

Monday

■ MA-04 has moved to MC-04

Title change:

■ MA-04

Monday, 8:30-10:00

O4-4

Complementarity Problems and Variational Inequalities 1

Cluster: Mathematical Programming

Invited session

Chair: Sandor Zoltan Nemeth

■ MA-15

- 1 - **Comparative Analysis of Differential Evolution, Firefly and Genetic Algorithms on Dynamic Environments**
Burcin Ozsoydan, Adil Baykaso?lu
- 2 - **Optimizing intrusion detection system performance in ubiquitous environments using genetic algorithm approach**
Lynda Sellami
Cancellation
Internet decision system for combinatorial optimization problems under permutation
Lamia Trabelsi, Talel Ladhari
- 4 - **A Genetic Algorithm Based Approach for Operator Allocation Problem in Garment Industry with the Consideration of Labour Skill Levels**
Derya Dengi, Gonca Tuncel

■ MA-50

- 1 - **A Markov Chain Approximation to Choice Modeling**
Vineet Goyal, Guillermo Gallego, Jose Blanchet
- 2 - **Assortment Optimization and Pricing under Multi-Level Nested Logit Model**
Huseyin Topaloglu, Guang Li, Paat Rusmevichientong
- 3 - **Assortment Optimization Under General Choice**
Srikanth Jagabathula, Vivek Farias, Devavrat Shah
Cancellation
Pricing Managed Lanes
Robert Phillips

■ MC-03

- 1 - **Equilibrium customer behavior in a queueing system with batch services**
Antonis Economou, Olga Boudali
- 2 - **Optimal Pricing for a Service Facility with Trial Service and Retrial Customers**
Zhaotong Lian
- 3 - **Service Time Competition with Bounded Rational Customers**
Pengfei Guo, Robin Li, Zhaotong Lian
Cancellation
Time-based Competition with Benchmark Effects
Liu Yang, Francis De Vericourt, Peng Sun

■ MC-04 has moved to MA-04

Title change:

■ MC-04

Monday, 12:30-14:00

O4-4

Complementarity Problems and Variational Inequalities 2

Cluster: Mathematical Programming

Invited session

Chair: Goran Lesaja

Title change:

■ MC-08

Monday, 12:30-14:00

O3-2

Tutorial - S. Dauzère-Pérès

Cluster: Invited Lectures - Keynotes and Tutorials

Invited session

Chair: Christian Prins

■ MC-11

Cancellation

A Column Generation Algorithm for Communication Systems with High Error Correction Capability

Banu Kabakulak, Z.Caner Taskin, Ali Emre Pusane

- 2 - **A new algorithm for blind separation of discrete signals used in digital communications**
Abdenour Labeled

Cancellation

The joint power control and spectrum allocation problem in cognitive networks

Abdelkader Tounsi, Malika Babes

- 4 - **A Scatter Search Algorithm for a Bi-level Topological Design of LANs**
José-Fernando Camacho-Vallejo, Julio Mar-Ortiz

■ MC-32

Cancellation

A new enhancement of the heuristic for the vehicle routing problem

Andrey Zyatchin

- 2 - **Coordination of Supply Chain with Stochastic Demand by Delay-in-Payment Contract**
Xiaobo Zhao, Deng Gao
- 3 - **RFID applications for distribution management on retail trade**
Joachim R. Daduna
- 4 - **Analysing the effects of cost allocation methods for the cooperative facility location problem**
Lotte Verdonck, Patrick Beullens, An Caris, Katrien Ramaekers, Gerrit K. Janssens

■ MC-51

- 1 - **On optimal partial hedging in incomplete discrete markets**
Alexey Soloviev, Vladimir Morozov

- 2 - **An Intelligent Water Drops Algorithm Combined with Differential Evolution Algorithm for Solving Cardinality Constrained Portfolio Optimization Problems**

Mualla Gonca Yunusoglu, Adil Baykaso?lu

- 3 - **On the Impact of Copulas on VaR Forecasts: A Simulation Study**

Theo Berger

Paper moved to session HB-51

- Portfolio Choice in Markets with Contagion**

Yacine Ait-Sahalia, Tom Hurd

■ MC-62

- 1 - **Quadratic Outer Approximation for Convex Integer Programming**

Long Trieu, Christoph Buchheim

- 2 - **A Branch and Bound Approach for the Optimal Control of System Dynamics Models**

