

**25th Conference of European Chapter on Combinatorial Optimization
ECCO 2012**

**April 26 – 28, 2012, Antalya, Turkey
Scientific Program**

April 26th, Thursday

08:30-17:00 Registration

09:00-09:30 Opening Session

09:30-10:30 Plenary Speaker (Miguel F. Anjos)

10:30-10:50 Coffee Break

10:50-12:30 Parallel Sessions

A. Stream: Algorithm and Computational Design

Session: Computational Optimization (Chair: Başak Akteke-Öztürk)

- The Dynamic p-Median Problem (Huseyin Guden, Haldun Sural)
- The Foraging Search for Combinatorial Optimization Problems (Ayca Altay, Gulgun Kayakutlu)
- Can we really ignore time in simple plant location problems? (Joana Matos Dias)
- A Parallel Algorithm for Solving Quadratic Assignment Problem on GPUs (Erdener Özçetin, Gurkan Ozturk)
- How to benefit from Algorithm Engineering in areas of departmental research and applications (Basak Akteke-Ozturk, Haldun Sural)

B. Stream: Global Optimization

Session: Global Optimization (Chair: Tuğba Saraç)

- Mixed Convexity and Optimization (Emre Tokgoz)
- Global Optimization of Mixed-Integer Bilevel Programming Problems (Zhaohui Xu)
- QMIST - An algorithm for solving non-convex quadratic mixed-integer problems (Angelika Wiegele, Christoph Buchheim)
- An extended cutting plane method for mixed integer nonconvex programming (Linh Nguyen, Ho Phong)
- Modified subgradient based hybrid algorithm for solving binary quadratic programming problems (Tugba Saraç, Nergiz Kasimbeyli, Refail Kasimbeyli)

C. Stream: Constraint Programming and Combinatorial Optimization

Session: Constraint Programming and Combinatorial Optimization (Chair: Arslan Örnek)

- Models for Working Time Determination Problem in Interval Scheduling (Güvenç Dik, Gamze Mat, Deniz Türsel Eliiyi, Brahim Hnich)
- A MIP/CP approach for production scheduling at a major European dairy company (Onur A. Kilic, Dirk Pieter Van Donk)
- REX-2: An Efficient Algorithm For Automatic Knowledge Acquisition In Inductive Learning (Filiz Şenyüzlüler, Ömer AKGÖBEK, Emre Yakut)
- Computing Optimal (s,S) Policy Parameters Under Service Level Constraints (Brahim Hnich, Imen Zghidi, Roberto Rossi, Armagan Tarim, Habib CHABCHOUB)
- A Constraint Based Heuristic To Solve Advanced Planning and Scheduling Problems (Arslan Ornek, Cemalettin Öztürk)

D. Stream: Combinatorial Optimization in Supply Chain Management

Session: Supply Chain Optimization (Chair: Edwin Romeijn)

- Internet Shopping with Additional Variables (Jedrzej Musial, Jacek Blazewicz, Pascal Bouvry)
- Cost Effective and Environmentally Friendly Hybrid Energy Model: The Case of Turkey (Buse Aras, Metin Turkey)
- Retailing Shelf Space Allocation: A Critical Review (Mehmet Erdem Coskun, Elkafi Hassini)
- Approximation algorithms for selective newsvendor problems (Edwin Romeijn, Zohar Strinka)

12:30-13:30 Lunch

13:30-15:10 Parallel Sessions

A. Stream: Integer and Combinatorial Optimization

Session: Integer and Combinatorial Optimization (Chairs: Xiaoling Sun and Monique Guignard-Spielberg)

- Approximation Algorithms for Single Vehicle Scheduling Problems with Release and Service Times on a Tree or Cycle (Zhaohui Liu)
- On-Line Scheduling on Batch Machines with Delivery Times (Xiwen Lu, Peihai Liu)
- The role of diversification when solving dispersion problems (Roberto Aringhieri, Roberto Cordone, Andrea Grosso)
- A primal heuristic for several quadratic pure 0-1 models (Monique Guignard-Spielberg, Aykut Ahlatcioglu, Lucas Létocart, Gérard Plateau)

B. Stream: Recent Advances in Scheduling

Session: New Scheduling Models (Chair: Erwin Pesch)

