

The 11th International Symposium on Operational Research
in Slovenia

SOR '11

Dolenjske Toplice, SLOVENIA
September 28 - 30, 2011

Scientific Program

Slovenian Society INFORMATIKA (SDI)
Section for Operational Research (SOR)

SOR '11

The 11th International Symposium on Operational Research in Slovenia
Dolenjske Toplice, SLOVENIA, September 28 - 30, 2011

<i>Wednesday</i> <i>September 28, 2011</i>	<i>Thursday</i> <i>September 29, 2011</i>	<i>Friday</i> <i>September 30, 2011</i>
8.00 – Registration	8.00 – Registration	8.00 – Registration
9.30 – 10.00 Opening ceremony	9.30 – 10.10 Plenary lecture III (<i>Ulrich Pferschy</i>)	9.00 – 9.40 Plenary lecture V (<i>Arie M.C.A. Koster</i>)
10.05 – 10.45 Plenary lecture I (<i>Walter Gutjahr</i>)	<i>10.10 – 10.40</i> <i>Coffee break</i>	9.45 – 11.15 Work in parallel sections
<i>10.45 – 11.15</i> <i>Coffee break</i>	10.40 – 12.10 Work in parallel sections	<i>11.15 – 11.45</i> <i>Coffee break</i>
11.15 – 12.00 Work in parallel sections	12.15 – 12.55 Plenary lecture IV (<i>Erling D. Andersen</i>)	11.45 – 12.25 Plenary lecture VI (<i>Zrinka Lukac</i>)
<i>12.00 – 13.30</i> <i>Lunch break</i>	<i>13.00 – 14.30</i> <i>Lunch break</i>	12.30 – 13.00 Closing ceremony
13.30 – 14.10 Plenary lecture II (<i>Horst W. Hamacher</i>)	14.30 – 16.00 Work in parallel sections	
14.15 – 15.00 Work in parallel sections		
<i>15.30 – 22.45</i> <i>Excursion, dinner</i>		

Wednesday morning

September 28, 2011

8.00 - Registration

9.30 – 10.00 Opening Ceremony

10.05 – 10.45 *Plenary Lecture I*

Chair: Janez Žerovnik

PL-I Walter Gutjahr : Multi-Objective Combinatorial Optimization under Uncertainty

10.45 – 11.15 Coffee break

11.15 – 12.00 Work in two parallel sections:

Section II: Graphs and Their Applications

Chair: Ulrich Pferschy

II.1 Marjan Čeh, Frank Gielsdorf, Anka Lisec : Homogenization of Digital Cadastre Index Map
Improving Geometrical Quality

II.2 Dušan Hvalica : Solving Job Shop Problems in the Context of Hypergraphs

II.3 Pablo Sartor, Franco Robledo : An Heuristic for the Edge-survivable Generalized Steiner
Problem

Section VII: Production and Inventory - 1

Chair: Janez Kušar

VII.1 Zoran Babić, Tunjo Perić : Volume Discounts in Multiproduct Supplier Selection Problem

VII.2 Tomaž Berlec, Primož Potočnik, Edvard Govekar, Marko Starbek : Predicting
Manufacturing Due Date

VII.3 Danijel Kovačić, Marija Bogataj : Reverse Logistics Facility Location in Extended MRP
Theory

September 28, 2011

Wednesday afternoon

12.00 – 13.30 Lunch break

13.30 – 14.10 *Plenary Lecture II*

Chair: Janez Povh

PL-II Horst W. Hamacher : Operations Research Methods in the Planning, Control, and Adaptation of Evacuation Plans

14.15 – 15.00 Work in two parallel sections:

Section III: OR Applications in Telecommunication and Navigation Systems

Chair: Arie M. C. A. Koster

III.1 Minja Marinović, Milan Stanojević, Dragana Makajić-Nikolić : LP Model for Day-ahead Planning in Energy Trading

III.2 Polona Pavlovčič Prešeren, Bojan Stopar : GNSS Orbit Re-Construction Using Wavelet Neural Networks

III.3 Željko Račić : Application of Data Mining in Telecommunications Companies

Section VII: Production and Inventory - 2

Chair: Anka Lisec

VII.4 Mirjana Čižmešija, Maja Copak, Nataša Kurnoga Živadinović : Industrial Confidence Indicator and Manufacturing Industry in the EURO Area

VII.5 Stanislav Gorenc, Mitja Hrast, Tomaž Berlec, Marko Starbek : Layout of Company's Functional Units

VII.6 Mitja Hrast, Stanislav Gorenc, Tomaž Berlec, Marko Starbek : Virtual Factory – the Reality of the Present

15.30 – 22.45 Excursion, dinner

8.00 – Registration

9.30 – 10.10 *Plenary Lecture III*

Chair: Vesna Čančer

PL-III Ulrich Pferschy : Mathematical Models and Solutions for Network Design Problems

10.10 – 10.40 Coffee break

10.40 – 12.10 Work in two parallel sections:

Section VI: Econometric Models and Statistics

Chair: Alenka Brezavšček

VI.1 Martina Basarac : Sectoral Growth Drivers of Wood Processing and Furniture Manufacturing in Croatia

VI.2 Mirjana Čižmešija, Jelena Knezović : ARIMA Models and the Box – Jenkins Approach in Analysing and Forecasting Variables in Field of Sustainable Development – The Case of Croatia

VI.3 Samo Drobne, Marija Bogataj, Danijela Tuljak Suban, Urška Železnik : Regression-Neuro-Fuzzy Approach to Analyse Distance Function in Internal Inter-Regional Migrations in EU Countries

VI.4 Ksenija Dumičić, Anita Čeh Časni, Irena Palić : Multivariate Regression Analysis of Personal Consumption in Croatia

