

3.8 Detailed Schedule of Parallel Sessions

In the following the parallel sessions are listed in chronological order.

3.8.1 Wednesday, Sep. 3, 2003, 13:30 – 15:30

Praxis des Revenue Management (Section 1)

WED 13:30 – 15:30, Room: NU 12a, Chair: Klein, Robert

1. **Low Cost Carrier - ein neues Feld für Revenue Management**
Thiel, Rüdiger (*Lufthansa Systems Berlin*) (Abstract p. 63)
 2. **Revenue Management in der Gaswirtschaft**
Dörband, Robert (*viavera GmbH, Dortmund*) (Abstract p. 59)
 3. **Herausforderungen für das Ertragsmanagement im kombinierten Güterverkehr**
Papadopoulos, Konstantinos (*c/o Kombiverkehr GmbH & Co KG, Frankfurt*) (Abstract p. 62)
 4. **Revenue Management und Dynamic Pricing im Rahmen der GOR (Diskussion)**
Klein, Robert (*Institut für BWL, Technische Universität Darmstadt*)
Wäscher, Gerhard (*Otto-von-Guericke-Universität Magdeburg*) (Abstract p. 60)
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Planning UMTS Network (Section 2)

WED 13:30 – 15:30, Room: AW 1017, Chair: Martin, Alexander

1. **Snapshots for Planning and Evaluation of Cellular Networks**
Fledderus, Erik R. (*TNO Telecom / Eindhoven University of Technology*) (Abstract p. 65)
 2. **Models for UMTS Radio Network Planning**
Eisenblätter, Andreas (*atesio GmbH, Berlin*) (Abstract p. 64)
 3. **Optimization Methods for UMTS Radio Network Planning**
Junglas, Daniel (*Technische Universität Darmstadt - Fachbereich Mathematik*) (Abstract p. 65)
 4. **Optimization for UMTS Radio Access Network Planning**
Ziegelmann, Mark (*Siemens AG, München*) (Abstract p. 66)
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Process Industry (Section 3)

WED 13:30 – 15:30, Room: NU 04, Chair: Quadt, Daniel

1. **Campaign Planning with Time-Indexed Model Formulations**
Sürle, Christopher (*Technische Universität Darmstadt*) (Abstract p. 79)
 2. **A Mixed Integer Programming Approach for the Development of Production Planning in the Process Industry**
Omar, Mohamed Khaled (*Multimedia University, Selangor*) (Abstract p. 74)
 3. **Ein heuristisches Verfahren auf Basis von Prioritätsregeln zur Produktionsplanung in der Prozessindustrie**
Schoner, Peter (*Universität Kassel*) (Abstract p. 77)
 4. **Integrated Procurement and Production Optimization in the Meat Processing Industry**
Kroll, Frank (*SAS Institute GmbH*) (Abstract p. 72)
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Supply Chain Inventories (Section 3)

WED 13:30 – 15:30, Room: NU 05, Chair: Minner, Stephan

1. **Analyzing the Behavior of Supply Chains in Response to Stationary and Non-Stationary Demand: A Control Theoretic Approach**
Hoberg, Kai (*Institute of Supply Chain Management, Münster University*) (Abstract p. 70)

2. **Methods for Balanced Allocation in Mathematical Programming Models for Supply Chain Operations Planning**
Spitter, Judith Maria (*Technische Universiteit Eindhoven*) (Abstract p. 78)
 3. **The Influence of Inventory Deviation on Lead-Time and Utilization**
Jodlbauer, Herbert (*FH-Steyr*) (Abstract p. 70)
 4. **Waiting Time Probabilities for Customer Orders in a Supply Chain**
Zillus, Andrea (*Institut für Fördertechnik und Logistiksysteme, Universität Karlsruhe*) (Abstract p. 80)
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Vehicle Routing and Scheduling: Practice (Section 4)

WED 13:30 – 15:30, Room: NU 09, Chair: Daduna, Joachim

1. **Generic Modelling and Algorithms for Real-World Vehicle Routing and Scheduling Problems**
Grünert, Tore (*LuF Operations Research und Logistik Management, RWTH Aachen*) (Abstract p. 84)
 2. **Combined Request Selection and Transport Planning – Models and Algorithms**
Schönberger, Jörn (*Chair of Logistics, University of Bremen*) (Abstract p. 89)
 3. **A Real-World S-MD-mVRP-TW**
Garn, Wolfgang Walter (*Telekom Austria AG / BMR / Operations Research, Universität Wien*) (Abstract p. 83)
 4. **Vermittlung von Fahrgemeinschaften betrachtet als Vehicle Routing Problem**
Reents, Gerriet (*Universität Oldenburg*) (Abstract p. 87)
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Further Scheduling Topics 1 (Section 5)

WED 13:30 – 15:30, Room: NU 01, Chair: Brucker, Peter

1. **Decomposition of Railway Scheduling Problems**
Brucker, Peter (*Universität Osnabrück*) (Abstract p. 90)
 2. **A Lagrangean Heuristic for the Weighted Job Interval Scheduling Problem**
Elendner, Thomas (*University of Kiel*) (Abstract p. 91)
 3. **Semi On-Line Problems on Identical Machines**
Kotov, Vladimir (*DMA Department, Belarusian State University, Minsk*) (Abstract p. 93)
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Marketing and Data Analysis 1 (Section 6)

WED 13:30 – 15:30, Room: NU 08, Chair: Wagner, Udo

1. **Linking Conjoint Analysis and Quality Function Deployment for Optimal Product Design**
Baier, Daniel (*Brandenburg University of Technology Cottbus*) (Abstract p. 98)
 2. **Product Bundling as a Marketing Application**
Stauß, Bernd (*Inst. f. Entscheidungstheorie u. Unternehmensforschung, Univ. Karlsruhe*) (Abstract p. 101)
 3. **Using Multidimensional Scaling in Recommender Systems**
Thoma, Patrick (*Universität Karlsruhe*) (Abstract p. 102)
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Bank Management (Section 8)

WED 13:30 – 15:30, Room: NU 10, Chair: Breitner, Michael H.

1. **Neuerungen im Bereich der Data Envelopment Analysis und deren Einsatz im Bankensektor**
Varmaz, Armin (*Lehrstuhl für ABWL, insb. Finanzwirtschaft, Universität Bremen*) (Abstract p. 111)
2. **How to Control Dynamically Market Risk Setting Risk Limits?**
Straßberger, Mario (*Lehrstuhl für Allgemeine Betriebswirtschaftslehre, Universität Jena*) (Abstract p. 110)
3. **WARRANT-PRO-2: A GUI-Software for Easy Evaluation, Design and Visualization of European Double-Barrier Options**
Breitner, Michael H. (*Institut für Wirtschaftsinformatik, Universität Hannover*) (Abstract p. 107)

Theory of Linear and Nonlinear Optimization (Section 10)

WED 13:30 – 15:30, Room: NU 13, Chair: Recht, Peter

1. **A Mixed-Discrete Bilevel Programming Problem**
Dempe, Stephan (*Technische Universität Bergakademie Freiberg*) (Abstract p. 116)
 2. **The Bilevel Optimization Problems with a Multiple-Choice Knapsack Problem on the Lower Level**
Plyasunov, Alexander (*Sobolev Inst. of Mathematics, Novosibirsk*) (Abstract p. 119)
 3. **On Types of Convergence of Penalty Functions Method**
Belousov, Evgeny (*Moscow State University*) (Abstract p. 114)
 4. **Relaxation Schemes for Constrained Variational Problems in Dual Formulation**
Buss, Hinderk (*Institut für Angewandte Mathematik, Universität Heidelberg*) (Abstract p. 115)
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Cones, Clustering and Stable Sets (Section 11)

WED 13:30 – 15:30, Room: NU 14, Chair: Gritzmann, Peter

1. **Generating Spanning Cones and Strongly Connected Digraphs**
Khachiyan, Leonid (*Rutgers University, New Jersey*) (Abstract p. 127)
 2. **Consolidation of Farming by Means of Norm-Maximization**
Brieden, Andreas (*Technical University München*) (Abstract p. 124)
 3. **Cluster Techniques, Polytopes and the Optimization of Search Strategies within the Analysis of DNA-Expression Data**
Pickl, Stefan (*Department of Mathematics -ZAIK- University of Cologne*) (Abstract p. 133)
 4. **Solving Weighted Stable Set Problems by the Simplex Method**
Euler, Reinhardt (*Faculté des Sciences, Brest*) (Abstract p. 125)
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Genetic and Interactive Algorithms (Section 11)

WED 13:30 – 15:30, Room: NU 15, Chair: Kolokolov, Alexander

1. **Human-Guided Search: Survey and Recent Results**
Klau, Gunnar W. (*Institut für Computergraphik und Algorithmen, Technische Univ. Wien*) (Abstract p. 128)
 2. **Ein genetischer Algorithmus für das zweidimensionale Strip-Packing-Problem**
Bortfeldt, Andreas (*Fernuniversität Hagen*) (Abstract p. 123)
 3. **Genetic Algorithm Fitness Functions for the Nesting Problem**
Kubitschek, Frank (*Universität der Bundeswehr Hamburg*) (Abstract p. 130)
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Portfolio-Optimization (Section 12)

