binary optimal control by trust-region steepest descent
Mathematical programming - Berlin: Springer . - 2022, insges. p44 S.;
[Imp.fact.: 3.06]

Kahle, Thomas; Krüsemann, Jonas
Binomial edge ideals of cographs
Revista de la Unión Matemática Argentina/ Unión Matemática Argentina - Buenos Aires: Unión, Bd. 63 (2022), 2, S. 305-316;
[Imp.fact.: 0.657]

Kahle, Thomas; Le, Dinh Van; Römer, Tim
Invariant chains in algebra and discrete geometry
SIAM journal on discrete mathematics/ Society for Industrial and Applied Mathematics - Philadelphia, Pa.: Soc., Bd. 36 (2022), 2, S. 975-999;
[Imp.fact.: 0.868]

Keppeler, Daniel; Möller, Philip; Varghese, Olga
Automatic continuity for groups whose torsion subgroups are small
Journal of group theory - Berlin: de Gruyter . - 2022;
[Imp.fact.: 0.638]

Lam-Weil, Joseph; Carpentier, Alexandra; Sriperumbudur, Bharath K.
Local minimax rates for closeness testing of discrete distributions
Bernoulli - Aarhus, Bd. 28 (2022), 2, S. 1179-1197;
[Imp.fact.: 1.822]

Milićević, Elizabeth; Naqvi, Yusra; Schwer, Petra; Thomas, Anne
A gallery model for affine flag varieties via chimney retractions
Transformation groups - Boston, Mass.: Birkhäuser, 1996, Bd. 27 (2022), 4, insges. 49 S.;
[Imp.fact.: 0.752]

Milićević, Elizabeth; Schwer, Petra; Thomas, Anne
Affine deligne-lusztig varieties and folded galleries governed by chimneys
Annales de l'Institut Fourier/ Institut Fourier - Grenoble: Univ. . - 2022, insges. 54 S.

Pott, Alexander; Crnković, Dean; Leung, Ka Hin
Preface to the special issue on ArasuFest
Journal of algebraic combinatorics - Dordrecht [u.a.]: Springer Science + Business Media B.V., Bd. 55 (2022), 1, insges. 3 S.;
[Imp.fact.: 0.963]

Rach, Stefanie
Motivational states in an undergraduate mathematics course - relations between facets of individual interest, task values, basic needs, and effort
ZDM - Berlin: Springer . - 2022, insges. 16 S.;
[Imp.fact.: 2.481]

Schwer, Petra
Shadows in the wild - folded galleries and their applications
Jahresbericht der Deutschen Mathematiker-Vereinigung/ Deutsche Mathematiker-Vereinigung - Heidelberg: Springer, Bd. 124 (2022), S. 3-41;

Thünen, Anna; Leyffer, Sven; Sager, Sebastian
State elimination for mixed-integer optimal control of partial differential equations by semigroup theory
Optimal control, applications and methods - New York, NY [u.a.]: Wiley, Bd. 43 (2022), 3, S. 867-883;
[Imp.fact.: 1.955]

Zeile, Clemens; Weber, Tobias; Sager, Sebastian
Combinatorial integral approximation decompositions for mixed-integer optimal control
Algorithms - Basel: MDPI, Bd. 15 (2022), 4, insges. 26 S.;

NICHT BEGUTACHTETE ZEITSCHRIFTENAUFSÄTZE

Görlach, Paul; Reichelt, Thomas; Sevenheck, Christian; Steiner, Avi; Walther, Uli
Tautological systems, homogeneous spaces and the holonomic rank problem
De.arxiv.org - [S.l.]: Arxiv.org . - 2022, insges. 61 S.;

Milićević, Elizabeth; Schwer, Petra; Thomas, Anne
Chimney retractions in affine buildings encode orbits in affine flag varieties
De.arxiv.org - [S.l.]: Arxiv.org . - 2022, insges. 31 S.;

Rego, Yuri Santos; Schwer, Petra
The galaxy of coxeter groups
De.arxiv.org - [S.l.]: Arxiv.org . - 2022, insges. 30 S.;

Röttger, Frank; Kahle, Thomas; Schwabe, Rainer
Optimal designs for discrete choice models via graph Laplacians
De.arxiv.org - [S.l.]: Arxiv.org . - 2022, insges. 23 S.;

