

## Conferences and Workshops

- 06/18 “Tower Crane Selection and Positioning on Construction Sites”, IC-CMSC 2018: International Conference on Construction Methods and Scheduling, Paris/France, June 25<sup>th</sup> - 26<sup>th</sup> 2018
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- 04/18 “Scheduling of Vehicles with Handover Relations at Transshipment Terminals”, 16th Int’l Conference on Project Management and Scheduling, Rome/Italy, April 17<sup>th</sup> - 20<sup>th</sup> 2018
- 03/18 “Routing von Dronen in Truck-Dronen-Tandems”, Workshop of GOR-Arbeitsgruppe “Projektmanagement und Scheduling”, Bonn, Germany
- 02/18 “Drone delivery from trucks: Drone scheduling for given truck routes”, 32nd Annual Conference of the Belgium Operational Research Society 2018, Liège/Belgium, February 1<sup>st</sup> - 2<sup>nd</sup> 2018
- 09/17 “Assignment, Scheduling and Routing of Triple-Crossover-Cranes in Container Yards”, International Scientific Annual Conference Operations Research 2017, Berlin/Germany, September 6<sup>th</sup> - 8<sup>th</sup> 2017 (with Lennart Zey)
- 09/17 “Crane selection and location on construction sites”, International Scientific Annual Conference Operations Research 2017, Berlin/Germany, September 6<sup>th</sup> - 8<sup>th</sup> 2017 (with Michael Dienstknecht)
- 09/17 “Carpool formation along high-occupancy vehicle lanes”, International Scientific Annual Conference Operations Research 2017, Berlin/Germany, September 6<sup>th</sup> - 8<sup>th</sup> 2017 (with Stefan Schwerdfeger, Nils Boysen, and Konrad Stephan)
- 09/17 “Preventing Crane Interferences at Automated Container Terminals”, International Scientific Annual Conference Operations Research 2017, Berlin/Germany, September 6<sup>th</sup> - 8<sup>th</sup> 2017 (with Jenny Nossack and Erwin Pesch)
- 09/17 “Scheduling jobs and maintenance activities subject to job-dependent machine deteriorations”, International Scientific Annual Conference Operations Research 2017, Berlin/Germany, September 6<sup>th</sup> - 8<sup>th</sup> 2017 (with Liliana Grigoriu)
- 08/17 “Scheduling of Crossover-Gantry Cranes”, 7th International Conference on Logistics and Maritime Systems, Bergen/Norway
- 06/17 “Container Dispatching and Conflict-Free Yard Crane Routing in an Automated Container Terminal”, 13<sup>th</sup> Workshop on Models and Algorithms for Planning and Scheduling Problems, Seon-Seebruck/Germany