WED 13:30 – 15:30, Room: NU 12, Chair: Rieder, Ulrich

1. **Portfolio Optimization under Partial Information: Parameter Estimation in a Hidden Markov Model**
Sass, Jörn (*Mathematics Department, University of British Columbia, Vancouver*) (Abstract p. 139)
2. **On Random Sums and Compound Process Models in Financial Mathematics**
Volf, Petr (*Institute of Information Theory and Automation, Prague*) (Abstract p. 140)
3. **On the Set of Optimal Policies in Variance Penalized Markov Decision Chains**
Sladky, Karel (*Institute of Information Theory and Automation, Academy of Sciences, Prague*) (Abstract p. 140)
4. **Optimal Stopping Approach to Investment Timing Problem**
Arkin, Vadim (*Central Economics and Mathematics Institute RAS, Moscow*) (Abstract p. 137)

Neural Networks (Section 13)

WED 13:30 – 15:30, Room: IS 0011, Chair: Spengler, Thomas

1. **Application of Neural Networks in Advanced Planning**
Rohde, Jens (*Technical University Darmstadt*) (Abstract p. 144)
2. **The Neural Network Based Integrated Multi-Criteria Decision Support System**
Zhang, Kejing (*Universität Karlsruhe*) (Abstract p. 146)
3. **Model Based Feature Selection by Neural Networks**
Zimmermann, Hans-Georg (*Siemens AG Corporate Technology*) (Abstract p. 146)
4. **Cognitive Agents with Utility Functions**
Zimmermann, Hans-Georg (*Siemens AG Corporate Technology*) (Abstract p. 146)

Statistics and Econometrics (Section 14)

WED 13:30 – 15:30, Room: NU 03, Chair: Kogelschatz, Hartmut

1. **Least Squares Estimation in Linear Regression Models with Vague Concepts**
Krätschmer, Volker (*Universität des Saarlandes, Saarbrücken*) (Abstract p. 149)
2. **Testen kausaler Effekte**
Brosche, Carmen (*Lehrst. f. Wirtschafts- u. Sozialstatistik, Friedrich-Schiller-Universität Jena*) (Abstract p. 147)
3. **Stochastic Optimization and Statistical Estimates**
Vogel, Silvia (*Technical University Ilmenau*) (Abstract p. 150)

Anreizprobleme mehrerer Agenten sowie Unternehmensbewertung und Kapitalkosten (Section 16)

WED 13:30 – 15:30, Room: NU 06, Chair: Korn, Evelyn

1. **Zur Manipulationsresistenz kollektiver Entscheidungsregeln**
Krapp, Michael (*University of Augsburg*) (Abstract p. 155)
2. **Unternehmenssteuerung mit undifferenzierten Anreizsystemen**
Daugart, Jan (*Universität Hannover*) (Abstract p. 154)
3. **Unternehmensbewertung bei atmender Verschuldung und Insolvenzrisiko**
Stephan, Jörg (*Sem. für Allg. Betriebswirtschaftslehre und Controlling, Universität zu Köln*)
Weiß, Matthias (*Sem. für Allg. Betriebswirtschaftslehre und Controlling, Universität zu Köln*) (Abstract p. 157)
4. **Die Konzeption operativer Planungsrechnungen aus kapitalmarkttheoretischer Sicht**
Dierkes, Stefan (*Universität Leipzig*) (Abstract p. 154)

Decision Support Systems (Section 17)

WED 13:30 – 15:30, Room: NU 02, Chair: Trinkaus, Hans L.

1. **A Knowledge Box for Dynamic Multicriteria Decision Support**
Trinkaus, Hans L. (*Fraunhofer Institute for Industrial Mathematics, Kaiserslautern*) (Abstract p. 162)
2. **A Decision Support System for Recovery Management in Public Transport**
Suhl, Leena (*Decision Support and Operations Research, University of Paderborn*) (Abstract p. 161)
3. **K-Pool: Concepts for Interfacing Knowledge Management and Decision Support based on Contextual Collaboration and Web Technology**
Huang, Guanwei (*University of Paderborn*) (Abstract p. 159)

3.8.2 Wednesday, Sep. 3, 2003, 16:45 – 18:45

Forecasting and Impacts of Customer Behaviour (Section 1)

WED 16:45 – 18:45, Room: NU 12a, Chair: Fleischmann, Moritz

1. **Adaptive Mechanisms in an O&D Demand Forecasting System**
Riedel, Silvia (*Lufthansa Systems Berlin*) (Abstract p. 63)
 2. **A New Hybrid Method for the Detection of Outliers in an Airline's Booking Data**
Petrick, Anita (*Technische Universität Darmstadt*) (Abstract p. 62)
 3. **The Influence of Revenue Management Techniques on Customer Relations**
Lindenmeier, Jörg (*Albert-Ludwigs-Universität Freiburg*) (Abstract p. 61)
 4. **Service Pricing & Revenue Management: An Integrated Approach of Marketing and Operations**
Schön, Cornelia (*Institut für Wirtschaftstheorie und Operations Research, Universität Karlsruhe*) (Abstract p. 63)
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Optimization and Trading in Telecommunication and Information Technology (Section 2)

WED 16:45 – 18:45, Room: AW 1017, Chair: Eisenblätter, Andreas

1. **A Lagrangian Approach for Integrated Network Configuration and Routing Planning in IP Networks**
Bley, Andreas (*Konrad-Zuse-Zentrum für Informationstechnik Berlin*) (Abstract p. 64)
 2. **Wavelength Assignment with Converters in All-Optical Networks**
Zymolka, Adrian (*Konrad-Zuse-Zentrum für Informationstechnik Berlin*) (Abstract p. 66)
 3. **Tarification of Connections in Telecom Networks**
Hoesel, Stan van (*University Maastricht*) (Abstract p. 65)
 4. **Optimization of the Economical Decisions on the Basis of Reflexive Information Technology – VINT-SELLING**
Popova, Olga (*Omsk State Technical University*) (Abstract p. 65)
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Network Design and Operations (Section 3)

WED 16:45 – 18:45, Room: NU 04, Chair: Melo, Teresa

1. **Planning Methodology and Optimization Approaches for Supply Chains in the Automotive after Sales Business**
Klohr, Volker (*LOCOM Consulting GmbH, Karlsruhe*) (Abstract p. 71)
 2. **Mixed Integer Programming (MIP) Approach for Distribution System Planning Problem**
Bilgen, Bilge (*Department of Industrial Engineering, Dokuz Eylul University, Izmir*) (Abstract p. 67)
 3. **Fast Heuristics for Territory Design**
Schröder, Michael (*Fraunhofer Institute for Industrial Mathematics, Kaiserslautern*) (Abstract p. 77)
 4. **Dynamic Multi-Commodity Facility Location: A Mathematical Modelling Framework for Strategic Supply Chain Planning**
Melo, Teresa (*Fraunhofer Institute for Industrial Mathematics, Kaiserslautern*) (Abstract p. 74)
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Inventory Control (Section 3)

WED 16:45 – 18:45, Room: NU 05, Chair: Spitter, Judith M.

1. **Deriving Inventory Control Policies for Periodic Review with Genetic Programming**
Kleinau, Peer (*University of Münster*) (Abstract p. 71)
2. **Multi-Product Replenishment Strategies under a Joint Capacity Constraint**
Minner, Stefan (*University of Paderborn*) (Abstract p. 74)
3. **Policy Approximation for the Production Inventory Problem with Stochastic Demand, Stochastic Yield and Production Leadtime**
Gotzel, Christian (*Otto-von-Guericke-Universität Magdeburg*) (Abstract p. 69)
4. **Coordinated Transportation and Inventory Management in Supply Chains**
Kiesmüller, Gudrun (*Technical University Eindhoven*) (Abstract p. 70)

Routing Problems (Section 4)

WED 16:45 – 18:45, Room: NU 09, Chair: Grünert, Tore

1. **A Genetic Algorithm Based Approach for Solving the Dynamic Pickup and Delivery Problem with Time Windows**
Pankratz, Giselher (*FernUniversität in Hagen*) (Abstract p. 87)
2. **An IP/CP Solution Procedure for the Vehicle Routing Problem with Alternative Drop Points and Time Constraints**
Cardeneo, Andreas (*Institute for Conveying Technology and Logistics, University of Karlsruhe*) (Abstract p. 81)
3. **Iterated Local Search, Variable Neighborhood Search and Hybrid Evolutionary Algorithms for Periodic Multiple Depot Vehicle Routing Problems**
Reinholz, Andreas (*University Dortmund*) (Abstract p. 88)
4. **Ein hybrider genetischer Algorithmus zur Transportdisposition im Lieferservice**
Homburger, Jörg (*Berufsakademie Stuttgart*) (Abstract p. 85)

Project Scheduling (Section 5)