BEGUTACHTETE BUCHBEITRÄGE

Ardalani, Ali; Pott, Alexander
A new transformation for costas arrays
2022 10th International Workshop on Signal Design and its Applications in Communications (IWSDA)/ International Workshop on Signal Design and Its Applications in Communications - [Piscataway, NJ]: IEEE . - 2022, insges. 5 S.;

Ehrlich, Marco; Lukas, Georg; Trsek, Henning; Jasperneite, Jürgen; Diedrich, Christian
Investigation of resource constraints for the automation of industrial security risk assessments
Konferenz: 18th International Conference on Factory Communication Systems, WFCS, Pavia, Italy, 27-29 April 2022, 18th IEEE International Workshop on Factory Communication Systems 2022/ IEEE International Conference on Factory Communication Systems - [Piscataway, NJ]: IEEE . - 2022, insges. 8 S.;

Hahn, Mirko; Kirches, Christian; Manns, Paul; Sager, Sebastian; Zeile, Clemens
Decomposition and approximation for PDE-constrained mixed-integer optimal control
Non-Smooth and Complementarity-Based Distributed Parameter Systems - Cham: Springer International Publishing; Hintermüller, Michael . - 2022, S. 283-305 - (International series of numerical mathematics; volume 172);

Hering, Milena; Nill, Benjamin; Süß, Hendrik
Stability of tangent bundles on smooth toric Picard-rank-2 varieties and surfaces
Facets of algebraic geometry ; 2 - Cambridge: Cambridge University Press; Aluffi, Paolo *1960-* . - 2022, insges. 25 S.;

Pustelnik, Kolja
Problemlöseprozesse von Lehramtsstudierenden im ersten Semester
Professionsorientierte Fachwissenschaft - Berlin, Heidelberg: Springer Berlin Heidelberg; Isaev, Viktor . - 2022, S. 123-138;

Rach, Stefanie
Aufgaben zur Verknüpfung von Schul- und Hochschulmathematik - haben derartige Aufgaben Auswirkungen auf das Interesse von Lehramtsstudierenden?
Professionsorientierte Fachwissenschaft - Berlin, Heidelberg: Springer Berlin Heidelberg; Isaev, Viktor . - 2022, S. 177-189;

HERAUSGEBERSCHAFTEN

Rolfes, Tobias; Rach, Stefanie; Ufer, Stefan; Heinze, Aiso
Das Fach Mathematik in der gymnasialen Oberstufe
Münster [u.a.]: Waxmann, 2022, ca. 400 Seiten

NICHT BEGUTACHTETE BUCHBEITRÄGE

Geisler, Sebastian; Rach, Stefanie
Development of attitudes during the transition to university mathematics different for students who drop out?
Konferenz: 45th Conference of the International Group for the Psychology of Mathematics Education, Alicante, Spain„ Proceedings of the 45th conference of the international group for the psychology of mathematics education - Publicacions Institucionals UA . - 2022, S. 283-290

DISSERTATIONEN

Boege, Tobias; Kahle, Thomas [AkademischeR BetreuerIn]; Kaibel, Volker [AkademischeR BetreuerIn]
The Gaussian conditional independence inference problem
Magdeburg: Universitätsbibliothek, 2022, 1 Online-Ressource (ii, 143 Seiten, 1,33 MB), Formeln;

INSTITUT FÜR ANALYSIS UND NUMERIK

1. LEITUNG

Prof. Dr. Peter Benner (MPI Magdeburg)
Prof. Dr. Klaus Deckelnick
Prof. Dr. Hans-Christoph Grunau
Jun. Prof. Dr. Jan Heiland
Prof. Dr. Thomas Richter (Geschäftsführender Leiter)
Prof. Dr. Miles Simon
Prof. Dr. Gerald Warnecke nur bis 31.03.2022
Priv.-Doz. Dr. Bernd Rummler nur bis 31.03.2022

2. VERÖFFENTLICHUNGEN

BEGUTACHTETE ZEITSCHRIFTENAUFSÄTZE

An, Xinghai; Hayat, Adnan; Lee, Ju Weon; Qamar, Shamsul; Warnecke, Gerald; Seidel-Morgenstern, Andreas
Analysis and experimental demonstration of temperature step gradients in preparative liquid chromatography
Journal of chromatography / A - New York, NY [u.a.]: Science Direct, Bd. 1665 (2022);
[Imp.fact.: 4.601]