Ingmar Vierhaus, Armin Fügenschuh

- 3 - **Mixed Integer Gomory Cuts for Quadratic Programming: The Power of Extended Formulations**

Juan Pablo Vielma, Sina Modaresi, Mustafa Kilinc

Cancellation

- Intersection cuts for Mixed Integer Conic Quadratic Sets**

Kent Andersen

■ MD-45

- 1 - **A theory for the optimal government debt control: explicit formula for the optimal debt ceiling**

Abel Cadenillas, Ricardo Huaman

- 2 - **A polyhedral complementarity approach for searching an equilibrium in linear exchange models**

Vadim Shmyrev

- 3 - **Alternative versions of the Global Competitiveness Ranking: a Social Choice approach**

Andrey Subochev, Fuad Aleskerov, Igor Zakhlebin

Cancellation

- The imperfect competition in spatially price models of economic systems**

Alexey Kovalenko

■ MD-72

- 1 - **A Modified Gravity Model for Mexico - U.S. Migration Data**

Duygu Cinar, Deniz Duman, Linet Ozdamar

- 2 - **Corporate foresight and strategic decision making: Dealing with societal complexity**

Ulrike Reisach

- 3 - **Is topological invariance a reasonable assumption for studying social systems too? Methodological remarks on the application of NK simulation modeling**

Lucio Biggiero

Paper moved to session TD-45

- Energy Efficiency and Climate Change**

Sudhakara Reddy

■ MD-74

Cancellation

- Developing OR application skills with AIMMS: a bridge in OR education**

Ovidiu Listes

- 2 - **Educational Outreach Activities: Playing OR Games!**

Paul Harper, Vincent Knight, Louise Orpin

- 3 - **Production and Operations Management in the LegoFactory**

Evelyn Richards

Tuesday

■ TA-04

- 1 - **Trace-Penalty Minimization for Large-scale Eigenspace Computation**

Yin Zhang, Zaiwen Wen, Chao Yang, Xin Liu

- 2 - **A simple and original method to obtain the optimal power operating point of the solar cell**

Jaleddine Ben Amor

- 3 - **Inexact BOSVS Algorithm for Ill-Posed Inversion with Application to Parallel Image Reconstruction**

Maryam Yashtini, William Hager, Hongchao Zhang

Paper added to session

- 4 - **A modification of discrete Raiffa's solution for three-player bargaining problems**

Milan Vlach, Theoretical Computer Science and Mathematical Logic, Charles University, Malostranske namesti 25, 118 00 Prague 1, 118 00, Prague, Czech Republic, mvlach@ksi.ms.mff.cuni.cz

Since Nash's papers on bargaining and Raiffa's studies on arbitration schemes in the beginning of 1950's, it has become customary to present a cooperative bargaining problem as a nonempty collection B of pairs (S, d) where each S is a nonempty subset of a finite-dimensional real linear space endowed with the Euclidean metric, and d is a point in S . We propose an alternative stepwise solution for three-player problem that generalizes Raiffa's solution. The solution is based on the existence of a unique finite stable set in the individually rational region of (S, d) .

■ TA-05

- 1 - **Pareto-Nash-Stackelberg control problems: mathematical models and principles of solving**

Valeriu Ungureanu

Cancellation

- A noncooperative differential game of a stochastic productive asset**

Ricardo Josa-Fombellida, Juan Pablo Rincon-Zapatero

- 3 - **Cooperative and non-cooperative trade-offs among design quality and cost-reducing r&d in a supply chain**

Juan Carlos Espinoza Garcia, Fouad El Ouardighi, Victoire Denoyel

- 4 - **Non-Linear Strategies in Differential Games: A Numerical Investigation**

Guiomar Martin-Herran, Javier de Frutos

Title change:

■ TA-46

Tuesday, 8:30-10:00

Y10-1

Game-theoretical applications in sustainable supply chains

Cluster: Game-theoretical Models in Operations Research

Invited session

Chair: Gokce Esenduran

■ TA-69

- 1 - **Integrated Energy Planning at the Block Level**
Subhash Datta
- 2 - **The Role of Geographic Information Systems in the Energy Sector in India**
Badri Toppur
- 3 - **Application of DEA to Define the Revenues of Brazilian Power Transmission Companies**
Tiago Soares, Rajiv Banker, Ana Lopes
Paper moved to session WA-69
Economic Sentiment Indicator and Business Survey Liquidity Measure in Forecasting Changes in Industrial Production- the Case of Croatia
Mirjana Cizmesija, Natasa Erjavec, Vlasta Bahovec