WED 16:45 – 18:45, Room: NU 01, Chair: Kolisch, Rainer

1. **A Random Key Based Genetic Algorithm for the Resource Constrained Project Scheduling Problem**
Fernando Gonçalves, José (*Faculdade de Economia da Universidade do Porto*) (Abstract p. 91)
2. **Dynamische Projektsteuerung unter Berücksichtigung der Risikoeinstellung der Projektleitung**
Wolf, Andreas (*Inst. f. Unternehmensführung u. Unternehmensforschung, Univ. Bochum*) (Abstract p. 97)
3. **Central vs. Decentral Scheduling of Research Projects**
Kolisch, Rainer (*Technical University München*) (Abstract p. 93)
4. **Tabu Search Algorithm for the Resource Constrained Project Scheduling Problem with Profit Reinvestment**
Soukhikh, Sergey (*Sobolev Inst. of Mathematics, Russian Academy of Sciences, Omsk*) (Abstract p. 96)

Marketing and Data Analysis 2 (Section 6)

WED 16:45 – 18:45, Room: NU 08, Chair: Baier, Daniel

1. **Identifying Patterns in Buying Behavior by Means of Growing Neural Gas Network**
Decker, Reinhold (*University of Bielefeld*) (Abstract p. 99)
2. **Web Robot Detection**
Bomhardt, Christian (*Inst. f. Entscheidungstheorie u. Unternehmensforschung, Univ. Karlsruhe*) (Abstract p. 98)
3. **Measurement of Online Visibility**
Schmidt-Mänz, Nadine S. (*Inst. f. Entscheidungsth. u. Unternehmensforsch., Univ. Karlsruhe*) (Abstract p. 100)

Financial Engineering (Section 8)

WED 16:45 – 18:45, Room: NU 10, Chair: Branger, Nicole

1. **Using Financial Engineering for the Valuation of Operational Flexibility**
Doege, Jörg (*Institut für Operations Research, ETH Zürich*) (Abstract p. 108)
2. **Tractable Hedging – An Implementation of Robust Hedging Strategies**
Branger, Nicole (*Goethe University Frankfurt*) (Abstract p. 107)
3. **Mathematical Optimization in Finance: Closing the Gap**
Nelissen, Franz (*GAMS Software GmbH, Cologne*) (Abstract p. 110)

Simulation Software and Applications (Section 9)

WED 16:45 – 18:45, Room: AW 1016, Chair: Günther, Hans-Otto

1. **Konfiguration von Anlagen der Elektronikmontage mit Hilfe objektorientierter Simulation**
Grunow, Martin (*Produktionsmanagement, Technische Universität Berlin*) (Abstract p. 113)
 2. **Integrierte Simulation mittels EPOS**
Zisgen, Horst (*IBM Deutschland, Mainz*) (Abstract p. 114)
 3. **SimTool - eine Plattform zum Design interaktiver Kurse im Bereich Simulation**
Reiners, Torsten (*Technische Universität Braunschweig*) (Abstract p. 113)
 4. **New Sampling Techniques and Variance Reduction Monte Carlo Simulation Algorithms for Dirichlet Distribution**
Gouda, Ashraf A. (*Inst. of Mathematics, Budapest Univ. of Technology and Economics*) (Abstract p. 113)
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Multiobjective Optimization (Section 10)

WED 16:45 – 18:45, Room: NU 13, Chair: Dempe, Stephan

1. **On Geoffrions Proper Efficiency in $C(T)$**
Winkler, Kristin (*Inst. of Optimization and Stochastics, University Halle-Wittenberg*) (Abstract p. 121)
 2. **Connections between Semidefinite Programming and Vector Optimization**
Jahn, Johannes (*Universität Erlangen-Nürnberg*) (Abstract p. 118)
 3. **An Interactive Weighted-Sum Algorithm for Solving Multiple Objective Linear Fractional Programming Problems**
Lourenço, João (*ISCAC Instituto Politécnico de Coimbra*) (Abstract p. 118)
 4. **Reference Points and the Computation of Non-Dominated Solutions in MOLFP**
Costa, João Paulo (*Faculdade de Economia Universidade de Coimbra*) (Abstract p. 115)
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Assignments (Section 11)

WED 16:45 – 18:45, Room: NU 14, Chair: Anjos, Miguel

1. **Three-Index Axial Assignment Problem on Single-Cycle Permutations: Feasible Solutions and Approximation Algorithms**
Korkishko, Natalie (*Novosibirsk State University*) (Abstract p. 129)
 2. **A Fast Algorithm for a Parametric Assignment Problem and Applications to Max-Algebra**
Gassner, Elisabeth (*Graz University of Technology*) (Abstract p. 125)
 3. **The Quadratic Assignment Problem: Reaching the Optimal Solution using Pairwise Permutation**
Demidenko, Vitali (*Inst. of Mathematics, Nat. Academy of Sciences of Belarus, Minsk*) (Abstract p. 124)
 4. **A New Tabu Search Algorithm for the Generalized Assignment Problem**
Paschenko, Mikhail (*Sobolev Inst. of Mathematics, Novosibirsk*) (Abstract p. 132)
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Hamilton Cycle and TSP (Section 11)

WED 16:45 – 18:45, Room: NU 15, Chair: Borndörfer, Ralf

1. **Small Instance Relaxations for the Traveling Salesman Problem**
Wenger, Klaus M. (*Institute of Computer Science, University of Heidelberg*) (Abstract p. 135)
2. **Solving the Sequential Ordering Problem with Automatically Generated Lower Bounds**
Hernadvolgyi, Istvan (*University of Ottawa*) (Abstract p. 127)
3. **A $3/4$ -Approximation Algorithm for Finding Two Disjoint Hamiltonian Cycles of Maximum Total Weight**
Baburin, Alexei Y. (*Sobolev Inst. of Mathematics, Novosibirsk*) (Abstract p. 122)

4. **An Approximation Algorithm for a Metric Problem of Finding Two Disjoint Hamiltonian Cycles of Minimum Weight**
Gimadi, Edward (*Sobolev Inst. of Mathematics, Novosibirsk*) (Abstract p. 126)
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Stochastic Programming (Section 12)

WED 16:45 – 18:45, Room: NU 12, Chair: Dupacova, Jitka

1. **Stochastic Programs with Decision-Dependent Probability Distributions**
Dupacova, Jitka (*Department of Statistics, Charles University, Prague*) (Abstract p. 137)
 2. **Stochastic Programs and Coherent Risk Measures: Stability and Decomposition Approaches**
Eichhorn, Andreas (*Humboldt-University Berlin*) (Abstract p. 138)
 3. **A Remark on Multiobjective Stochastic Optimization Problems: Stability and Empirical Estimates**
Kankova, Vlasta (*Inst. of Inf. Theory and Automation, Academy of Sciences, Czech Republic*) (Abstract p. 138)
 4. **Multivariate Lagrange Interpolation and its Application for Bounding Multivariate Discrete Moment Problems**
Madi-Nagy, Gergely (*Budapest University of Technology and Economics*) (Abstract p. 139)
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Decision Systems based on Fuzzy Logic (Section 13)

WED 16:45 – 18:45, Room: IS 0011, Chair: Poddig, Thorsten

1. **Ein entscheidungstheoretischer Ansatz zur Bewertung von Fuzzy-Regeln**
Beck, Sebastian (*Forschungszentrum Karlsruhe / Fernuniversität Hagen*) (Abstract p. 141)
 2. **Die Auswahl von Produktionsmaschinen mit Hilfe eines Fuzzy-Entscheidungsunterstützungssystems**
Guttenberger, Siegfried (*Berufskolleg Villingen-Schwenningen*) (Abstract p. 142)
 3. **Fuzzy-Szenario-Management**
Spengler, Thomas (*Otto-von-Guericke-Universität Magdeburg*) (Abstract p. 144)
 4. **Using Conception of Maximal p -Partite Structure of Fuzzy Graph for Classification Problem**
Starostina, Tatiana (*Taganrog State University of Radio-Engineering*) (Abstract p. 145)
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Dynamische Anreizprobleme (Section 16)

WED 16:45 – 18:45, Room: NU 06, Chair: Homburg, Carsten

1. **Gestaltung von Erfolgsrechnungen zur Steuerung langfristiger Projekte**
Hofmann, Christian (*Universität Hannover*) (Abstract p. 155)
 2. **Performancemessung und Informationsgehalt in einer Agency-Beziehung mit beschränkter Selbstbindungskraft**
Schöndube, Jens Robert (*Otto-von-Guericke Universität Magdeburg*) (Abstract p. 157)
 3. **Executive Pay: Prior Successes and Future Incentives**
Lukas, Christian (*Otto-von-Guericke Universität Magdeburg*) (Abstract p. 156)
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Internet based Learning (Section 17)

WED 16:45 – 18:45, Room: NU 02, Chair: Reiners, Torsten

1. **Interactively Learning Operations Research Methods with ActiveMath**
Gogvadze, George (*Universität des Saarlandes, Saarbrücken*) (Abstract p. 159)
 2. **Eine induktive Lernstrategie zur Verarbeitung sicherer Regeln**
Prümer, Birgit (*Lehrstuhl für BWL, insb. OR, Fernuniversität Hagen*) (Abstract p. 159)
 3. **Die adaptive virtuelle Lernumgebung SMARTFRAME**
Reiners, Torsten (*Abt. ABWL, Wirtschaftsinf. u. Inf.management, TU Braunschweig*) (Abstract p. 160)
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3.8.3 Thursday, Sep. 4, 2003, 08:30 – 10:00

Revenue Management with Multiple Resources (Section 1)