Benner, Peter; Goyal, Pawan; Heiland, Jan; Duff, Igor Pontes
Operator inference and physics-informed learning of low-dimensional models for incompressible flows
Electronic transactions on numerical analysis - Kent, Ohio: Kent State Univ., Bd. 56 (2022), S. 28-51;

Benner, Peter; Heiland, Jan; Werner, Steffen W. R.
A low-rank solution method for Riccati equations with indefinite quadratic terms
Numerical algorithms - Bussum: Baltzer . - 2022;
[Imp.fact.: 2.37]

Benner, Peter; Heiland, Jan; Werner, Steffen W. R.
Robust output-feedback stabilization for incompressible flows using low-dimensional H∞-controllers
Computational optimization and applications - New York, NY [u.a.]: Springer Science + Business Media B.V., Bd. 82 (2022), 1, S. 225-249;
[Imp.fact.: 2.005]

Cherifi, Karim; Goyal, Pawan; Benner, Peter
A non-intrusive method to inferring linear port-Hamiltonian realizations using time-domain data
Electronic transactions on numerical analysis - Kent, Ohio: Kent State Univ., Bd. 56 (2022), S. 102-116;

Danilov, S.; Mehlmann, Carolin; Fofonova, V.
On discretizing sea-ice dynamics on triangular meshes using vertex, cell or edge velocities
Ocean modelling online - Amsterdam [u.a.]: Elsevier Science, Bd. 170 (2022);
[Imp.fact.: 3.293]

Deckelnick, Klaus; Herbert, Philip; Hinze, Michael
A novel W1,∞ approach to shape optimisation with Lipschitz domains
Control, optimisation and calculus of variations - Les Ulis: EDP Sciences, Bd. 28 (2022), 2, insges. 29 S.;

Deckelnick, Klaus; Styles, Vanessa
Finite element error analysis for a system coupling surface evolution to diffusion on the surface
Interfaces and free boundaries - Zürich: European Mathematical Soc. Publ. House, Bd. 24 (2022), 1, S. 63-93;
[Imp.fact.: 1.389]

Frei, Stefan; Heinlein, Alexander; Richter, Thomas
On temporal homogenization in the numerical simulation of atherosclerotic plaque growth
Proceedings in applied mathematics and mechanics - Weinheim: Wiley-VCH, Bd. 21 (2022), 1, insges. 5 S., 2021;

Hantke, Maren; Matern, Christoph; Warnecke, Gerald; Yaghi, Hazem
A new method to discretize a model for isothermal flow with a multi-component equation of state
Journal of computational and applied mathematics - Amsterdam [u.a.]: North-Holland, Bd. 422 (2023), insges. 10 S.;
[Imp.fact.: 2.872]

Heiland, Jan; Benner, Peter; Bahmani, Rezvan
Convolutional neural networks for very low-dimensional LPV approximations of incompressible Navier-Stokes equations
Frontiers in applied mathematics and statistics - Lausanne: Frontiers Media, Bd. 8 (2022), insges. 15 S.;

Heiland, Jan; Kim, Yongho
Convolutional autoencoders and clustering for low-dimensional parametrization of incompressible flows
IFAC-PapersOnLine/ Internationale Förderung für Automatische Lenkung - Frankfurt: Elsevier, Bd. 55 (2022), 30, S. 430-435;

Heiland, Jan; Unger, Benjamin
Identification of linear time-invariant systems with dynamic mode decomposition
Mathematics - Basel: MDPI, Bd. 10 (2022), 3, insges. 13 S.;
[Imp.fact.: 2.592]