- 06/17 “The Home-Away Pattern Set Feasibility Problem”, 13<sup>th</sup> Workshop on Models and Algorithms for Planning and Scheduling Problems, Seon-Seebruck/Germany
- 03/17 “Tower Crane Selection and Positioning on Construction Sites – Construction Management and Computational Geometry”, Technical Operations Research Workshop 2017, Wenden/Germany
- 11/16 “Scheduling of Vehicles with Handover Relations at Transshipment Terminals”, INFORMS Annual Meeting 2016, Nashville/USA, November 13<sup>th</sup> - 16<sup>th</sup> 2016
- 08/16 “A shortest path algorithm for routing of triple crossover cranes”, International Scientific Annual Conference Operations Research 2016, Hamburg/Germany, August 30<sup>th</sup> - September 2<sup>nd</sup> 2016 (with Lennart Zey)
- 08/16 “Scheduling of Vehicles with Handover Relations at Transshipment Terminals”, International Scientific Annual Conference Operations Research 2016, Hamburg/Germany, August 30<sup>th</sup> - September 2<sup>nd</sup> 2016
- 07/16 “A Test Suite for Scheduling Algorithms for Cranes in Transshipment Terminals”, 28<sup>th</sup> European Conference on Operational Research, Poznań/Poland (with Florian Jaehn and Andreas Wiehl)
- 07/16 “Container Dispatching and Conflict-Free Yard Crane Routing in an Automated Container Terminal”, 28<sup>th</sup> European Conference on Operational Research, Poznań/Poland (with Jenny Nossack and Erwin Pesch)
- 03/16 “Ein Testdatengenerator für Verfahren zur Steuerung von Rail Mounted Gantries (und mehr)”, Workshop of GOR-Arbeitsgruppe “Projektmanagement und Scheduling”, Neuss, Germany
- 02/16 “Ein Testdatengenerator für Verfahren zur Steuerung von Rail Mounted Gantries (und mehr)”, Workshop of GOR-Arbeitsgruppe “Logistik und Verkehr”, Leverkusen, Germany
- 11/15 “Lot Sizing On Multiple Lines With A Single Setup Operator”, INFORMS Annual Meeting 2015, Philadelphia/USA, November 1<sup>st</sup> - 4<sup>th</sup> 2015
- 09/15 “Auto-Carrier Transportation Problem with Pickup and Delivery Operations”, International Scientific Annual Conference Operations Research 2015, Vienna/Austria, September 1<sup>st</sup> - 4<sup>th</sup> 2015 (with Marcel Schmick-erath)
- 09/15 “Pricing Combinatorial Auctions by a Set of Linear Price Vectors”, International Scientific Annual Conference Operations Research 2015, Vienna/Austria, September 1<sup>st</sup> - 4<sup>th</sup> 2015

- 09/15 “Scheduling three co-operating stacking cranes with predetermined container sequences”, International Scientific Annual Conference Operations Research 2015, Vienna/Austria, September 1<sup>st</sup> - 4<sup>th</sup> 2015 (with Lennart Zey)
- 09/15 “A quasi-fixed Cyclic Production Scheme for the Synchronized and Integrated Two-Stage Lot Sizing and Scheduling Problem with Stochastic Demand”, International Scientific Annual Conference Operations Research 2015, Vienna/Austria, September 1<sup>st</sup> - 4<sup>th</sup> 2015 (with Philipp Zeise)
- 08/15 “A tabu search heuristic for the dynamic capacitated lotsizing problem with scarce setup resources”, International Workshop on Lot Sizing 2015, Montreal/Canada, August 24<sup>th</sup> - 26<sup>th</sup> 2015 (with Sascha Düerkop and Horst Tempelmeier)
- 07/15 “Mixed integer programming for emission and flow time reduction for locks in sequence”, 27<sup>th</sup> European Conference on Operational Research, Glasgow/UK (with Ward Passchyn and Frits Spieksma)
- 07/15 “No-wait scheduling for locks”, 27<sup>th</sup> European Conference on Operational Research, Glasgow/UK (with Ward Passchyn and Frits Spieksma)
- 06/15 “Locks, Graphs, and Intervals”, 12<sup>th</sup> Workshop on Models and Algorithms for Planning and Scheduling Problems, La Roche-en-Ardenne, Belgium (with Ward Passchyn and Frits Spieksma)
- 06/15 “Locks and emissions”, 12<sup>th</sup> Workshop on Models and Algorithms for Planning and Scheduling Problems, La Roche-en-Ardenne, Belgium (with Ward Passchyn and Frits Spieksma)
- 05/15 “Bribery Under Partial Information”, EXPLORE-2015: The 2<sup>nd</sup> Workshop on Exploring Beyond the Worst Case in Computational Social Choice, Istanbul, Turkey (with Gabor Erdelyi and Christian Reger)
- 02/15 “Steuerung von Schleusen”, Workshop of GOR-Arbeitsgruppe “Projektmanagement und Scheduling”, Lippstadt, Germany
- 11/14 “Integrated Scheduling of Jobs and Maintenance Activities”, INFORMS Annual Meeting 2014, San Francisco/USA, November 9<sup>th</sup> - 12<sup>th</sup> 2014
- 09/14 “A heuristic decomposition procedure for the twin robot scheduling problem on a line”, International Scientific Annual Conference Operations Research 2014, Aachen/Germany, September 2<sup>nd</sup> - 5<sup>th</sup> 2014 (with Nils Boysen and Simon Emde)
- 09/14 “Mathematical programming models for scheduling locks in sequence”, ALGO 2014, Wroclaw/Poland, September 8<sup>th</sup> - 12<sup>th</sup> 2014 (with Ward Passchyn and Frits Spieksma)