THU 08:30 – 10:00, Room: NU 12a, Chair: Kimms, Alf

1. **Optimal Threshold Policies and an Online Decision Rule for Multidimensional Resources in Revenue Management**
Feller, Jens (*Universität Dortmund*) (Abstract p. 59)
 2. **A New Resource Formulation of Multi-Product Revenue Management**
Meißner, Jörn (*Graduate School of Business, Columbia University, New York*) (Abstract p. 61)
 3. **Network Revenue Management: Some Issues on Upper and Lower Bounds**
Müller-Bungart, Michael (*Technical University Bergakademie Freiberg*) (Abstract p. 61)
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Cooperative Lotsizing (Section 3)

THU 08:30 – 10:00, Room: NU 04, Chair: Buscher, Udo

1. **Unternehmensübergreifende Losgrößenplanung mit dem Verfahren nach Blackburn-Millen**
Schulte, Gregor (*Technical University Dresden*) (Abstract p. 78)
 2. **Effizienzuntersuchungen in Losgrößenmodellen**
Behrens, Sven (*Fakultät für Wirtschaftswissenschaft, Ruhr-Universität Bochum*) (Abstract p. 66)
 3. **Coordination in Economic Production Quantities**
Sural, Haldun (*Middle East Technical University, Ankara*) (Abstract p. 79)
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Remanufacturing (Section 3)

THU 08:30 – 10:00, Room: NU 05, Chair: Kiesmüller, Gudrun

1. **Evaluating the Performance of Heuristics for the Disassemble-to-Order Problem**
Langella, Ian M. (*Otto-von-Guericke Universität Magdeburg*) (Abstract p. 72)
 2. **Location of Repairshops in a Stochastic Environment**
Ommereen, Jan-Kees van (*University of Twente*) (Abstract p. 75)
 3. **A Dynamic Model for Choosing the Optimal Technology in the Context of Reverse Logistics**
Kleber, Rainer (*Otto-von-Guericke-Universität Magdeburg*) (Abstract p. 71)
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Crew and Fleet Planning (Section 4)

THU 08:30 – 10:00, Room: NU 09, Chair: Irnich, Stefan

1. **Large Scale Crew-Rostering**
Kharraziha, Hamid (*Carmen Systems AB*) (Abstract p. 85)
 2. **Column Generation for Crew Pairing**
Galia, Rastislav (*Carmen Systems*) (Abstract p. 83)
 3. **Mehrdepot-Umlaufplanung für ÖPNV-Betriebe**
Kliewer, Natalia (*Universität Paderborn*) (Abstract p. 86)
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Crew/Staff Scheduling (Section 5)

THU 08:30 – 10:00, Room: NU 16 (Senatssaal), Chair: Mattfeld, Dirk C.

1. **Task Scheduling under Gang Constraints**
Mattfeld, Dirk Christian (*University of Bremen*) (Abstract p. 95)
2. **Scheduling Regular and Temporary Employees with Qualifications in a Casino**
Stark, Christoph (*Institut für Wirtschaftswissenschaften, Technische Universität Clausthal*) (Abstract p. 96)

3. Optimization of Cost and Robustness in Airline Crew Scheduling

Ehrgott, Matthias (*Department of Engineering Science, University of Auckland*) (Abstract p. 91)

Single-Machine Scheduling (Section 5)

THU 08:30 – 10:00, Room: NU 01, Chair: Kanet, John

1. Single Machine Scheduling with Precedence Constraints and Due Date Assignment

Gordon, Valery (*United Inst. of Informatics Problems, Nat. Academy of Sciences of Belarus, Minsk*) (Abstract p. 92)

2. Precedence Theorems for One-Machine Weighted Tardiness

Kanet, John (*University of Dayton*) (Abstract p. 93)

3. A Single Processor Scheduling Problem with a Range-Linear Model of Loss of Job Value

Krysiak, Tomasz (*Institute of Engineering Cybernetics, Wrocław University of Technology*) (Abstract p. 94)

Marketing and Data Analysis 3 (Section 6)

THU 08:30 – 10:00, Room: NU 08, Chair: Hildebrandt, Lutz

1. Ein einfaches Modell zur Bestimmung des Markenwechselfhaltens auf Konsumgütermärkten

Wagner, Udo (*Universität Wien*) (Abstract p. 102)

2. Modeling Brand Loyalty

Poukliakova, Lana (*University of Alberta*) (Abstract p. 100)

3. Konzeption eines intelligenten Systems zur Überwachung unternehmensrelevanter Marktentwicklungen

Scholz, Sören W. (*Lehrstuhl für Betriebswirtschaftslehre und Marketing, Universität Bielefeld*) (Abstract p. 101)

Clinical Radio Therapy Planning (Section 7)

THU 08:30 – 10:00, Room: AW 1017, Chair: Fleßa, Steffen

1. A Multiple-Objective Optimizer for Clinical Radiation Therapy Planning

Küfer, Karl-Heinz (*Fraunhofer Institute for Industrial Mathematics, Kaiserslautern*) (Abstract p. 104)

2. Modelling Clinical Decision Processes for Radiotherapy Planning

Monz, Michael (*Fraunhofer Institute for Industrial Mathematics, Kaiserslautern*) (Abstract p. 105)

3. Planning Patient Transports in Hospitals - Insights and a Project Report

Nickel, Stefan (*Fraunhofer Institute for Industrial Mathematics, Kaiserslautern*) (Abstract p. 105)

Risk Management (Section 8)

THU 08:30 – 10:00, Room: NU 10, Chair: Kleine, Andreas

1. Conditional Value-at-Risk bei diskreten Zufallsvariablen

Kleine, Andreas (*University of Hohenheim*) (Abstract p. 109)

2. Calculating Concentration-Sensitive Capital Charges with Conditional Value-at-Risk

Tasche, Dirk (*Deutsche Bundesbank*) (Abstract p. 111)

3. Umsetzung von Muster-Portfolio-Strategien im Rentenfondsmanagement

Nickel, Nils-Holger (*Universität Köln*) (Abstract p. 110)

Simulating Human Resources (Section 9)

THU 08:30 – 10:00, Room: NU 03, Chair: Grunow, Martin

1. **Service Quality and Customer Abandonment: A System Dynamics Approach to Call Center Management**
Armenia, Stefano (*Tor Vergata University - DISP, Rome*) (Abstract p. 112)
 2. **Simulation in Management**
Bradl, Peter (*Forwiss, Erlangen*) (Abstract p. 112)
-

Quadratic and Nonsmooth Optimization (Section 10)

THU 08:30 – 10:00, Room: NU 13, Chair: Mombaur, Katja D.

1. **Redundancies in Positive-Semidefinite Quadratic Programming**
Recht, Peter (*University of Dortmund*) (Abstract p. 120)
 2. **Constraint Qualifications for Non-Smooth Optimization Problems with Applications to Design Centering**
Stein, Oliver (*Rheinisch-Westfälische Technische Hochschule Aachen*) (Abstract p. 120)
 3. **Stability Optimization of Periodic Processes with Discontinuities**
Mombaur, Katja D. (*Interdisz. Zentrum für Wiss. Rechnen, Universität Heidelberg*) (Abstract p. 119)
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Scheduling 1 (Section 11)

THU 08:30 – 10:00, Room: NU 14, Chair: Euler, Reinhardt

1. **Solving Duty Scheduling Problems in Public Transit**
Borndörfer, Ralf (*Konrad-Zuse-Zentrum für Informationstechnik Berlin*) (Abstract p. 123)
 2. **Solving Coupled Task Problems to Optimality**
Oswald, Marcus (*Institut für Informatik, Universität Heidelberg*) (Abstract p. 132)
 3. **Scheduling Multiprocessor Tasks in the Hybrid Flow Shop**
Janiak, Adam (*Institute of Engineering Cybernetics, Wrocław University of Technology*) (Abstract p. 127)
-

Stability and Sensitivity (Section 11)

THU 08:30 – 10:00, Room: NU 15, Chair: Brieden, Andreas

1. **Stability Analysis of Some Integer Programming Algorithms**
Kolokolov, Alexander (*Sobolev Inst. of Mathematics, Russian Academy of Sciences, Omsk*) (Abstract p. 128)
 2. **Regions of Stability for Nonlinear Discrete Optimization Problems**
Fanghänel, Diana (*Technische Universität Bergakademie Freiberg*) (Abstract p. 125)
 3. **Sensitivity Analysis of Vector Discrete Optimization Problems**
Nikulin, Yury (*Belarussian State University, Minsk*) (Abstract p. 131)
-

Fuzzy Decision Support Systems (Section 13)

THU 08:30 – 10:00, Room: IS 0011, Chair: Rommelfanger, Heinrich

1. **Dienstplanbewertung mit unscharfen Regeln**
Schroll, Alexandra (*Otto-von-Guericke-Universität Magdeburg*) (Abstract p. 144)
2. **Duality in Fuzzy Linear Programming Based on Fuzzy Relations**
Ramik, Jaroslav (*Silesian University, School of Business, Karvina*) (Abstract p. 143)
3. **Tourenplanung bei vager Nachfrage**
Drawe, Michael (*Fakultät für Wirtschaftswissenschaft, Ruhr-Universität Bochum*) (Abstract p. 142)

Auctioning Systems (Section 15)