Jungclaus, J. H.; Lorenz, S. J.; Schmidt, H.; Brovkin, V.; Brüggemann, N.; Chegini, F.; Crüger, T.; De-Vrese, P.; Gayler, V.; Giorgetta, M. A.; Gutjahr, O.; Haak, H.; Hagemann, S.; Hanke, M.; Ilyina, T.; Korn, P.; Kröger, J.; Linardakis, L.; Mehlmann, Caroline; Mikolajewicz, U.; Müller, W. A.; Nabel, J. E. M. S.; Notz, D.; Pohlmann, H.; Putrasahan, D. A.; Raddatz, T.; Ramme, L.; Redler, R.; Reick, C. H.; Riddick, T.; Sam, T.; Schneck, R.; Schnur, R.; Schupfner, M.; Storch, J.-S.; Wachsmann, F.; Wieners, K.-H.; Ziemen, F.; Stevens, B.; Marotzke, J.; Claussen, M.
The ICON earth system model version 1.0
Journal of advances in modeling earth systems - Fort Collins, Colo., Bd. 14 (2022), 4, insges. 39 S.;
[Imp.fact.: 8.47]

Kalosha, J. I.; Zuyev, Alexander L.
Asymptotic stabilization of a flexible beam with an attached mass
Ukrainian mathematical journal - New York, NY: Consultants Bureau, Bd. 73 (2022), 10, S. 1537-1550;

Kaya, Utku; Braak, Malte
Stabilizing the convection-diffusion-reaction equation via local problems
Computer methods in applied mechanics and engineering - Amsterdam [u.a.]: Elsevier Science, Bd. 398 (2022);
[Imp.fact.: 6.588]

Korn, P.; Brüggemann, N.; Jungclaus, J. H.; Lorenz, S. J.; Gutjahr, O.; Haak, H.; Linardakis, L.; Mehlmann, Carolin; Mikolajewicz, U.; Notz, D.; Putrasahan, D. A.; Singh, V.; Storch, J.-S.; Zhu, X.; Marotzke, J.
ICON-O - the ocean component of the ICON Earth System Model$dglobal simulation characteristics and local telescoping capability
Journal of advances in modeling earth systems - Fort Collins, Colo., Bd. 14 (2022), 10;
[Imp.fact.: 8.47]

Kunik, Matthias; Liu, Hailiang; Warnecke, Gerald
Radially symmetric solutions of the ultra-relativistic Euler equations
Methods and applications of analysis - Somerville, Mass.: International Press, Bd. 28 (2021), 4, S. 401-422;

Kweyu, Cleophas; Feng, Lihong; Stein, Matthias; Benner, Peter
Reduced basis method for the nonlinear Poisson-Boltzmann equation regularized by the range-separated canonical tensor format
International journal of nonlinear sciences and numerical simulation - Berlin: de Gruyter . - 2022;
[Imp.fact.: 2.156]

Margenberg, Nils; Lessig, Christian; Richter, Thomas
Structure preservation for the Deep Neural Network Multigrid Solver
Electronic transactions on numerical analysis - Kent, Ohio: Kent State Univ., Bd. 56 (2022), S. 86-101;

Mehlmann, Carolin; Gutjahr, Oliver
Discretization of sea ice dynamics in the tangent plane to the sphere by a CD-grid-type finite element
Journal of advances in modeling earth systems - Fort Collins, Colo. . - 2022, insges. 24 S.;
[Imp.fact.: 8.47]

Misra, Rahul; Wisniewski, Rafal; Zuyev, Alexander
Attitude stabilization of a satellite having only electromagnetic actuation using oscillating controls
Aerospace - Basel: MDPI, Bd. 9 (2022), 8, insges. 14 S.;
[Imp.fact.: 2.66]

Rhode, Michael; Nietzke, Jonathan; Richter, Tim; Mente, Tobias; Mayr, Peter; Nitsche, Alexander
Hydrogen effect on mechanical properties and cracking of creep-resistant 9% Cr P92 steel and P91 weld metal
Welding in the world - Berlin: Springer . - 2022, insges. 12 S.;
[Imp.fact.: 1.984]

NICHT BEGUTACHTETE ZEITSCHRIFTENAUFSÄTZE

Deruelle, Alix; Schulze, Felix; Simon, Miles
Initial stability estimates for Ricci flow and three dimensional Ricci-pinched manifolds
De.arxiv.org - [S.l.]: Arxiv.org . - 2022, insges. 40 S.;

BEGUTACHTETE BUCHBEITRÄGE

Chellappa, Sridhar; Feng, Lihong; Benner, Peter
An adaptive sampling approach for the reduced basis method
Realization and Model Reduction of Dynamical Systems - Cham: Springer International Publishing; Beattie, Christopher . - 2022, S. 137-155;