■ TB-41

- 1 - **Measuring the efficiency of police stations efficiency in Slovenia: an application of a multi-stage data envelopment analysis**
Jernej Mencinger, Aleksander Aristovnik
- 2 - **Wineries' performance, response to a crisis period**
Katrin Simon-Elorz, Juan Sebastián Castillo, Maria Carmen Garcia-Cortijo
Cancellation
Efficiency and risk in the Greek banking industry
Ioannis Tsolas
Paper moved from session HA-40
- 4 - **Estimating Technical and Allocative Efficiency of Australian Schools**
John Ruggiero, Vincent Blackburn, Shae Brennan

■ TB-44

- Cancellation*
- On the convergence to Walrasian prices in random matching Edgeworthian economies**
Bruno M.P. M. Oliveira, Alberto Pinto, Luis Ferreira, Barbel Finkstadt, Athanasios Yannacopoulos
- 2 - **Influence of individual decisions in competitive market policies**
Alberto Pinto, Renato Soeiro, Abdelrahim Mousa
 - 3 - **Two characterizations of the Shapley value for regression games**
Enrique González-Arangüena, Rene van den Brink, Conrado M. Manuel

■ TB-51

- 1 - **Quantile Hedging in Discrete Time**
Erdinc Akyildirim

- 2 - **Investment strategies under debt issuance amount constraints**
Takashi Shibata, Michi Nishihara
- 3 - **Design and Pricing of Derivative Contracts in a Spectrum Market**
Aparna Gupta, Praveen Kumar Muthuswamy, Koushik Kar
Paper moved to session WD-51
Data Sampling Frequency and Stochastic Processes of Bond Rates and Currencies
A. Can Inci

■ TB-60

- Cancellation*
- Georgian SME business development analysis: Case Study**
Shorena Kalandarishvili, Levan Labadze
- 2 - **The Influence of Financial Crisis on UK SMEs**
Meng Ma, Jake Ansell, Galina Andreeva
 - 3 - **Using DTW for Clustering Time Series and Finding Leading Series**
Efe P?nar, Ozden Gur Ali
 - 4 - **Incorporating measures of evolution of customer choice behavior in churn prediction**
Andrey Volkov, Dirk Van den Poel, Anita Prinzie

■ TC-13

- 1 - **Modeling effect of car ownership on activity time allocation**
Yan Yin, Zhi-chun Li
- 2 - **A Simulation Based Optimization Method in Determining Time Varying Pricing of Toll Roads**
Lei Zhang, Xiang He, Xiqun (Michael) Chen, Chenfeng Xiong
- 3 - **Throughput and waiting times at unsignalised intersections**
Hannah Van den Bossche, Dieter Fiems, Herwig Bruneel
Cancellation
Offering more choices to travellers to mitigate undesired boundary effects of traffic congestion charging
Yingen Ge

■ TC-19

- 1 - **Environmental Effects of EVs and Location of Charge Stations**
Damla Sener, Metin Turkay
- 2 - **stochastic network design problem under probabilistic constraints with continuous random variables and efficient methods to solve them.**
Olga Myndyuk
- 3 - **An efficient exact solution approach for the Traveling Repairman Problem on a Line**
Stefan Bock
Paper added to session
- 4 - **Multi-commodity reliable facility location problem: A scatter search based approach**
Sumanta Basu, Operations Management, Indian Institute of Management Calcutta, K-302, New Academic Block, IIM Calcutta, D.H. Road, Joka, 700104, Kolkata, West Bengal,

India, sumanta@iimcal.ac.in, Megha Sharma, Partha Sarathi Ghosh

Logistics and supply chain network design problems are often modelled as discrete facility location problems. A majority of these models assume that the facilities once located, will be available all the time. This assumption does not hold true in reality. We relax this assumption in the context of the single stage multi-commodity capacitated facility location problem and incorporate the non-availability of facilities. We develop a scatter search based solution approach for this problem and compare the results obtained by using different criteria for selecting the facilities.