THU 08:30 – 10:00, Room: AW 1016, Chair: Lehmann-Waffenschmidt, Marco

1. **A Cumulative Genetic Algorithm to Solve Combinatorial Auction**
Galiano, Graziano (*University of Rome Tor Vergata*) (Abstract p. 151)
 2. **On Participation and Bidding in Sequential Procurement Auctions**
Reiß, J. Philipp (*Otto-von-Guericke-Universität Magdeburg*) (Abstract p. 152)
 3. **On Ascending Vickrey Auctions for Heterogeneous Objects**
Vries, Sven de (*Technical University München*) (Abstract p. 152)
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Controlling und Produktmarkt-Wettbewerb (Section 16)

THU 08:30 – 10:00, Room: NU 06, Chair: Dierkes, Stefan

1. **Zur Durchsetzung des Arm's Length Grundsatzes – Eine Win-Win Situation?**
Korn, Evelyn (*Eberhard Karls Universität Tübingen*) (Abstract p. 155)
 2. **Choice of Managerial Performance Measures and Their Effect on Incentives for Takeovers**
Pirchegger, Barbara (*Otto-von-Guericke Universität Magdeburg*) (Abstract p. 157)
 3. **Relative Performancebewertung auf Oligopolmärkten**
Asseburg, Holger (*Universität Hannover*) (Abstract p. 153)
-

Data and Knowledge Management (Section 17)

THU 08:30 – 10:00, Room: NU 02, Chair: Scheubrein, Ralph

1. **Strukturierung von Wissensdatenbanken mit Hilfe der Metapher „Lernziel“**
Scheubrein, Ralph (*Universität Hohenheim*) (Abstract p. 160)
 2. **Non-Linear Programming Solvers for Decision Analysis Support Systems**
Ding, Xiaosong (*Department of Information Technology and Media, Mid-Sweden University*) (Abstract p. 158)
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3.8.4 Thursday, Sep. 4, 2003, 13:30 – 15:30

Dynamic Pricing (Section 1)

THU 13:30 – 15:30, Room: NU 12a, Chair: Thonemann, Ulrich

1. **Revenue Management in Manufacturing**
Defregger, Florian (*Katholische Universität Eichstätt-Ingolstadt*) (Abstract p. 59)
 2. **Application of Capacity Options for Air Cargo Revenue Management**
Hellermann, Rolf (*WHU, Otto Beisheim Graduate School of Management, Koblenz*) (Abstract p. 60)
 3. **Coordinating Inventory and Pricing Decisions when Customers Stockpile**
Fleischmann, Moritz (*School of Management, Erasmus University Rotterdam*) (Abstract p. 60)
 4. **Coordination of Pricing and Inventory Control Across Products**
Thonemann, Ulrich (*University of Münster*) (Abstract p. 64)
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Coordination and Cooperation (Section 3)

THU 13:30 – 15:30, Room: NU 04, Chair: Leisten, Rainer

1. **Aggregation of Demand in Supply Chain Management using Approximated Shadow Prices**
Kleindienst, Erich (*University of Mannheim*) (Abstract p. 71)
 2. **The Impact of the Exchange of Market and Stock Information on the Bullwhip Effect in Supply Chains**
Faißt, Bernd (*University of Karlsruhe*) (Abstract p. 69)
 3. **Production Planning under Dynamic Environment: An Integrated Framework Approach**
Bong, Cheng-Siong (*Multimedia University, Selangor*) (Abstract p. 67)
 4. **Planungsmodelle zur Unterstützung eines zentralen und dezentralen Supply Chain Planning**
Pibernik, Richard (*Johann Wolfgang Goethe-Universität Frankfurt*) (Abstract p. 75)
-

Production and Inventory Control (Section 3)

THU 13:30 – 15:30, Room: NU 05, Chair: Sürle, Christopher

1. **Analysis and Optimization of Production Authorization Card Controlled Complex Manufacturing Systems**
Rücker, Thomas (*Technical University Ilmenau*) (Abstract p. 76)
 2. **Scheduling with Storage Resources**
Schwindt, Christoph (*Universität Karlsruhe*) (Abstract p. 78)
 3. **A Priority-Rule Based Method for Batch Production Scheduling in the Process Industries**
Trautmann, Norbert (*Institut für Wirtschaftstheorie und OR, Universität Karlsruhe*) (Abstract p. 79)
 4. **Assignment and Dynamic Loading of Chemical Products to Bulk Tankers**
Elhafsi, Mohsen (*University of California, Berkeley*) (Abstract p. 69)
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Vehicle Routing and Scheduling: Theory (Section 4)

THU 13:30 – 15:30, Room: NU 09, Chair: Crainic, Teodor

1. **Using MST Information for Solving the TSP with an Ant System**
Reimann, Marc (*Universität Wien*) (Abstract p. 88)
2. **Local Search for Vehicle Routing and Scheduling Problems (Part I): Neighborhoods**
Irnich, Stefan (*LuF Operations Research und Logistik Management, RWTH Aachen*) (Abstract p. 85)
3. **Local Search for Vehicle Routing and Scheduling Problems (Part II): Search Techniques**
Grünert, Tore (*LuF Operations Research und Logistik Management, RWTH Aachen*) (Abstract p. 84)
4. **On Dynamic Pickup and Delivery Vehicle Routing with Several Time Windows and Waiting Times**
Fabri, Anke (*Operations Research und Wirtschaftsinformatik, Universität Dortmund*) (Abstract p. 82)

Further Scheduling Topics 2 (Section 5)

THU 13:30 – 15:30, Room: NU 16 (Senatssaal), Chair: Buchholz, Jens

1. **Efficient Simulation of Queues in Heavy Traffic**
Wang, Chia-Li (*National Dong Hwa University, Hualien*) (Abstract p. 97)
2. **Risiko- und Konfliktmanagement im IT-Projekt**
Ahuja, André (*Lehrstuhl für BWL, insb. OR, FernUniversität Hagen*) (Abstract p. 90)
3. **Optimal Machine Scheduling in a Shipyard**
Buchholz, Jens (*University Duisburg-Essen*) (Abstract p. 91)
4. **Preemptable Malleable Tasks Scheduling Problem**
Machowiak, Maciej (*Poznan University of Technology*) (Abstract p. 95)

Flow-Shop Scheduling (Section 5)

THU 13:30 – 15:30, Room: NU 01, Chair: Knust, Sigrid

1. **Complexity Results for Flow-Shop Problems with a Single Server**
Knust, Sigrid (*Universität Osnabrück*) (Abstract p. 93)
2. **Scheduling Two-Machine Flowshop with one Inavailability Interval**
Kovalyov, Mikhail Y. (*Belarus State University, Minsk*) (Abstract p. 94)
3. **Approximation Algorithms for Single and Two-Machine Flow Shop Problems with Exact Delays**
Ageev, Alexander A. (*Sobolev Inst. of Mathematics, Novosibirsk*) (Abstract p. 90)
4. **Scheduling Tasks in a Two Machines Flow Shop with Transportation**
Pawlak, Grzegorz (*Institute of Computing Science, Poznan University of Technology*) (Abstract p. 96)

Marketing and Data Analysis 4 (Section 6)

THU 13:30 – 15:30, Room: NU 08, Chair: Gaul, Wolfgang

1. **Kundensegmentierung auf Basis der logistischen Regression**
Missler-Behr, Magdalena (*Wirtschaftswissenschaftliches Zentrum, Universität Basel*) (Abstract p. 100)
2. **Determinants and Behavioral Consequences of Customer Loyalty and Dependence in Online Brokerage: Results from a Causal Analysis**
Staack, Yvonne (*McKinsey & Co. Hamburg*) (Abstract p. 101)
3. **Ein Modell zur Erklärung der Kundenbindung im Automobilssektor**
Hilbert, Andreas (*Lehrst. f. Math. Methoden der Wirtschaftswissenschaften, Univ. Augsburg*) (Abstract p. 99)
4. **Marketing Decision Support by Means of Stochastic Programming in a Fuzzy Environment**
Weber, Klaus (*Lufthansa Systems Berlin*) (Abstract p. 102)

Public Health and Hospital Management (Section 7)

THU 13:30 – 15:30, Room: AW 1017, Chair: Küfer, Karl-Heinz

1. **Many Worlds of Health: A System Dynamics Model of the Epidemiological Transition**
Fleßa, Steffen (*Department of Public Health, University of Heidelberg*) (Abstract p. 103)
2. **Einsatzplanung für medizinisches Personal in klinischen Studien**
Günther, Hans-Otto (*Technische Universität Berlin*) (Abstract p. 104)
3. **Optimierung oder globale Effizienzbestimmung in Krankenhäusern?**
Zimmermann, Hans-Jürgen (*INFORM, Aachen*) (Abstract p. 106)

Financial Markets (Section 8)

THU 13:30 – 15:30, Room: NU 10, Chair: Dorfleitner, Gregor

1. **Modellanalytische Preis-Gleichgewichtsbeziehungen auf Kassa- und Terminmärkten**
Fink, Claudia (*Universität Graz*) (Abstract p. 108)
 2. **How Short-Termed is the Trading Behavior in German Futures Markets?**
Dorfleitner, Gregor (*Universität Augsburg*) (Abstract p. 108)
 3. **Trading Volume and Stock Return Volatility**
Mestel, Roland (*Department of Banking and Finance, University of Graz*) (Abstract p. 109)
 4. **Der Einfluss von Handelssystemen auf die Volatilität eines Investments**
Klein, Christian (*Institut für Statistik und Math. Wirtschaftsforschung, Univ. Augsburg*) (Abstract p. 109)
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Numerical Methods of Nonlinear Optimization 1 (Section 10)