VI.5 Ksenija Dumičić, Berislav Zmuk : Impact of Acceptance Sampling Plan on Quality Costs

VI.6 Amir Jamak, Alen Svatić, Mehmet Can : Principal Component Analysis for Authorship Attribution

Section VIII: Finance and Investments

Chair: Petra Šparl

VIII.1 Draženka Čizmić : Price and Volume Measures in National Accounts

VIII.2 Alan Domić : The Open Economy New Keynesian Phillips Curve with Adjusted Measures of Real Marginal Cost: Estimates for Croatia

VIII.3 Margareta Gardijan : Option Leverage

VIII.4 Alenka Kavkler, Mejra Festic : Modelling Stock Exchange Index Returns in 12 New Member States with a Tree-Based Approach

VIII.5 Snježana Pivac, Blanka Škrabić Perić, Anita Udiljak : Analysis of Croatian Tax Revenue Indicators and Comparison with Selected Countries

VIII.6 Josip Arnerić, Nada Pleli, Tihana Škrinjarić : Impact of Social Security on Fertility – a Panel Data Analysis

12.15 – 12.55 *Plenary Lecture IV*

Chair: Janez Povh

PL-IV Erling D. Andersen : Ten Years of Experience with Conic Quadratic Optimization

September 29, 2011

Thursday afternoon

13.00 – 14.30 Lunch break

14.30 – 16.00 Work in two parallel sections:

Section V: Multiple Criteria Decision Making

Chair: Lidija Zadnik Stirn

- V.1 Andrej Bregar : Investigation of the Aggregation-Disaggregation Approach to Multi-Criteria Negotiations: Consolidation of Simulation and Case Studies
- V.2 Vesna Čančer : How to Use the 5WS & H Technique to Determine the Weights of Interacting Criteria
- V.3 Samo Drobne, Marija Bogataj : Economic Criteria in Decision-Making on Number of Functional Regions: The Case of Slovenia
- V.4 Milena Đurović, Gordana Savić, Marija Kuzmanović, Milan Martić : Towards Criteria Selection in DEA by Conjoint Analysis
- V.5 Petra Grošelj, Lidija Zadnik Stirn : Interval Comparison Matrices in Group AHP
- V.6 Višnja Vojvodić Rosenzweig, Hrvoje Volarević, Mario Varović : A Goal Programming Approach to Ranking Banks

Section VII: Production and Inventory - 3

Chair: Snježana Pivac

- VII.7 Alenka Brezavšček : A Simple Discrete Approximation for the Renewal Function
- VII.8 Marija Kuzmanović, Biljana Panić, Mirko Vujošević, Slobodan Vujčić : Risk Assessment and Management in the Mining Industry
- VII.9 Lidija Rihar, Stanislav Gorenc, Janez Kušar, Marko Starbek : Teamwork in Simultaneous Product Realization Process
- VII.10 Viljem Rupnik : An Axiomatic Approach to the Generalised Evaluation Procedure
- VII.11 Slavko Šimundić, Siniša Franjić, Danijel Barbarić : Computer Manipulation Methods, Theirs Detecting, Reporting and Sanctioning
- VII.12 Ilko Vrankić, Mira Oraić, Zrinka Lukač : Allocative Efficiency and Optimal Adjustments of a Producer

8.00 – Registration

9.00 – 9.40 *Plenary Lecture VI*

Chair: Janez Žerovnik

PL-VI Arie M. C. A. Koster : Robust Optimization of Telecommunication Networks

9.45 – 11.15 Work in two parallel sections:

Section I: Pascal 2 session

Chair: Zrinka Lukać

I.1 Janez Žerovnik : A Generalization of the Ball-Packing Problem

I.2 Bojan Kuzma, Janez Žerovnik : Ball Packing with two Ball Sizes: Some Bounds Based on Geometry

I.3 Petra Šparl : A Survey on Known Upper Bounds for Multichromatic Number for Hexagonal Graphs

Section IV: Mathematical Programming and Optimization

Chair: Zoran Babić

IV.1 Kristijan Cafuta, Igor Klep, Janez Povh : Trace Optimization Using Semidefinite Programming

IV.2 Igor Đukanović, Jelena Govorčin, Nebojša Gvozdenović, Janez Povh : On Semidefinite Programming Based Heuristics for the Graph Colouring Problem

IV.3 Maja Remic, Gašper Žerovnik, Janez Žerovnik : Experimental Comparison of Basic and Cardinality Constrained Bin Packing Problem Algorithms

Section IX: Location and Transport

Chair: Marija Bogataj

IX.1 Samo Drobne, Marija Bogataj, Mateja Zupan, Anka Lisec : Dynamics and Local Policy in Commuting: Attractiveness and Stickiness of Slovenian Municipalities

IX.2 Nebojša Gvozdenović, Dejan Brčanov, Karlo Bala : Where to Place Cross Docking Points?

IX.3 Eloy Hontoria, M.Victoria de-la-Fuente Aragon, Lorenzo Ros-McDonnell, Marija Bogataj : Monte Carlo Simulation Applied to the Logistics of Ceramics

IX.4 Arash Motaghedi-Larijani, Mohamad-Saied Jabalameli : Proposing Mixed non Linear Programming Model for Network Design Problem under Perspective of third Party Logistics

IX.5 Attila Tóth, Miklós Krész : A Flexible Optimization Framework for Driver Scheduling

11.15 – 11.45 Coffee break

11.45 – 12.25 *Plenary Lecture VII*

Chair: Lidija Zadnik Stirn

PL-VII Zrinka Lukać : Metaheuristic Optimization

12.30 – 13.00 Closing Ceremony

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