■ TC-40

1 - DEA Models for Estimating Efficiency When Inputs (Outputs) Are Not Substitutes

Darold Barnum, John Gleason

Cancellation

Directional Elasticity of Scale for Research Institutes via DEA

Wenbin Liu

3 - Returns to Scope: A Metric for Production Synergies Demonstrated for Hospital Production

Andrew Johnson, Brandon Pope

4 - Consolidating Productivity Stylized facts at the micro level: a General Framework

Cinzia Daraio

■ TC-49

1 - Optimal control problem of stochastic switching system with delay

Charkaz Aghayeva

2 - Short-Time Work As A Stochastic Control Process Of Labour Input Under Uncertainty

Kilian Niedermayer

Cancellation

The Application of H-J-B Method in stochastic modelation for volatility with persistence: The Mexican Case Index

Guillermo Sierra

■ TC-66

1 - MRP optimization model for a production system with remanufacturing

Fernanda Raupp

Cancellation

Quick Response and inventory management in the apparel industry: the fast fashion in Minas Gerais

Priscilla Ribeiro, Andre Golobovante

3 - A Novel Mixed Integer Linear Programming Model for the Strategic Planning of a Reverse Supply Chain Network

Ernesto D.R.S Gonzalez, Nelson Maculan

4 - Sustainable Large-Scale Mining Network Design

Bruno Pimentel

Title change:

■ TC-70

Tuesday, 12:30-14:00

R19-4

Meeting of decision analysis groups and societies

Cluster: Decision Processes

Invited session

Chair: K. Nadia Papamichail

■ TD-26 has moved to WD-27

■ TD-26 has moved from WD-27

Tuesday, 14:30-16:00

G9-7

Large-scale vehicle or crew scheduling problems solved with constraint aggregation

Cluster: Combinatorial Optimization II

Invited session

Chair: Francois Soumis

■ TD-45

1 - Congestion Management in Electricity networks: evidence from EU electricity markets

Silvia L. Vitiello

2 - Optimum Energy Portfolio using Genetic Algorithm with Random Walk Selection

Secil Ercan, Gulgun Kayakutlu

3 - Optimization of Turkey's Natural Gas Policy using Fuzzy Mathematical Programming

Serhat Tüzün, Tufan Demirel

Paper moved from session MD-72

4 - Energy Efficiency and Climate Change

Sudhakara Reddy

■ TD-57

1 - Retail pricing and promotion design through customer segmentation

Pavankumar Murali, Wei Sun, Anshul Sheopuri

Cancellation

Optimal Timing for a Newsvendor Problem with In-season Price Adjustment

Piotr Staliński, Chia-Shin Chung

3 - Chasing Demand: Pricing and Learning in a Changing Environment

Bora Keskin, Assaf Zeevi

■ TD-60

1 - Modelling the Extreme Precipitation Data: Case Study from Turkey

Büşra Aksoy, Vilda Purutcuoglu, Inci Batmaz, Ceylan Yozgatligil

2 - Cross-Selling Models for Private Banking — Which data are useful?

Ozden Gur Ali, Haldun Aytug, Mehmet Hamdi Ozcelik

3 - The Use of a Memetic Algorithm at the Evacuation Plan Design

Lubomir Toman

Cancellation

Customers Walking Patterns and Influence on Their Shopping Behavior

Marina Kholod

Wednesday

■ WA-08 has moved to HA-08

Title change:

■ WA-08

Wednesday, 8:30-10:00

O3-2

Tutorial - R. Vohra

Cluster: Invited Lectures - Keynotes and Tutorials

Invited session

Chair: *Kenneth Sørensen*

■ WA-57

- 1 - **Using the Newsvendor Game as a new research environment for behavioral OM and Marketing**
Abraham Seidmann, Tong Wu
- 2 - **Optimizing Skippable and Non-Skippable Advertisements for Video Sharing Websites**
Soumyakanti Chakraborty, Sumanta Basu, Megha Sharma
Cancellation
New product pricing policy and reward programme in the existence of taste effect and word of mouth effect
Wu Lingli