- Algorithms for the uncertain version of 2 machines flow shop problem with interval processing times (Marcin Siepak, Jerzy Jozefczyk)
- Integrating Tactical and Operational Decisions in Parallel Machine Scheduling with Time Windows (Ugur Eliiyi, Deniz Türsel Eliiyi)
- Flowshop Scheduling with Flexible Operations on 2 Adjacent Machines (Hakan Gultekin, Hatice Hande Demirtaş)
- Truck Scheduling Problem in Intermodal Container Transportation (Erwin Pesch, Jenny Nossack)

C. Stream: Combinatorial Optimization in Computational Biology, Bioinformatics and Medicine

Session: Combinatorial Optimization in Computational Biology, Bioinformatics and Medicine 1 (Chairs: Jacek Blazewicz, Piotr Lukasiak)

- The novel approach for building models of protein structure (Piotr Lukasiak)
- Construction of signaling pathways from PPI and RNAi data using Linear Programming (Oyku Eren Ozsoy, Tolga Can)
- A novel graph theoretical approach for reconstruction of signalling pathways by genetic algorithm Sureyya Ozogur-Akyuz, Atabey Kaygun, İrem Karaduman)
- Mixed Integer Optimization Approach for Fragment Based Design of Drug Candidates (Zeynep Ozsarp, Metin Turkey)
- The tool for automatic prediction of RNA tertiary structures. (Jacek Blazewicz, Mariusz Popena, Maciej Antczak, Marta Szachniuk, Piotr Lukasiak, Ryszard Adamiak, Natalia Bartol, Katarzyna Purzycka)

D. Stream: Emerging Applications of Combinatorial Optimization

Session: Mixed Approaches for Mixed Problems (Chair: Patrick De Causmaecker)

- Mixed Objectives and Solution Fairness (Andrew J. Parkes, Adam Letchford, Tolga Bektas)
- Round-robin strategy-based selection hyper-heuristic (Ender Özcan, Ahmed Kheiri)
- A Time-Complexity Analysis of Hyper-Heuristics (Per Kristian Lehre, Ender Özcan)
- Applications of combinatorial optimisation are not unisided (Patrick De Causmaecker)

15:10-15:30 Coffee Break

15:30-17:10 Parallel Sessions

A. Stream: Multiple Criteria Decision Making and Combinatorial Optimization (MCDM Invited Stream)

Session: Applications of MCDM in Combinatorial Optimization (Chair: Vladimir Korotkov)

- Finding Pareto optimal solutions in scheduling deteriorating jobs (Krzysztof Oczekiewicz, Marek Kubale)
- Pseudo-Automatic Beam's Eye View for Multicriteria Intensity-Modulated Radiation Therapy (Ahmad-Saher Azizi-Sultan)
- On some models of energy-aware computing (Jan Weglarz)
- A multi objective decision making problem in an open and distance learning system (Zehra Kamisli Ozturk, Gurkan Ozturk)
- Stability analysis of multiple criteria investment Boolean problem with Wald's criteria (Vladimir Korotkov, Vladimir Emelichev)

B. Stream: Scheduling

Session: Scheduling-1 (Chair: Ante Cusic)

- Discrete-continuous project scheduling problems with discounted cash flows and progress payments (Grzegorz Waligora)
- Quadratic assignment problem with partition size weights (Maciej Drwal)
- Optimization-simulation approach for job shop scheduling problem with random processing time (Quoc Ho)

Doan, Ho Phong, Minh Nguyen, Do Vinh Truc)

- o Age-dependent Selective Maintenance (Huy Truong Ba)
- o Special Cases of the Planar 3-index Assignment Problem (Ante Cusic, Bettina Klinz)

C. Stream: Combinatorial Optimization in Data Mining

Session: Data Mining (Chair: Cem İyigün)

- o Biclustering on Microarray Gene Expression Data (Ozan Cinar, Ozlem Ilk, Cem Iyigun)
- o Spectral Clustering on Time Series Data (Sipan Aslan, Cem Iyigun)
- o Contour Approximation of Data and a New Validity Index for Clustering (Cem Iyigun)
- o A new multivariate regression spline algorithm for classification problems (Elcin Kartal Koc, Cem Iyigun)
- o Investigating the seasonal patterns of continental central anatolia by clustering (Tülay Akal, Vilda Purutcuoglu Gazi, Inci Batmaz, Elcin Kartal Koc, Cem Iyigun, Ceylan Yozgatligil)