- 08/14 “Two neighborhood search approaches for the dynamic capacitated lot sizing problem with scarce setup resources”, International Workshop on Lot Sizing 2014, Porto/Portugal, August 27<sup>th</sup> -29<sup>th</sup> 2014 (with Sascha Duerkop and Horst Tempelmeier)
- 07/14 “Scheduling Set-Up Operations in a Multi-Machine Environment when only One Set-Up Operator is Present”, IFORS 2014, Barcelona, Spain (with Daniel Schnitzler)
- 07/14 “A Quasi-fixed Cyclic Production Scheme for a Multi-Item Production System with Stochastic Demand”, IFORS 2014, Barcelona, Spain (with Philipp Zeise)
- 02/14 “A Branch & Price Approach for Stable Workforce Assignments”, Workshop of GOR-Arbeitsgruppe “Projektmanagement und Scheduling”, Augsburg, Germany
- 09/13 “Methods for lock scheduling with ship-dependent handling times”, International Scientific Annual Conference Operations Research 2013, Rotterdam, The Netherlands (with Ward Passchyn, Sofie Coene, and Frits Spieksma)
- 09/13 “The berth allocation problem with mobile quay walls”, International Scientific Annual Conference Operations Research 2013, Rotterdam, The Netherlands (with Nils Boysen and Simon Emde)
- 09/13 “Determining Product Frequencies and Produce-Up-To Levels in a Single Facility Multi-Item Production System with Stochastic Demands”, International Scientific Annual Conference Operations Research 2013, Rotterdam, The Netherlands (with Philipp Zeise)
- 09/13 “Scheduling Setups on Multiple Machines with a Single Setup Operator”, International Scientific Annual Conference Operations Research 2013, Rotterdam, The Netherlands (with Daniel Schnitzler)
- 09/13 “An efficient algorithm for scheduling groups of jobs with individual release dates”, International Scientific Annual Conference Operations Research 2013, Rotterdam, The Netherlands (with Alexander Lieder and Raik Stolletz)
- 06/13 “A two-level optical FTTH network design problem”, 11<sup>th</sup> Workshop on Models and Algorithms for Planning and Scheduling Problems, Pont à Mousson, France (with Murat Firat)
- 02/13 “The lockmaster’s problem”, Workshop of GOR-Arbeitsgruppe “Projektmanagement und Scheduling”/Wissenschaftliche Kommission Operations Research des VHB, Wuppertal, Germany