■ WA-69

- 1 - **Closed-Loop Supply Chain Network Design Model For Remanufacturing in Turkey's Mobile Phone Market**
Aslı Özmen, İsmail Erol
- 2 - **Performance Efficiency of DMMMSU Colleges and Institutes: A Data Envelopment Analysis (DEA) Study**
Milagros Baldemor
- 3 - **Mechanisms for resolving framework of conflict in the border area of transition from one state to another in the logistics and customs sphere**
Irina Kazina
Paper moved from session TA-69
- 4 - **Economic Sentiment Indicator and Business Survey Liquidity Measure in Forecasting Changes in Industrial Production- the Case of Croatia**
Mirjana Cizmesija, Natasa Erjavec, Vlasta Bahovec
Cancellation
Online Global Trading Marketplace as a Buyer-Seller Social Network: A Study of Implicit Social Interactions in Developed versus Emerging Markets
Yubo Chen, Qi Wang, Jinhong Xie, Jurui Zhang

■ WA-70

- 1 - **The effect of the ethical leadership on perceived organizational justice and organizational identification of the employees: the case of tourism businesses**
Ükran Öktem, Hakan Turgut, Gözde Kubat
- 2 - **Identifying a System of Bribery in Business Transactions**
Sule Onsel Ekici, Ahmet Ekici

- 3 - **Study of awareness rate of patients from prism of patient rights.**
Mohammad Reza Bateni, Shahla Shiranifard
Cancellation
The contribution of corporate governance to bank stability
Aristotelis Boukouras, Davide Mare

■ WB-12

- 1 - **Tackling key strategic decisions of the chocolate-producing companies: A system dynamics approach**
Tatiana Boyarskaya, Evgenia Ushakova
- 2 - **Group Buying Schemes - A Sustainable Business Model?**
Sebastian Koepp, Aliaksei Mukhachou
Cancellation
Bootstrapping for Confidence Interval Estimation in the Taylor Rule Model for Monetary Policy in Brazil
Felix Neugebauer
- 4 - **Modelling a Sovereign Debt Crisis: the case of Jamaica**
Brian Dangerfield, Jide Lewis

■ WB-66

- 1 - **Closed loop supply chain networks design in Presence of Distributed Generation(DG): Benders decomposition approach**
Salman Khodayifar, Hassan Salehi Fathabadi, Mohammad Ali Raayatpanah, Hamed Rahimian
- 2 - **Green vehicle routing problem with time windows**
Asli Aksoy, Seval Ene, Ilker Küçükoğlu, Nursel Ozturk
Cancellation
Are carbon footprint become a barrier trade for developing countries?
Mahmoud Nawar
- 4 - **Distribution centers to improve the supply chain efficiency and sustainability of the system.**
Elisabeth Freitas Rodrigues, Nelio D Pizzolato

■ WC-07

- 1 - **Solving polynomial bilevel problems**
Philipp Renner
- 2 - **Containment problems for polytopes and spectrahedra**
Christian Trabant, Kai Kellner, Thorsten Theobald
- 3 - **Using column generation to improve the sum of squares representation of a polynomial optimization problem**
John Mitchell, Tim Lee
Cancellation
Lower Bounds for a Polynomial on a basic closed semialgebraic set using geometric programming
Mehdi Ghasemi

■ WC-26

- 1 - **The Micks: A polynomial class of "strong" inequalities for the packing knapsack**
Sunil Chopra, Sangho Shim
- 2 - **Localized Local Branching**
Emanuele Manni, Gianpaolo Ghiani, Gilbert Laporte
Cancellation

On cut generating sets and their use in mixed integer programming

Egon Balas

Paper added to session

4 - A Reduced-Cost Iterated Local Search Heuristic for the Fixed Charge Transportation Problem

Paolo Toth, DEIS, University of Bologna, Viale Risorgimento 2, 40136, Bologna, Italy, paolo.toth@unibo.it, Erika Buson, Roberto Roberti

The Fixed Charge Transportation Problem (FCTP) generalizes the Transportation Problem by considering an additional fixed cost for sending a flow from an origin to a destination. We describe an ILS heuristic based on reduced costs to guide the restart phase. The reduced costs are obtained by a lower bounding procedure that computes a sequence of increasing lower bounds by solving a three-index formulation strengthened with valid inequalities. The heuristic provided new best-known upper bounds on 123 of the 124 open benchmark instances from the literature within five minutes of computing times.