D. Stream: Spectral Graph Theory Techniques and Applications in Combinatorial Optimization

Session: Graph Eigenvalues and Combinatorial Optimization (Chair: Domingos Cardoso)

- o A generalization of Fiedler's lemma and its application on graph energy (Enide Martins)
- o Bounds for the Generalized Krein Parameters of Strongly Regular Graphs (Vasco Mano, Enide Martins, Luís Vieira)
- o On the spread of the line graph and applications (Helena Gomes)
- o Star Sets and Graphs with Convex Quadratic Stability Number (Carlos J. Luz)
- o Maximum matching by convex quadratic programming based on an adverse graph conjecture (Maria F Pacheco, Domingos Cardoso, Carlos J. Luz)

17:10-17:30 Coffee Break

17:30-19:10 Parallel Sessions

A. Stream: Vehicle Routing and Travelling Salesman Problems

Session: Vehicle Routing and Travelling Salesman Problems 1 (Chair: Fidan Nuriyeva)

- o The Traveling Visitor Problem and the Koper Algorithm for Solving It (Milan Djordjevic, Andrej Brodnik)
- o Variants of 2-opt approach for The Generalized Traveling Salesman Problem (Thanh LUU VAN)
- o On the polytope of Bipartite TSP (Hajieh Jabbari, Bela Vizvari)
- o New Heuristic Algorithms for Travelling Salesman Problem (Fidan Nuriyeva)
- o A Mathematical Model to Improve City Transportation by Using Flexible Work Hour Approach (Zehra Durak, Özcan Mutlu, Olcay Polat, Hasan AKYER)

B. Stream:

Session:

C. Stream: Combinatorial and Hybrid Regulatory Systems - Game Theory

Session: Regularity systems, optimization and scheduling (Chair: Sirma Zeynep Alparslan Gok)

- o Combinatorial Aspects of Revenue Management in Broadcasting Advertisements - Solving the Dynamic Stochastic On-line Multi-Knapsack Problem with Assignment Restrictions (Michael Mohaupt, Andreas Hilbert)
- o Selection of Event Tickets for Bundling in Sports and Entertainment Industry (Serhan Duran, Okan Ozener, Ertan YAKICI)
- o Improving Delinquent Loan Processing Efficiency via Efficient Assignments in a Large US Bank (Aysegul Peker, Ivan Oliveira)
- o Online Conversion Algorithms with Price Updates (Günter Schmidt, Iftikhar Ahmad)
- o Reconstruction of a Complex Biochemical System and Forecasting Its Behaviour (Vilda Purutcuoglu Gazi, Ozlem Defterli, Armin Fügenschuh, Gerhard-Wilhelm Weber)

D. Stream: Emerging Applications of Combinatorial Optimization

Session: Constrained Clustering and its Applications (Chair: Pelin Canbolat)

- o Constrained Clustering and its Applications (Peter Gritzmann, Andreas Brieden)
- o Partition Polytopes in Constrained Clustering (Steffen Borgwardt)
- o Thompson Sampling for Complex Bandit Problems (Aditya Gopalan, Shie Mannor, Yishay Mansour)
- o Mean-Variance Efficiency in the Equilibrium of a Stochastic Competitive R&D Race (Pelin Canbolat, Boaz Golany, Uriel G. Rothblum)

20:30

Welcome Reception

08:30-17:00 Registration

09:00-10:40 Parallel Sessions

A. Stream: Graph Theory and Network Problems

Session: Network Design (Chair: Edward Gimadi)

- Sensor Networks and Min-Density Covering of Plane Regions by Ellipses (Adil Erzin, Ruslan Zainutdinov)
- Reconfiguration of distribution systems with distributed generation(dg) by bender's decomposition: An application to electrical distribution networks (Salman Khodayifar, Hassan Salehi Fathabadi, Mohammad Ali Raayatpanah)
- Mathematical Measure at Vulnerability of Communication Networks (Mehmet Ali Balci)
- Efficient Monitoring of a Stripe by Outside Sensors with Adjustable Sensing Ranges (Sergey Astrakov, Adil Erzin)
- On effective algorithms with performance guarantees for some hard-to-solve routing problems (Edward Gimadi)

B. Stream: Scheduling

Session: Scheduling-2 (Chair: Rafal Rozycki)