THU 13:30 – 15:30, Room: NU 13, Chair: Stein, Oliver

1. **On a primal-proximal heuristic in combinatorial optimization. Application to unit-commitment**
Lemarechal, Claude (*INRIA Grenoble*) (Abstract p. 118)
 2. **Global Optimization with GAMS - Applications and Performance**
Bussieck, Michael (*GAMS Development Corporation*) (Abstract p. 115)
 3. **Barrier-Projective Methods for Linear Complementarity Problem**
Zhadan, Vitalij (*Dorodnicyn Computing Centre of RAS, Moscow*) (Abstract p. 121)
 4. **Parallel Multimethod Technology for Solving Nonlinear Constraint Programming Problems**
Izhutkin, Victor (*Mari State University, Yoshkar-Ola*) (Abstract p. 117)
-

Graph Theory and Layout (Section 11)

THU 13:30 – 15:30, Room: NU 14, Chair: Gruber, Gerald

1. **On Maximal Edge-Disjoint Cycle Decompositions in Graphs**
Degenhardt, Jan (*University of Dortmund*) (Abstract p. 124)
 2. **Approximation Algorithms for Hypergraph Layout Problems**
Lepin, Victor (*Inst. of Mathematics, Nat. Academy of Sciences of Belarus, Minsk*) (Abstract p. 130)
 3. **Dimension of Orbit in Graph**
Montenegro, Eduardo (*Universidad Católica de Valparaíso*) (Abstract p. 131)
 4. **P_3 -dominable Graphs**
Orlovich, Yury (*Inst. of Mathematics, Nat. Academy of Sciences of Belarus, Minsk*) (Abstract p. 132)
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VLSI, Design and Steiner Trees (Section 11)

THU 13:30 – 15:30, Room: NU 15, Chair: Mutzel, Petra

1. **On the Relationship between Geodetic and Steiner Numbers of Graphs**
Voß, Stefan (*Institut für Wirtschaftsinformatik, Universität Hamburg*) (Abstract p. 135)
2. **The Fractional Prize-Collecting Steiner Tree Problem**
Pfersch, Ulrich (*University of Graz*) (Abstract p. 133)
3. **On Solving some Complex Design Problems using Discrete Optimization Models**
Yarosh, Alexandra (*Omsk State Service Institute*) (Abstract p. 136)
4. **A Survey of Optimization Problems in Automatic Leaf-Cells Synthesis Techniques for VLSI Chips Production**
Kozik, Andrzej (*Wroclaw University of Technology*) (Abstract p. 129)

Artificial Intelligence (Section 13)

THU 13:30 – 15:30, Room: IS 0011, Chair: Poddig, Thorsten

1. **Structural Optimization in Aircraft Engineering using Support Vector Machines for Design Classification**
Kaletta, Peter (*Institute of Aerospace Engineering, Technical University Dresden*) (Abstract p. 142)
2. **Optimization by Gaussian Processes Assisted Evolution Strategies**
Ulmer, Holger (*Center for Bioinformatics Tübingen, University of Tübingen*) (Abstract p. 145)
3. **A Multi-Criteria Prioritization of Investment Projects of a Municipality under Linguistic Information**
Devjak, Srečko (*Faculty of Public Administration, University of Ljubljana*) (Abstract p. 141)
4. **Ein informationstheoretisches Modell assoziativer Strukturen - Anbieter und Sortimente in der Kundenwahrnehmung**
Kulmann, Friedhelm (*Lehrstuhl für BWL, insb. OR, Fernuniversität Hagen*) (Abstract p. 143)

Econometrics and Mathematical Economics (Section 14)

THU 13:30 – 15:30, Room: NU 03, Chair: Helbing, Dirk

1. **On the Leontief Inverse of a Beta Distributed Input Matrix**
Kogelschatz, Hartmut (*Alfred-Weber-Institut, Universität Heidelberg*) (Abstract p. 148)
2. **Time Lags in Capital Accumulation**
Brandt-Pollmann, Ulrich (*Interdisciplinary Center for Scientific Computing, Heidelberg*) (Abstract p. 147)
3. **Imitation Model of the Metal Market Functioning**
Protsenko, Artem (*Sobolev Inst. of Mathematics, Novosibirsk*) (Abstract p. 150)

Nonlinear Dynamics and Games (Section 15)

THU 13:30 – 15:30, Room: AW 1016, Chair: Wolff, Reiner

1. **New Aspects of Learning Speed and Convergence in the Santa Fe Artificial Stock Market**
Badegruber, Thomas (*Universität Graz*) (Abstract p. 151)
2. **Monotone Methods for Equilibrium Selection under Perfect Foresight Dynamics**
Oyama, Daisuke (*Department of Economics, University of Vienna*) (Abstract p. 151)
3. **Endogenous-Horizon Randomly Furcating Differential Games**
Yeung, David Wing Kay (*Hong Kong Baptist University*) (Abstract p. 153)
4. **A Characterization of Equitable Core Allocations in Cost-Sharing Games**
Wolff, Reiner (*University of Fribourg*) (Abstract p. 152)

Steuerung von Investitionsentscheidungen (Section 16)

THU 13:30 – 15:30, Room: NU 06, Chair: Missler-Behr, Magdalena

1. **Incentive Properties of Residual Income when there is an Option to Wait**
Friedl, Gunther (*Ludwig-Maximilians-Universität München*) (Abstract p. 155)
2. **Investing in the Agent's Productivity**
Luhmer, Alfred (*Otto-von-Guericke-Universität Magdeburg*) (Abstract p. 156)
3. **Integrated Incentive Plans and Capital Budgeting**
Pfeiffer, Thomas (*Accounting and Control, Vienna University*) (Abstract p. 156)

Software Agents (Section 17)

THU 13:30 – 15:30, Room: NU 02, Chair: Suhl, Leena

1. **A Multi-Agent Model to Improve SMEs E-Procurement Process**
Stecca, Giuseppe (*University of Rome Tor Vergata*) (Abstract p. 161)
 2. **A Negotiation Protocol for E-Procurement Process**
Stecca, Giuseppe (*University of Rome Tor Vergata*) (Abstract p. 161)
 3. **Financial Market Web Mining with the Software Agent PISA**
Bartels, Patrick (*Institut für Wirtschaftsinformatik, Universität Hannover*) (Abstract p. 158)
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3.8.5 Friday, Sep. 5, 2003, 08:30 – 10:00

Semiconductor Industry (Section 3)

FRI 08:30 – 10:00, Room: NU 04, Chair: Mönch, Lars

1. **Scheduling Jobs with Reentrant Flows Using Lagrangian Relaxation Techniques**
Habenicht, Ilka (*Institut für Wirtschaftsinformatik, Technische Universität Ilmenau*) (Abstract p. 69)
 2. **An Integrated Lot-Sizing and Scheduling Approach for Flexible Flow-Lines**
Quadt, Daniel (*Katholische Universität Eichstätt-Ingolstadt*) (Abstract p. 75)
 3. **On Experiences Using the Operating Curve Methodology for Controlling and Performance Evaluation of Semiconductor Chip Manufacturing**
Schömig, Alexander (*Infineon Technologies AG*) (Abstract p. 77)
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Lotsizing (Section 3)

FRI 08:30 – 10:00, Room: NU 05, Chair: Schwindt, Christoph

1. **Partitioning Heuristics for the Multi-Item Capacitated Lot Size Problem**
Meißner, Jörn (*Columbia University, Graduate School of Business, New York*) (Abstract p. 73)
 2. **An Economic Production Quantity-Model for a Multi-Stage Production System with Defective Items and Rework**
Buscher, Udo (*Faculty of Economics and Management, University Würzburg*) (Abstract p. 68)
 3. **Aspects of Coordinating Program Planning and Lot-Sizing in Production Planning**
Leisten, Rainer (*Universität Duisburg-Essen*) (Abstract p. 73)
-

Public Services and Transportation (Section 4)

FRI 08:30 – 10:00, Room: NU 16 (Senatssaal), Chair: Voß, Stefan

1. **Operative Planning in Drinking Water Supply: A Case Study**
Steinbach, Marc (*Konrad-Zuse-Zentrum für Informationstechnik Berlin*) (Abstract p. 89)
 2. **Ein mathematisches Simulationsmodell für die Abfuhrplanung in der kommunalen Abfallentsorgung**
Dohmen, Lothar (*Forschungsinstitut für Rationalisierung an der RWTH Aachen*) (Abstract p. 82)
 3. **Personal- und Fahrzeugeinsatzplanung in der Müllentsorgung**
Daduna, Joachim R. (*FHW Berlin*) (Abstract p. 81)
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Traffic (Section 4)