■ WC-49

1 - The Impact of dog celebrity type and consumer involvement on the efficiency of internet banner advertisement in the dog-allowed restaurant

Chin-Yi Fang, Chieh-Ju Chu

Cancellation

Balancing the trade-off between privacy and profitability in social media using NMASNT

Devina Vyas, Rahul Ranjan, Charul Charul, Durga Prasad Guntoju

3 - Deploying Dynamic Ensemble Selection To Tackle Concept Drift in Predictive Customer Analytics

Koen W. De Bock

New session:

■ WD-08

Wednesday, 14:30-16:00

O3-2

Keynote - F. Vanderbeck

Cluster: Invited Lectures - Keynotes and Tutorials

Invited session

Chair: Gerhard-Wilhelm Weber

■ WD-22

1 - A heuristic solution approach for the assembly line worker integration and balancing problem

Mayron César Oliveira Moreira, Alysson M. Costa, Cristobal Miralles

Cancellation

Effectiveness of assigning intermediate milestones to outsourced projects for avoiding tardy completion

Changmuk Kang, Byung-Cheon Choi

3 - Scheduling a Satellite Downlink: Real Time Solutions for a Constrained Minimization Problem

Fattaneh Cauley, Stephen Cauley

4 - On scheduling models for the multiple carrier frequency assignment problem with cumulative interferences

Christian Artigues, Kata Kiatmanaroj, Laurent Houssin

■ WD-27 has moved to TD-26

■ WD-27 has moved from TD-26

Wednesday, 14:30-16:00

G9-8

Integral Simplex Using Decomposition

Cluster: Combinatorial Optimization I

Invited session

Chair: Francois Soumis

■ WD-34

1 - An inventory optimization technique based in minimizing lost sales

Fernando Paredes, Javier Pereira, Claudio Fuentes

2 - Myopic replenishment policies for lost-sales inventory systems

Marco Bijvank

3 - A New Heuristic For an Inventory System with Random Yield and Positive Lead Time

Wanrong Ju, Adriana F. Gabor, Jan-Kees van Ommeren

Cancellation

Optimal control of an inventory-production system with state-dependent random yield

Gudrun Kiesmüller

■ WD-35

Cancellation

Trucks fleets routing for vehicle transportation

Alain Nguyen, Jean-philippe Brenaut

2 - Incorporating inventory decisions in location-routing problems

Wenyih Lee

3 - A leveled inventory routing approach for planning periodic milk-runs

Martin Grunewald, Thomas Volling, Thomas Spengler

■ WD-51

1 - Multilevel Monte Carlo Methods for Pricing of American Options

Denis Belomestny

2 - A Riskless Asset Strictly Enhances the Best Sharpe Ratio in a Multi-Period Setting

Li Zhongfei

3 - Multilevel policy iteration for pricing American options

Marcel Ladkau, Denis Belomestny

Paper moved from session TB-51

4 - Data Sampling Frequency and Stochastic Processes of Bond Rates and Currencies

A. Can Inci

■ WD-74

1 - Uncovering the hidden world of O. R.; the secret science of system improvement

Geoff Royston

2 - Improving the Relevance and utility of Evaluation in Educational Development Processes: A Viable Systems Approach

Diane Hart, Alberto Paucar-Caceres

Cancellation

A Dynamic Nonlinear Model for Educational Systems: A Simulation Study for Primary Education

Roy Zúñiga, Luis Lopez

- 4 - **Two-variable linear programming: a graphical tool**
Susana Fernandes, José Pereira
Paper moved from session HA-12
- 5 - **Decoding the dynamics of crime**
Luis Lopez, Roy Zúñiga

Thursday

■ HA-08 has moved to WA-08

■ HA-08 has moved from WA-08

Thursday, 8:30-10:00
O3-2

Tutorial - G. Raidl

Cluster: Invited Lectures - Keynotes and Tutorials
Invited session
Chair: Tamás Terlaky

■ HA-12

- 1 - **Solving Generalized Nash Games with Shared Constraints through Evolutionary Variational Inequalities**
Monica-Gabriela Cojocar
- 2 - **Optimal Strategy and Pricing on the CLSC with Buy-back and Remanufacturing**
Zhaowei Miao, Zhiqiang Xia
- 3 - **A System Dynamics application to strategic marketing**
Suzanne van Staveren, Rasa Cincyte
Paper moved to session WD-74
- Decoding the dynamics of crime**
Luis Lopez, Roy Zúñiga