HABILITATIONEN

Minakowski, Piotr; Richter, Thomas [AkademischeR BetreuerIn]
Selected aspects of complex flow problems - modelling, analysis, numerics
Magdeburg: Universitätsbibliothek, 2022, 1 Online-Ressource (x, 200 Seiten, 18,15 MB), Illustrationen;

DISSERTATIONEN

Matern, Christoph; Warnecke, Gerald [AkademischeR BetreuerIn]
The Riemann problem for weakly hyperbolic two-phase flow model of a dispersed phase in a carrier fluid
Magdeburg: Universitätsbibliothek, 2022, 1 Online-Ressource (x, 125 Seiten, 1,74 MB), Diagramme;

Penke, Carolin; Benner, Peter [AkademischeR BetreuerIn]
Efficient algorithms for solving structured Eigenvalue problems arising in the description of electronic excitations
Magdeburg: Universitätsbibliothek, 2022, 1 Online-Ressource (xxi, 188 Seiten, 1,47 MB), Illustrationen;

INSTITUT FÜR MATHEMATISCHE OPTIMIERUNG

1. LEITUNG

Prof. Dr. Volker Kaibel (geschäftsführender Leiter)
Prof. Dr. Sebastian Sager

2. VERÖFFENTLICHUNGEN

BEGUTACHTETE ZEITSCHRIFTENAUFSÄTZE

Daues, Endric; Friedrich, Ulf
Computing optimized path integrals for knapsack feasibility
INFORMS journal on computing/ Institute for Operations Research and the Management Sciences - Linthicum, Md.: INFORMS, Bd. 34 (2022), 4, S. 2163-2176;
[Imp.fact.: 3.288]

Hahn, Mirko; Leyffer, Sven; Sager, Sebastian
Binary optimal control by trust-region steepest descent
Mathematical programming - Berlin: Springer . - 2022, insges. p44 S.;
[Imp.fact.: 3.06]

Khodabandeh, Pouria; Kayvanfar, Vahid; Rafiee, Majid; Werner, Frank
Home health care planning with the consideration of flexible starting/ending points and service features
Axioms - Basel: MDPI, 2012, Bd. 11 (2022), 8, insges. 18 S.;
[Imp.fact.: 1.824]

Le, Do Duc; Merkert, Maximilian; Sorgatz, Stephan; Hahn, Mirko; Sager, Sebastian
Autonomous traffic at intersections - an optimization-based analysis of possible time, energy, and CO 2 savings
Networks - New York, NY: Wiley, Bd. 79 (2022), 3, S. 338-363; http://dx.doi.org/10.1002/net.22078 10.25673/92608
[Imp.fact.: 5.059]

Naseri, Atefeh; Kayvanfar, Vahid; Sheikh, Shaya; Werner, Frank
Social medias role in achieving marketing goals in Iran during the COVID-19 pandemic
Social Sciences - Basel: MDPI, Bd. 11 (2022), 11, insges. 19 S.;

Rafiee, Majid; Kayvanfar, Vahid; Mohammadi, Atieh; Werner, Frank
A robust optimization approach for a cellular manufacturing system considering skill-leveled operators and multi-functional machines
Applied mathematical modelling - Amsterdam [u.a.]: Elsevier Science . - 2022;
[Imp.fact.: 5.129]

Thünen, Anna; Leyffer, Sven; Sager, Sebastian
State elimination for mixed-integer optimal control of partial differential equations by semigroup theory
Optimal control, applications and methods - New York, NY [u.a.]: Wiley, Bd. 43 (2022), 3, S. 867-883;
[Imp.fact.: 1.955]

Werner, Frank
Special Issue 1st Online Conference on Algorithms (IOCA2021)
Algorithms - Basel: MDPI, Bd. 15 (2022), 11, insges. 2 S.;

Werner, Frank
The 1st International Electronic Conference on Algorithms (IOCA 2021)
Computer sciences & mathematics forum - Basel: MDPI, Bd. 2 (2022), 1, insges. 2 S.;

Zeile, Clemens; Weber, Tobias; Sager, Sebastian
Combinatorial integral approximation decompositions for mixed-integer optimal control
Algorithms - Basel: MDPI, Bd. 15 (2022), 4, insges. 26 S.;