- 10/12 “Deciding priority of rail mounted gantries when transport job sequences are given”, Workshop “New challenges on scheduling theory”, Frejus/France
- 10/12 “Exact Algorithms for Inventory Constrained Scheduling on a Single Machine”, Workshop “New challenges on scheduling theory”, Frejus/France (with Florian Jaehn and Erwin Pesch)
- 09/12 “Extended Production Policies based on Cyclic Patterns”, International Scientific Annual Conference Operations Research 2012, Hannover, Germany (with Philipp Zeise)
- 07/12 “Integrated planning of jobs and maintenance activities on a single machine”, 25<sup>th</sup> European Conference on Operational Research, Vilnius/Lithuania
- 07/12 “Packing chained items into bins with applications to container handling and project scheduling”, 25<sup>th</sup> European Conference on Operational Research, Vilnius/Lithuania (with Malte Fliedner)
- 07/12 “A dynamic programming approach to the aircraft landing problem with aircraft classes”, 25<sup>th</sup> European Conference on Operational Research, Vilnius/Lithuania (with Alexander Lieder and Raik Stolletz)
- 02/12 “Planung flexibler Instandhaltungsaktivitäten”, Workshop of GOR-Arbeitsgruppe “Projektmanagement und Scheduling”/Wissenschaftliche Kommission Operations Research des VHB, Leverkusen, Germany
- 11/11 “Minimizing Maximum Lateness Subject to Maintenance Activities”, INFORMS Annual Meeting 2011, Charlotte/USA, November 13<sup>th</sup> -16<sup>th</sup> 2011
- 09/11 “A dynamic programming approach to the aircraft landing problem with aircraft classes” (with Alexander Lieder and Raik Stolletz), International Scientific Annual Conference “Operations Research 2011”, Zürich/Switzerland, August 30<sup>th</sup> - September 2<sup>nd</sup> 2010
- 06/11 “The train positioning problem”, 10<sup>th</sup> Workshop on Models and Algorithms for Planning and Scheduling Problems, Nymburk, Czech Republic
- 04/11 “A graphical model for scheduling automated stacking cranes with pre-determined container sequences”, FACT2011, London/UK
- 11/10 “Sequencing aircraft landings under consideration of aircraft classes”, INFORMS Annual Meeting 2010, Austin/USA, November 7<sup>th</sup> -10<sup>th</sup> 2010
- 11/10 “Minimizing the Total Weighted Flow Time in Container Scheduling”, INFORMS Annual Meeting 2010, Austin/USA, November 7<sup>th</sup> -10<sup>th</sup> 2010
- 09/10 “The aircraft landing problem with aircraft classes”, Workshop “New challenges on scheduling theory”, Frejus/France

- 09/10 “IP models for the scheduling of flexible maintenance activities on a single machine”, International Scientific Annual Conference “Operations Research 2010”, München/Germany, September 1<sup>st</sup> - 3<sup>rd</sup> 2010
- 07/10 “Scheduling flexible maintenance activities on a single machine”, 24<sup>th</sup> European Conference on Operational Research, Lisbon/Portugal
- 07/10 “Scheduling of aircraft landings using aircraft classes” (with Raik Stolletz), 24<sup>th</sup> European Conference on Operational Research, Lisbon/Portugal
- 05/10 “Sequencing aircraft landings under consideration of aircraft classes”, KARS Aviation Workshop 2010, Cologne/Germany
- 10/09 “An Evolutionary Algorithm for Machine Scheduling subject to Inventory Constraints”, INFORMS Annual Meeting 2009, San Diego/USA, October 11<sup>th</sup> -14<sup>th</sup> 2009
- 10/09 “Container Scheduling Problem” (with Kangbok Lee, Byung-Cheon Choi, Michael Pinedo, Joseph Leung), INFORMS Annual Meeting 2009, San Diego/USA, October 11<sup>th</sup> -14<sup>th</sup> 2009
- 07/09 “A Genetic Algorithm for Inventory Constrained Scheduling on a Single Machine”, 23<sup>rd</sup> European Conference on Operational Research, Bonn/Germany
- 06/09 “Single machine scheduling with regard to inventory constraints”, 9<sup>th</sup> Workshop on Models and Algorithms for Planning and Scheduling Problems, Abbey Rolduc, The Netherlands
- 06/09 “An exact method for Scheduling Real World Sports Leagues” (with Andrei Horbach), 9<sup>th</sup> Workshop on Models and Algorithms for Planning and Scheduling Problems, Abbey Rolduc, The Netherlands
- 10/08 “Time Buffer Allocation in Machine Scheduling”, INFORMS Annual Meeting 2008, Washington DC/USA, October 13<sup>th</sup> -15<sup>th</sup> 2008
- 08/08 “Fairness in Round Robin Tournaments”, The 7<sup>th</sup> International Conference on the Practice and Theory of Automated Timetabling 2008, Montréal/Canada
- 03/08 “Robustes Maschinenscheduling”, 18. Workshop für “Quantitative BWL”, Nördlingen/Germany
- 11/07 “A Branching Scheme Fixing Breaks First”, INFORMS Annual Meeting 2007, Seattle/USA, November 4<sup>th</sup> -7<sup>th</sup> 2007
- 09/07 “Valid Inequalities for Minimum Cost RRT Models”, International Scientific Annual Conference “Operations Research 2007”, Saarbrücken/Germany, September 5<sup>th</sup> - 7<sup>th</sup> 2007