■ HA-17

- 1 - **Designing liner shipping networks**
Judith Mulder, Rommert Dekker
- 2 - **An algorithm for solving the time-constrained multicommodity flow problem with applications in liner shipping network design**
Christian Vad Karsten, David Pisinger, Stefan Ropke
- 3 - **A branch-and-price approach to the network design problem in liner shipping**
Kristian Thun, Henrik Andersson
Cancellation
A decision support tool for liner shipping network design
Berit Dangaard Brouer, Guy Desaulniers

■ HA-36

- 1 - **A hybrid algorithm of Particle Swarm Optimization and Genetic Algorithms for the non-guillotine two-dimensional single knapsack problem**
Luis Miguel Escobar Falcón, David Álvarez, Eliana Mirdedy Toro Ocampo, Rubén Augusto Romero Lázaro
Cancellation
Applying packing algorithms within a manufacturing automation context in a concrete factory
Andrey Ermakov, Anton Ryzhikov, Anton Firsov

- 3 - **A New Branch-and-Cut Algorithm for the Orthogonal Strip Packing Problem**
Marat Mesyagutov, Guntram Scheithauer, Gleb Belov

■ HA-40

- 1 - **Performance Evaluation of Regional Railways: Case of I.R. Iran Railway**
Hamid Reza Ahadi, Zahra Saghian
- 2 - **Evaluating the performance of UEFA Champions League scorers**
Christos Papahristodoulou
- 3 - **Evaluation of undergraduate courses using a non-radial Data Envelopment Analysis model**
Silvio Gomes Júnior, João Carlos Soares de Mello, Lidia Angulo-Meza, Andre Gomes, Gilson Lima
Paper moved to session TB-41
- Estimating Technical and Allocative Efficiency of Australian Schools**
John Ruggiero, Vincent Blackburn, Shae Brennan

■ HB-02

- 1 - **Analysis of threshold dynamics of epidemic models in a periodic environment**
Cansu Evcin, Ömür Ugur
- 2 - **Higher-Order Numerical Methods for the Discrete Dynamics and Anticipation of Genetic Regulatory Systems**
Ozlem Defterli, Armin Fügenschuh, Gerhard-Wilhelm Weber
Cancellation
Modified Adaptive Control Method for synchronization of fractional order chaotic systems
Subir Das
- 4 - **Constrained Nonlinear Optimization Problem with Fractional Order Dynamical System**
Firat Evirgen

■ HB-51

- 1 - **Robust Portfolio Selection via Learning with Mixture Model**
Shushang Zhu, Minjie Fan, Duan Li
- 2 - **Coherent risk minimization-based SVMs and its application to credit rating**
Jun-ya Gotoh, Akiko Takeda, Rei Yamamoto
Cancellation
Optimal Execution Problem under CVaR Framework
Mengfei He, Duan Li
- 4 - **Dynamic mean-risk portfolio management with two risk measures in continuous-time**
Jianjun Gao
Paper moved from session MC-51
- 5 - **Portfolio Choice in Markets with Contagion**
Yacine Ait-Sahalia, Tom Hurd

■ HB-58

- 1 - **A risk analysis based on a two-stage delayed diagnosis regression model**
Xin Shi
- 2 - **Forecasting and Minimizing The Failures Of Pipe Industry With Logistic Regression Models**
Gizem Kavlak

- 3 - **Clustering using Xavier Hyperbolic Smoothing Clustering Method and Parallel Computing**
Sergio B. Villas-Boas, Marcelo Lins, Adilson Elias Xavier

Cancellation

- Exploiting the Anomaly Detection for High Dimensional Data using Descriptive Approach of Data Mining**

Bharat Singh, Nidhi Kushwaha, O. P. Vyas

■ HB-74

- 1 - **Teaching Business Analytics to Undergraduate**

Students with R AnalyticFlow

*Yuji Nakayama, Tomonori Ishigaki, Nagateru Araki,
Hiroyuki Morita, Masashi Kondo*

- 2 - **Determining the most appropriate special education and rehabilitation center by the moora method**

Gökhan Özçelik, Emel Kizilkaya Aydogan, Cevriye Gencer

Cancellation

O.R. education administration

Erwin Reizes