- Sample Average Approximation with Ranking and Selection for the Parallel Machine Scheduling Problem (Talal Alkhamis)
- Sorting Common Operations to Minimize Tardy Jobs (Claudio Arbib)
- Ant Colony Optimization Algorithm for the Parallel Machine Scheduling Problem with Due Date Window and Release Times (Sezgin Kaplan, Sezgin Kilic)
- Lower bounds for the parallel machine problem with multiprocessor tasks (Wafa Omezine, Lotfi Hidri)
- Exact and heuristic approaches for server scheduling problem (Rafal Rozycki)

C. Stream: PASCAL 2 Stream: Machine Learning and Combinatorial Optimization

Session: Graph Theory and Applications (Chair: Janez Zerovnik)

- Minimum-cost Multicast over Coded Packet Networks with Uncertain Rate Demands (Mohammad Ali Raayatpanah, Hassan Salehi Fathabadi, Babak Khalaj, Salman Khodayifar)
- On the solution approaches of the combinatorial bandpass problem in telecommunication (Arif Gürsoy, Mehmet Kurt, Murat Erşen Berberler, Urfat Nuriyev)
- Wavelength assignment algorithms for wavelength-routed networks with sparse wavelength conversion (Tam Nguyen, Linh Nguyen)
- Proof of McDiarmid-Reed conjecture for a subclass of triangle-free hexagonal graph (Rafał Witkowski, Janez Zerovnik)
- A $3/2$ approximation algorithm for cardinality constrained bin packing problem (Janez Zerovnik, Gasper Zerovnik)

D. Stream: Combinatorial Optimization in Supply Chain Management

Session: Supply Chain Management: Production/Distribution Networks (Chair: Selin Ozpeynirci)

- Modeling the Efficiency of Energy Generation/Distribution Networks (Yigit Can Oren, Metin Turkey)
- Lattice, modularity, and optimization of remanufacturing systems (Xiuli Chao, Shaohui Zheng)
- Performance characteristics of an integrated procurement-production-distribution plan in multinational supply chains (Masoud Mohammad Esmaeil, Arun Kumar)
- A Hierarchical Solution Approach for a Multicommodity Distribution Problem Under a Special Cost Structure (E. Alper Yildirim, Esra Koca)
- Scheduling for Disassembly Systems (Burak Gokgur, Mahmut Ali Gokce, Selin Ozpeynirci)

10:40-11:00 Coffee Break

11:00-12:00 Plenary Speaker (Bernard Ries)

12:00-13:00 Lunch

13:00-14:40 Parallel Sessions

A. Stream: Vehicle Routing and Travelling Salesman Problems

Session: Vehicle Routing and Travelling Salesman Problems 2 (Chair: Jussi Rasku)

- Comparing iterated local search procedures to solve the profitable vehicle routing problem with multiple trips (Ahlem Chbichib, Racem Mellouli, Habib Chabchoub)
- Analytic Center Stabilization of Column Generation Algorithms for solving the Capacitated Vehicle Routing

Problem (Hadi Karimi, Abbas Seifi)

- A Mixed Integer Model For The Truck-To-Door Assignment (Beyzanur Cayir, Nil Aras)
- New Integer Linear Programming Formulations for Traveling Salesman Problem with Time Windows: Minimizing Tour Duration with Waiting Times (Ozge N. Koc, Imdat Kara, Fulya Altıparmak, Berna Dengiz)
- Visualizing Vehicle Route Optimization Solution Space with Multidimensional Scaling (Jussi Rasku, Pekka Hotokka)

B. Stream: Metaheuristics

Session: Metaheuristics (Chair: Arif Gürsoy)

- Artificial bee colony optimization algorithm for TS-type fuzzy systems learning (Ahcene Habbi)
- A comparative study of boundary violation handling techniques for Electromagnetism-like Algorithm (Alkın Yurtkuran, Erdal Emel)
- Analyzing The Performance of Modified Marriage in Honey Bees Optimization (MBO) Algorithm Using The Unconstrained Test Functions (Yuksel Celik, Erkan Ülker)
- Examination Timetable Program Solving With Quantum Genetic Algorithms (Cevriye Altıntaş, Tuncay Yigit)
- Genetic Incremental Clustering Algorithm (Burak Ordin, Arif Gürsoy)

C. Stream: Combinatorial Optimization in the Financial Sector

Session: Combinatorial Optimization in Finance 1 (Gerhard-Wilhelm Weber, Kasırga Yıldırak)