- 07/07 “Constructing Fair Sports Leagues Schedules”, 8<sup>th</sup> Workshop on Models and Algorithms for Planning and Scheduling Problems, Istanbul/Turkey
- 07/07 “Fairness in Tournaments Based on Strength Groups”, 22<sup>nd</sup> European Conference on Operational Research, Prague/Czech Republic
- 03/07 “Fairness durch Spielstärkegruppen”, 17. Workshop für “Quantitative BWL”, Jena/Germany
- 09/06 “Employing Home–Away Assignments in Branching Frameworks”, International Scientific Annual Conference “Operations Research 2006”, Karlsruhe/Germany, September 6<sup>th</sup> -8<sup>th</sup> 2006
- 08/06 “Scheduling Sports Leagues using Branch & Price”, The 6<sup>th</sup> International Conference on the Practice and Theory of Automated Timetabling 2006, Brno/Czech Republic
- 05/06 “Round Robin Tournaments and Three Index Assignment”, Workshop “Scheduling Algorithms for New Emerging Applications”, Marseille/France
- 03/06 “Heim–Auswärts–Muster von Ligaspielplänen”, 16. Workshop für “Quantitative BWL”, Moritzburg/Germany
- 09/05 “Container Transport Scheduling Based on Inventory Management Ideas”, International Scientific Annual Conference “Operations Research 2005”, Bremen/Germany, September 7<sup>th</sup> -9<sup>th</sup> 2005
- 03/05 “Scheduling im Container-Terminal – Container-Transport ohne Zeitvorgaben”, 15. Workshop für “Quantitative BWL”, Grainau/Germany

## Seminars

- 02/17 “Container Dispatching and Conflict-Free Yard Crane Routing in an Automated Container Terminal”, Kühne Logistics University, Hamburg/Germany
- 05/15 “Locks, Graphs, and Intervals”, University of Wuppertal, Wuppertal/Germany
- 04/15 “Locks, Graphs, and Intervals”, WOPL Seminar Series, University of Wuppertal, Wuppertal/Germany
- 04/15 “Locks, Graphs, and Intervals”, University of Osnabrück, Osnabrück/Germany
- 03/15 “Auktionen – Optimierung und Design”, 25. Workshop für “Quantitative BWL”, Schwerte /Germany
- 12/13 “Pricing Combinatorial Auctions by a Set of Linear Price Vectors”, University of Hamburg, Hamburg/Germany

- 11/13 “Pricing Combinatorial Auctions by a Set of Linear Price Vectors”, University of Augsburg, Augsburg/Germany
- 01/13 “A pricing scheme for combinatorial auctions based on bundle sizes”, University of Cologne, Cologne/Germany
- 11/12 “Deciding priority of rail mounted gantries when transport job sequences are given”, Operations Research Seminar, ORSTAT, Faculty of Business and Economics, KU Leuven, Leuven/Belgium
- 02/12 “Scheduling co-operating stacking cranes with predetermined container sequences”, International Centre for Maritime Studies, The Hong Kong Polytechnic University, Hong Kong, China
- 01/12 “Vorfahrtsregelung für Automated Stacking Cranes”, University of Cologne, Cologne/Germany
- 05/10 “A new Machine Scheduling Model for Maintenance Scheduling”, University of Cologne, Cologne/Germany
- 01/10 “New Machine Scheduling Models with Applications in Logistics and Operations Management”, Imperial College London, London/United Kingdom
- 11/09 “Scheduling Problems at Transshipment Terminals and Evolutionary Solution Techniques”, Technical University of Munich, Munich/Germany
- 11/09 “Inventory Constrained Scheduling on a Single Machine: Complexity and Appropriate Representation Schemes”, Technical University of Clausthal, Clausthal/Germany
- 09/09 “New Machine Scheduling Models with Applications in Logistics”, Technical University of Denmark, Copenhagen/Denmark
- 07/09 “Inventory Constrained Scheduling on a Single Machine and Metaheuristic Solution Approaches”, University of Wuppertal, Wuppertal/Germany
- 10/08 “Robustness in Machine Scheduling through Optimal Buffer Time Allocation”, Tepper School of Business, Carnegie Mellon University, Pittsburgh/USA
- 04/08 “Some Open Problems and Some Not So Open Problems in Sports Leagues Scheduling”, Stern School, New York University, New York/USA
- 11/07 “Scheduling Sports Leagues by Branching According to Feasible Home-Away-Pattern Sets”, Stern School, New York University, New York/USA
- 05/06 “Sportligaplanung: Modelle, Komplexität und eine offene Frage”, Gastvortrag im Rahmen von “Modellierung im Interdisziplinären Studien-Programm”, Universität Kaiserslautern/Germany, May 8<sup>th</sup> 2006