NICHT BEGUTACHTETE ZEITSCHRIFTENAUFSÄTZE

Kayvanfar, Vahid; Baziyad, Hamed; Sheikh, Shaya; Werner, Frank
Efficiency evaluation of banks with many branches using a heuristic framework and dynamic data envelopment optimization approach - a real case study
De.arxiv.org - [S.l.]: Arxiv.org . - 2022, insges. 22 S.;

Khodabandeh, Pouria; Kayvanfar, Vahid; Rafiee, Majid; Werner, Frank
Home health care planning with considering flexible starting/ending points and service features
De.arxiv.org - [S.l.]: Arxiv.org . - 2022, insges. 17 S.;

Vakhania, Nodari; Werner, Frank; Reynoso, Alejandro
Scheduling a single machine with compressible jobs to minimize maximum lateness
De.arxiv.org - [S.l.]: Arxiv.org . - 2022, insges. 20 S.;

Zabihian-Bisheh, Abed; Vandchali, Hadi Rezaei; Kayvanfar, Vahid; Werner, Frank
A multi-objective sustainable planning for a real hazardous waste production problem
De.arxiv.org - [S.l.]: Arxiv.org . - 2022, insges. 25 S.;

BEGUTACHTETE BUCHBEITRÄGE

Bärmann, Andreas; Gemander, Patrick; Martin, Alexander; Merkert, Maximilian
Energy-efficient timetabling in a German underground system
German Success Stories in Industrial Mathematics - Cham: Springer International Publishing; Bock, Hans Georg . - 2022, S. 105-108 - (Mathematics in industry; volume 35);

Hahn, Mirko; Kirches, Christian; Manns, Paul; Sager, Sebastian; Zeile, Clemens
Decomposition and approximation for PDE-constrained mixed-integer optimal control
Non-Smooth and Complementarity-Based Distributed Parameter Systems - Cham: Springer International Publishing; Hintermüller, Michael . - 2022, S. 283-305 - (International series of numerical mathematics; volume 172);

WISSENSCHAFTLICHE MONOGRAFIEN

Burtseva, Larysa; Werner, Frank; Romero, Rainier; Garcia-Mata, Carmen L.; Flores-Rios, Brenda L.; Yaurima, Victor; Delgado-Arana, Eddy M.; Gonzalez-Navarro, Felix F.; Lopez-Morteo, Gabriel A.
Production planning and scheduling for lot processing
Cambridge Scholars Publishing, 2022, 405 Seiten

HERAUSGEBERSCHAFTEN

Wagner, Gerd; Werner, Frank; De Rango, Floriano
Proceedings of the 12th International Conference on Simulation and Modeling Methodologies, Technologies and Applications (SIMULTECH 2022)I
[Setúbal, Portugal]: SCITEPRESS - Science and Technology Publications, Lda., 2022, 1 Online-Ressource;
Kongress: International Conference on Simulation and Modeling Methodologies, Technologies and Applications 12 (Lisbon, Portugal : 2022.07.14-16)

Werner, Frank
The 1st International Electronic Conference on Algorithms
Basel: MDPI, 2022, 1 Online-Ressource (XI, 164 Seiten);
Kongress: International Electronic Conference on Algorithms 1 (online : 2021.09.27-10.10)

DISSERTATIONEN

Boege, Tobias; Kahle, Thomas [AkademischeR BetreuerIn]; Kaibel, Volker [AkademischeR BetreuerIn]
The Gaussian conditional independence inference problem
Magdeburg: Universitätsbibliothek, 2022, 1 Online-Ressource (ii, 143 Seiten, 1,33 MB), Formeln;

Lobe, Elisabeth; Kaibel, Volker [AkademischeR BetreuerIn]
Combinatorial problems in programming quantum annealers
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INSTITUT FÜR MATHEMATISCHE STOCHASTIK

1. LEITUNG

Jun.-Prof. Dr. Marc Ditzhaus (seit 01.04.2022)
Prof. Dr. Anja Janßen
Prof. Dr. Claudia Kirch - geschäftsführende Leiterin (seit 01.09.2021)
Dr. Heiko Großmann
Dr. Martin Wendler

2. VERÖFFENTLICHUNGEN

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