- Pricing and hedging multiple exercise American options in incomplete markets (Mustafa Pınar)
- Portfolio Optimization using Multi-Objective Mathematical Programming (Bartosz Sawik)
- The Effect of Asset Liquidation on the (Bad Banks´) Stability in Times of Crisis (Bernhard Kronfellner, Wolfgang Aussenegg)
- Nonlinear Combinatorial Optimization for High Frequency Hedging and Mean-Variance Optimization in Automated Neuro Stock Trading (Gordon Dash, Nina Kajiji)
- Recent Advances on Stochastic Hybrid Dynamical Financial Systems: Discrete and Continuous, and Their Optimization (Gerhard-Wilhelm Weber, Azar Karimov, Efsun Kürüm, Çigdem Güleroglu)

D. Stream: Combinatorial Optimization in Supply Chain Management

Session: Transportation and Logistics: Algorithms (Chair: Bülent Çatay)

- A Bilevel Programming Model for Transportation of a Perishable Item with Stochastic Lifetime (Hande Günay Akdemir, Fatma Tiryaki)
- Minimizing the consumed electric energy for personal rapid transition transportation system (Lotfi Hidri, Mrad Mahdi)
- A Comparison of Two Evolutionary Algorithms on the Cumulative Capacitated Vehicle Routing Problem (Aydin Sipahioglu, Burcin Ozsoydan)
- A Variable Neighborhood Descent For Solving The Multi Objective Vehicle Routing Problem (Hacer Yumurtacı, Alp Baray)
- Greenest Paths in Time-Dependent Transportation Networks (U. Mahir Yıldırım, Bülent Çatay)

16:00-20:00 Sightseeing tours

20:00 Dinner

April 28th, Saturday

08:30-17:00 Registration

09:00-10:40 Parallel Sessions

A. Stream: Graph Theory and Network Problems

Session: Graph Theory-1 (Chair: Derya Doğan)

- Approximation algorithms for independent dominating sets in odd graphs (Ahmed Al-Herz, M. H. Alsuwaiyel)
- New Heuristic Methods for Unit Disk Graph Coloring and Its Reoptimization (Arman Boyacı, Tinaz Ekim)
- Spectral Graph Drawing (Navid Rezaie Melal)
- Average Covering Numbers of Some Special Graphs (Derya Doğan, Pinar Dundar)
- Center Coloring Of Graphs And Spanning Trees (Zeynep Örs Yorgancıoğlu, Pinar Dünder, Murat Erşen Berberler)

B. Stream: Scheduling

Session: Scheduling-3 (Chair: Claudio Arbib)

- Scheduling pharmacy openings (Paolo Serafini, Giovanni Andreatta, Luigi De Giovanni)
- A mathematical model for project team formation problem in report writing course (Feristah Özçelik, Tuğba Saraç)
- Mathematical Models for Pharmacy Duty Scheduling Problems (Özgür Özpeynirci, Ebru Ağlamaz)

- Heuristics for the parallel machine problem with unavailability constraints (Ilyes Karoui, Lotfi Hidri)
- Sorting Common Operations to Minimize Tardy Jobs (Claudio Arbib, Giovanni Felici, Mara Servilio)

C. Stream: Combinatorial and Hybrid Regulatory Systems - Game Theory

Session: Allocation Problems 1 (Chair: Ipek Ozkal-Sanver)

- Egalitarianism Under Earmark Constraints (Rahmi Ilkilic)
- Random Paths to Stability in Complete Matching Problems (Elena Molis, Elena Inarra)
- A Characterization of the Extended Serial Correspondence (Özgür Yılmaz)
- Consistent Core Enlargements in Roommate Problems (Ipek Ozkal-Sanver)

D. Stream: Combinatorial Optimization in Aviation Applications

Session: Airline and Crew Scheduling (Chair: Andreas Klinkert)

- Pickup And Delivery Problem In Risky Environment For Air Transportation In The Turkish Air Force (Özgür Aksoy, Muzaffer Kapanoglu)
- Solving The Turkish Crew Scheduling Problem (Melda Ormeci Matoglu, Okan Ozener, Gunes Erdogan, Mohamed Haouari)
- Aircraft and Passenger Recovery with Cruise Speed Control (Uğur Arıkan, Sinan Gürel, M. Selim Aktürk)
- Airport Staff Scheduling: A Large-Scale Real World Application (Andreas Klinkert)

10:40-11:00 Coffee Break

11:00-12:00 Plenary Speaker (John Shawe-Taylor)