FRI 08:30 – 10:00, Room: NU 09, Chair: Homberger, Jörg

1. **Behavioural Aspects at Signalized Intersections during the Intergreen Period**
Mahalel, David (*Civil and Env. Engineering Transp. Research Institute, Technion Haifa*) (Abstract p. 87)
 2. **Suche einer Signalfolge einer Verkehrslichtsignalanlage mit Hilfe eines Zustands- /Schichtgraphen**
Ladner, Klaus (*Karl-Franzens-Universität Graz*) (Abstract p. 86)
 3. **Convexification of the Traffic Equilibrium Problem with Social Marginal Cost Tolls**
Lindberg, Per Olov (*Department of Mathematics, Linköping University*) (Abstract p. 86)
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Further Scheduling Topics 3 (Section 5)

FRI 08:30 – 10:00, Room: NU 01, Chair: Mönch, Lars

1. **Optimal Resource Distribution in Scheduling Problems with Resource Dependent Setup and Processing Times**
Lichtenstein, Maciej (*Institute of Engineering Cybernetics, Wroclaw University of Technology*) (Abstract p. 94)

2. **Scheduling Jobs with Time and Resource Dependent Processing Times**
Janiak, Adam (*Wroclaw University of Technology*) (Abstract p. 92)
 3. **A Decision Theory Approach for Scheduling Jobs with Unequal Ready Times and Incompatible Families on a Single Batch Processing Machine**
Mönch, Lars (*Institut für Wirtschaftsinformatik, Technische Universität Ilmenau*) (Abstract p. 95)
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Marketing and Data Analysis 5 (Section 6)

FRI 08:30 – 10:00, Room: NU 08, Chair: Decker, Reinhold

1. **Using Choice Data to Model Preference Changes**
Michaelis, Lea (*Humboldt-University Berlin*) (Abstract p. 99)
 2. **A New Algorithm for Fuzzy Two-Mode Clustering**
Schlecht, Volker (*Inst. f. Entscheidungstheorie und Unternehmensforschung, Univ. Karlsruhe*) (Abstract p. 100)
 3. **Optimal Discretization of Quantitative Attributes for Association Rules**
Born, Stefan (*Mathematisches Institut, Universität Gießen*) (Abstract p. 98)
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Energy and Environment 1 (Section 7)

FRI 08:30 – 10:00, Room: AW 1017, Chair: Rentz, Otto

1. **Standortplanung für Elektronikschrott-Recyclingunternehmen in Spanien**
Queiruga, Dolores (*Inst. f. Wirtschaftswissenschaften, Abt. f. Produktionswirtschaft, TU Braunschweig*) (Abstract p. 106)
 2. **Produktprogrammplanung in Unternehmen der Lackproduktion unter besonderer Berücksichtigung der Auswirkungen neuer umweltgesetzlicher Regelungen**
Geldermann, Jutta (*Deutsch-Französisches Institut für Umweltforschung, Universität Karlsruhe*) (Abstract p. 104)
 3. **Management and Optimization of Environmental Data within Emission Trading Markets - VEREGIS-TER and TEMPI**
Pickl, Stefan (*Department of Mathematics ZAIK Cologne*) (Abstract p. 106)
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Numerical Methods of Nonlinear Optimization 2 (Section 10)

FRI 08:30 – 10:00, Room: NU 13, Chair: Gugat, Martin

1. **Methods for Correction of Solution Nonlinear Optimization Problem with Small Data Perturbations using Reduced Direction**
Izhutkin, Victor (*Mari State University, Yoshkar-Ola*) (Abstract p. 117)
 2. **Optimal Design of Wide Flange Cross Sections Based on Newton-Gradient Projection Technique**
Malek, Alaeddin (*Mathematics Department, Tarbiat Modarres University*) (Abstract p. 119)
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Satisfiability and OCC (Section 11)

FRI 08:30 – 10:00, Room: NU 14, Chair: Klau, Gunnar

1. **Solving the Satisfiability Problem Using Semidefinite Programming**
Anjos, Miguel (*University of Southampton*) (Abstract p. 122)
 2. **Analysis and Solving the Satisfiability Problem using L -partition**
Kolokolov, Alexander (*Sobolev Inst. of Mathematics, Russian Academy of Sciences, Omsk*) (Abstract p. 128)
 3. **On Directional Convex Hulls**
Naidenko, Vladimir (*Inst. of Mathematics, Nat. Academy of Sciences of Belarus, Minsk*) (Abstract p. 131)
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Scheduling 2 (Section 11)

FRI 08:30 – 10:00, Room: NU 15, Chair: Ahr, Dino

1. **Scheduling Identical Coupled Tasks: An Exact Algorithm**
Békési, József (*Faculty of Juhász Gyula Teacher's Training College, University of Szeged*) (Abstract p. 123)
2. **Scheduling Jobs with a Stepwise Function of Change of Their Values**
Krysiak, Tomasz (*Institute of Engineering Cybernetics, Wrocław University of Technology*) (Abstract p. 130)
3. **to be announced**
Oussedik, Sofiane (*ILOG Direct*) (Abstract p. 132)

Packing and Cutting (Section 11)

FRI 08:30 – 10:00, Room: NU 12a, Chair: Bortfeldt, Andreas

1. **Number of Different Patterns and Open Stacks in One-Dimensional Stock Cutting**
Belov, Gleb (*Technical University Dresden*) (Abstract p. 123)
2. **Optimization Models for the Containership Stowage Problem**
Giemsch, Peer (*Institut für Anwendungen des Operations Research, Universität Karlsruhe*) (Abstract p. 125)
3. **Computational Geometry and Design of Control System for Smart Structures**
Kolpakov, Alexander G. (*State Univ. of Telecommunications and Informatics, Novosibirsk*) (Abstract p. 129)

Queueing Systems 1 (Section 12)

FRI 08:30 – 10:00, Room: NU 12, Chair: Bäuerle, Nicole

1. **An Approximation for Waiting-Time Percentiles for the Finite-Capacity Multi-Server Queue**
Tijms, Henk (*Vrije University, Amsterdam*) (Abstract p. 140)
2. **On the Two-Class $M/M/1$ System under Preemptive Resume and Impatience of the Prioritized Customers**
Brandt, Manfred (*Konrad-Zuse-Zentrum für Informationstechnik Berlin*) (Abstract p. 137)
3. **A New Class of Lifetime Distributions: The M -class**
Müller, Alfred (*Universität Karlsruhe*) (Abstract p. 139)

Search Processes and Conditional Logic (Section 13)

FRI 08:30 – 10:00, Room: IS 0011, Chair: Rommelfanger, Heinrich

1. **Konditionale als Mittel zur Modellierung von Zeitformen**
Reucher, Elmar (*Lehrstuhl für BWL, insb. ÖR, Fernuniversität Hagen*) (Abstract p. 143)
2. **Comparison of Different Search Heuristics Proposed for a Constraint-Based Solution Approach to the Job Sequencing Problem**
Topaloglu, Seyda (*Department of Industrial Engineering, Dokuz Eylul University*) (Abstract p. 145)

Decision Theory and Mathematical Economics (Section 14)

FRI 08:30 – 10:00, Room: NU 03, Chair: Farkas, Zoltan

1. **A New Mathematical Programming Approach for the Minimization of Misclassification Costs**
Loucopoulos, Constantine (*Northeastern Illinois University, Chicago*) (Abstract p. 149)
2. **Infinite-Horizon Stochastic Control for Problems with Randomly Furcating Payoffs**
Cheng, Tak Sum (*Hong Kong Baptist University*) (Abstract p. 148)

Planungs- und Kontrollprobleme (Section 16)

FRI 08:30 – 10:00, Room: NU 06, Chair: Luhmer, Alfred

1. **On the Decision-Oriented Assignment of Common Cost**
Bauer, Ralf (*University of Mannheim*) (Abstract p. 153)
2. **Zur Manipulierbarkeit von Ergebnissen der Data Envelopment Analysis**
Behrens, Sven (*Fakultät für Wirtschaftswissenschaft, Ruhr-Universität Bochum*) (Abstract p. 154)
3. **Ein Stichprobenmodell zur Retourenkontrolle**
Missler-Behr, Magdalena (*Wirtschaftswissenschaftliches Zentrum, Universität Basel*) (Abstract p. 156)

3.8.6 Friday, Sep. 5, 2003, 13:30 – 15:30

Electronics Industry (Section 3)

FRI 13:30 – 15:30, Room: NU 04, Chair: Schömig, Alexander

1. **Scheduling Jobs with Incompatible Families on a Single Batch Processing Machine Using Tabu Search**
Mönch, Lars (*Institut für Wirtschaftsinformatik, Technische Universität Ilmenau*) (Abstract p. 74)
 2. **A Modeling Approach for the Automated Manufacturing of PC Boards**
Martin, Roland (*Technical University Darmstadt*) (Abstract p. 73)
 3. **Anwendung von Verfahren des maschinellen Lernens auf das Scheduling von Jobs auf Batchmaschinen in der Halbleiterindustrie**
Zimmermann, Jens (*Inst. f. Automatisierungs- und Systemtechnik, Technische Univ. Ilmenau*) (Abstract p. 80)
 4. **Leistungsabstimmung von Produktionslinien in der Elektronikmontage**
Schleusener, Martin (*Technical University Berlin*) (Abstract p. 76)
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Order Picking and Loading (Section 3)