## Industry



- 05/15 “Automatisierte Produktionsplanung im Mittelstand”, Siegener Mittelstandstagung 2015, Siegen, Germany, May 30<sup>th</sup> 2015
- 05/15 “DC Planning meets Operations Research: Automatisierte Planung ist machbar!”, G.I.B Success Days 2015, Siegen, Germany, May 6<sup>th</sup> 2015
- 10/14 “Ablaufplanung: Aus dem Elfenbeinturm in die Praxis und zurück”, G.I.B.mbH Infotainment Event, Friedrichshafen, Germany, October 24<sup>th</sup> 2014
- 09/14 “Ablaufplanung: Aus dem Elfenbeinturm in die Praxis und zurück”, G.I.B.mbH Infotainment Event, Bottrop, Germany, September 19<sup>th</sup> 2014
- 08/14 “Ablaufplanung: Aus dem Elfenbeinturm in die Praxis und zurück”, G.I.B.mbH Infotainment Event, Eltville am Rhein, Germany, August 29<sup>th</sup> 2014
- 07/14 “Neue Fragestellungen und erste Ansätze zur Planung von Rüstvorgängen und Wartungsaktivitäten”, Camelot Days, Mannheim, Germany, July 4<sup>th</sup> 2014
- 05/14 “Kooperation mit Erfolgsaussicht: Wie Forschung, Lehre und Wirtschaft voneinander profitieren können”, G.I.B Success Days 2014, Siegen, Germany, May 22<sup>nd</sup> 2014
- 01/14 “Mitarbeiterbefragung 2013 – Heinrichs GmbH”, Heinrichs GmbH, Lennestadt, Germany, January 8<sup>th</sup> 2014
- 10/13 “Geringe Datenqualität in der Produktionsplanung: erhöhte Lagerbestände, erhöhte Durchlaufzeit, geringere Lieferfähigkeit”, IHK Siegen, Germany, October 29<sup>th</sup> 2013
- 10/13 “Imageanalyse – St. Marien-Krankenhaus Siegen gem. GmbH”, St. Marien-Krankenhaus Siegen, Germany, October 15<sup>th</sup> 2013
- 10/11 “Scheduling co-operating stacking cranes with predetermined container sequences”, INFORM GmbH, Aachen, Germany, October 6<sup>th</sup> 2011
- 06/09 “Optimierungsprozesse in der Automobilindustrie”, Auto Uni Wolfsburg, June 2<sup>nd</sup> 2009
- 06/06 “Nachfrageprognose bei Schwering & Hasse”, Schwering & Hasse Elektrodraht GmbH, Lügde, Germany
- 06/06 “Priorisierung von Container-Brücken mittels AGV-Mindestanzahlen: Konzept und Bewertung”, Container Terminal Altenwerder, Hamburg, Germany
- 03/06 “Mustergenerierung und Maschinenbelegung”, Synflex Elektro GmbH & Co. KG, Blomberg, Germany
- 05/05 “AGV-Scheduling mit Lagerhaltungsprinzipien”, Container Terminal Altenwerder, Hamburg, Germany

## **Defence**

05/07 “Sports Leagues Scheduling – Models, Combinatorial Properties, and Optimization Algorithms”, University of Kiel

## **Habilitation**

04/11 “Koordination von kooperierenden Containerkränen”, University of Cologne