FRI 13:30 – 15:30, Room: NU 05, Chair: Schneider, Torsten

1. **Artikelanordnung bei Mann-zur-Ware-Kommissionierung**
Dörner, Karl (*Universität Wien*) (Abstract p. 68)
 2. **A New TSP-Based Heuristic Approach to Load Balancing in a Conveyor Flow Shop**
Schneider, Torsten (*Fraunhofer Institute for Industrial Mathematics, Kaiserslautern*) (Abstract p. 76)
 3. **Real-Time Control of Transportation Network**
Bock, Stefan (*University of Paderborn*) (Abstract p. 67)
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Hazardous Material Transportation and Services (Section 4)

FRI 13:30 – 15:30, Room: NU 16 (Senatssaal), Chair: Pankratz, Giselher

1. **A Metaheuristic Approach for Hazardous Materials Transportation**
Galiano, Graziano (*University of Roma Tor Vergata*) (Abstract p. 83)
 2. **Optimale Allokation von Aufgaben und Ressourcen in Servicebereichen**
Brecht, Winfried (*HTWK Leipzig*) (Abstract p. 81)
 3. **Multi-Year Planning of Maintenance Operations of Public Roads**
Andersson, Per-Åke (*Department of Mathematics, Linköping University*) (Abstract p. 80)
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Issues in Public and Industrial Transportation (Section 4)

FRI 13:30 – 15:30, Room: NU 09, Chair: Reinholz, Andreas

1. **Optimal Shunting**
Zimmermann, Uwe (*Technical University Braunschweig*) (Abstract p. 89)
2. **Simultaneous Optimization of School Starting Times and Public Bus Services**
Fügenschuh, Armin (*Technical University Darmstadt*) (Abstract p. 82)
3. **Strategic Planning in Public Transport**
Pfetsch, Marc (*Konrad-Zuse-Zentrum für Informationstechnik Berlin*) (Abstract p. 87)
4. **Standortplanung der Ticketautomaten zur elektronischen LKW-Maut**
Gnutzmann, Stefan (*Daimler-Chrysler AG, Berlin*) (Abstract p. 84)

Further Scheduling Topics 4 (Section 5)

FRI 13:30 – 15:30, Room: NU 01, Chair: Drexl, Andreas

1. **A Multi-Product Production Repair Model and its Solution using Hybrid Algorithms**
Jana, R. K. (*Department of Mathematics, Indian Institute of Technology, Kharagpur*) (Abstract p. 92)
 2. **Application of Robust Counterpart Technique to Production Management**
Guigues, Vincent (*LMC IMAG, Grenoble*) (Abstract p. 92)
 3. **A Parallel Approach to the Pricing Step in Crew Scheduling Problems**
Tran, Van Hoai (*Interdisciplinary Center for Scientific Computing, University of Heidelberg*) (Abstract p. 97)
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Energy and Environment 2 (Section 7)

FRI 13:30 – 15:30, Room: AW 1017, Chair: Liesegang, Günther D.

1. **Entwicklung und Anwendung einer mehrstufigen Methodik zur Analyse betriebsübergreifender Energieversorgungskonzepte**
Fichtner, Wolf (*Universität Karlsruhe*) (Abstract p. 103)
 2. **Mass- and Energy-Flow Orientated Master Production Scheduling**
Fröhling, Magnus (*Institute for Industrial Production, University of Karlsruhe*) (Abstract p. 103)
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Portfolio Selection (Section 8)

FRI 13:30 – 15:30, Room: NU 10, Chair: Kraft, Holger

1. **Using Hybrid Evolutionary Computation Algorithms for the Cardinality Constrained Portfolio Selection Problem**
Streichert, Felix (*Wilhelm-Schickard-Institut für Informatik, Universität Tübingen*) (Abstract p. 111)
 2. **Improvements on Michaud's Resampled Efficient Portfolios**
Werner, Ralf (*RiskLab GmbH, München*) (Abstract p. 112)
 3. **Optimal Portfolios with Stochastic Volatility**
Kraft, Holger (*Fraunhofer Institute for Industrial Mathematics, Kaiserslautern*) (Abstract p. 109)
 4. **Robust Portfolio Selection Using Yield Maximization**
Seifi, Abbas (*Depart. of Industrial Engineering, Amirkabir University of Technology, Tehran*) (Abstract p. 110)
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Optimal Control (Section 10)

FRI 13:30 – 15:30, Room: NU 13, Chair: Izhutkin, Victor

1. **Problems of Optimal Control in Flood Management**
Gugat, Martin (*Fachbereich Mathematik, Technische Universität Darmstadt*) (Abstract p. 117)
 2. **A Refined Existence Theorem for Optimal Control Problems with Infinite Horizon**
Dmitruk, Andrei (*Russian Academy of Sciences, Moscow*) (Abstract p. 116)
 3. **A Fast Optimal Control Algorithm with Application to Chemical Engineering**
Schäfer, Andreas (*Interdisciplinary Center for Scientific Computing, University of Heidelberg*) (Abstract p. 120)
 4. **Fluid Approach to Control of Multiclass Queueing Networks**
Weiss, Gideon (*Haifa University*) (Abstract p. 121)
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ILP Theory and Large Instances (Section 11)

FRI 13:30 – 15:30, Room: NU 14, Chair: Jünger, Michael

1. **Solving Large Scaled Combinatorial Optimization Problems**
Gruber, Gerald (*Carinthia Tech Institute*) (Abstract p. 126)

2. **On Compact Formulations for Integer Programs Solved by Column Generation**
Lübbecke, Marco (*Technische Universität Berlin*) (Abstract p. 130)
3. **Combining Mathematical Programming and Constraint Logic Programming**
Stuber, Martina (*Anwendungen des Operations Research, Universität Karlsruhe*) (Abstract p. 133)
4. **Improved Supernode Processing for Integer Programming**
Suhl, Uwe (*Freie Universität Berlin*) (Abstract p. 134)

Facility Location (Section 11)

FRI 13:30 – 15:30, Room: NU 15, Chair: Békési, József

1. **Solving Capacitated Facility Location Problems by Means of Branch-and-Price-and-Cut**
Görtz, Simon (*Bergische Universität Wuppertal*) (Abstract p. 126)
2. **Lower and Upper Bounds for the Bilevel Capacitated Facility Location Problem**
Ivanenko, Dmitry (*Sobolev Inst. of Mathematics, Novosibirsk*) (Abstract p. 127)
3. **Heuristic Solution Methods for a Dynamic Location Model with Inventory**
Velten, Sebastian (*Universität des Saarlandes, Saarbrücken*) (Abstract p. 134)
4. **Solving Minimax Location Problem on Plane with Forbidden Areas**
Zabudsky, Gennady (*Sobolev Inst. of Mathematics, Russian Academy of Sciences, Omsk*) (Abstract p. 136)

Routing and Delivery (Section 11)

FRI 13:30 – 15:30, Room: NU 12a, Chair: Oswald, Marcus

1. **Solving the Min-Max k -Chinese Postman Problem to Optimality**
Ahr, Dino (*Institute of Computer Science, University of Heidelberg*) (Abstract p. 122)
2. **Separation of R -Odd Cut Constraints for Routing Problems**
Theis, Dirk Oliver (*Institute of Computer Science, University of Heidelberg*) (Abstract p. 134)
3. **Two Approaches for Optimizing the Cost of Books Dispatching**
Walkowiak, Rafal (*Institute of Computing Science, Poznan University of Technology*) (Abstract p. 135)
4. **A Branch and Bound Algorithm for Solving the Concave Cost Supply Management Problem**
Zaozerskaya, Lidiya (*Sobolev Inst. of Mathematics, Russian Academy of Sciences, Omsk*) (Abstract p. 136)

Queueing Systems 2 (Section 12)

FRI 13:30 – 15:30, Room: NU 12, Chair: Brandt, Manfred

1. **On a Queueing System with Inventory Management**
Schwarz, Maik (*Universität Hamburg*) (Abstract p. 140)
2. **Steady State Probabilities for Queues with Total Desasters and Poisson Input Streams**
Freitag, Roman (*Vienna University of Economics and Business Administration*) (Abstract p. 138)
3. **Optimal Stochastic Scheduling of Two Interconnected Queues**
Weichbold, Josef (*Universität Linz*) (Abstract p. 141)
4. **The optimal set partitioning method for the construction of the optimal quadrature formulae**
Kiseleva, E. (*Depart. of Comp. Math. and Math. Cybernetics, Dnepropetrovsk National University*) (Abstract p. 138)

Decision Theory and Econometrics (Section 14)

FRI 13:30 – 15:30, Room: NU 03, Chair: Krätschmer, Volker

1. **On an Optimum Invariance Property of Synthesizing Decisions by using Method “Optimization with Minimal Information”**
Farkas, Zoltan (*National Institute of Labour Hungary*) (Abstract p. 148)
2. **A Solution Proposition For The Decision Problem Defining The New Routes of Istanbul Hydrofoils**
Turkan, Yusuf Sait (*Department of Industrial Engineering, Istanbul University*) (Abstract p. 150)
3. **Aggregation of Comparison Matrices in AHP under Group Decision Making Environment**
Lee, Hsuan-Shih (*Dept. of Shipping and Transp. Management, National Taiwan Ocean Univ.*) (Abstract p. 149)