12:00-13:00 Lunch

13:00-14:40 Parallel Sessions

A. Stream: Graph Theory and Network Problems

Session: Graph Theory-2 (5) (Chair: Mikhail Goubko)

- A new method for solving constrained bi-objective shortest-path flow problem (Neda Zarayeneh, Hassan Salehi Fathabadi, Ali Moallemi)
- Complexity Results of the Variations of the Edge Search Problem (Oznur Diner)
- Determining the Shortest Path with Improved All-Pairs Generic Algorithm (Sabahattin Kerem Aytulun)
- Heuristic algorithm for optimal tree search (Mikhail Goubko)
- Analysis of Discrete Structures via Complementary Problems (Asli Guler, Urfat Nuriyev)

B. Stream: Integer and Combinatorial Optimization

Session: Combinatorial Optimization and Reformulations (5) (Chair: Monique Guignard-Spielberg and Xiaoling Sun)

- Optimal Weighted Votes with Minimal Weights (Lee Papayanopoulos)
- SDP reformulation within a surrogate dual heuristic for the 0-1 exact k-item quadratic knapsack problem (Lucas Létocart, Marie-Christine Plateau, Gérard Plateau)
- Efficient formulation of 0-1 integer program using exact 0-1 knapsack separation (Saïd Hanafi, Igor Vasiliev, Maurizio Boccia)
- Heuristic and exact algorithms for the interval min-max regret knapsack problem (Silvano Martello, Fabio Furini, Manuel Iori, Mutsunori Yagiura)
- Improved 0-1 Convex QP Reformulations for Quadratic Knapsack Problems (Xiaoling Sun, Shuhui Ji, Xiaojin Zheng)

C. Stream: Combinatorial Optimization in Ergonomics

Session: Ergonomics and Layouts (4) (Chair: Bella Vizvari)

- Design of Virtual Complete Turkish Keyboard (Süleyman Mete, Kursad Agpak)
- Evaluating office layouts by considering ergonomic principles (N.Firat Özkan, Berna Ulutas)
- Optimal Supermarket Layout (Sadegh Niroomand, Bela Vizvari)
- On Multi-Dimensional Scaling (MDS) (Bela Vizvari, Sadegh Niroomand)

D. Stream: Combinatorial Optimization in Supply Chain Management

Session: Transportation and Logistics: Network Planning (5) (Chair: Guvenc Sahin, A. Cetin Suyabatmaz)

- Railway Freight Transportation: Models and Algorithms (Alexander Lazarev, Elena Musatova)
- Using mathematical models for the design of the logistic network of a company (Everton da Silveira Farias, Denis Borenstein)
- Selection of resilient supply portfolio in supply chains with disruption risks (Tadeusz Sawik)
- Selective And Periodic Inventory Routing Problem (Özge Tüncel, Sibel Salman)
- A Network Flow Formulation for a Crew Planning Problem in Railways (A. Cetin Suyabatmaz, Guvenc Sahin)

14:40-15:00 Coffee Break

15:00-16:40 Parallel Sessions

A. Stream: Multiple Criteria Decision Making and Combinatorial Optimization (MCDM Invited Stream)

Session: Multiple Criteria Decision Making and Combinatorial Optimization (5) (Chair: Özgür Özpeynirci)

- An algorithm for the bi-objective integer minimum cost flow problem (Salima Nait Belkacem, Moncef Abbas)
- Multiobjective Facility Layout Problem: An Optimization - Simulation approach (Ho Phong, Thao Ho)
- Multi-choice goal programming approach to university exam timetabling problem (Emre Ozel, Ozden Ustun, Safak Kiris, Ilker Ozan Koc)
- Dealer selection for an automotive company using ELECTRE I and TOPSIS methodologies (Elif Maç, Zerrin Aladag)
- A Solvable Order Picking Problem and Multiple Objectives (Cansu Kandemir, Ozgur Ozpeynirci)

B. Stream: Material Flows in Production Networks

Session: Combinatorial Optimization in Lot Sizing and Scheduling (4) (Chair: Alistair Clark and Simone Göttlich)

- A Hyper-heuristic Approach to Parallel Assembly Line Balancing Problems (Gokhan Secme, Lale Özbakır, Ender Özcan)
- An Integer Linear Programming Model for the Optimal Assignment of Referees: the Italian Volleyball Championships Case (Paolo Toth, Andrea Tramontani, Rodrigo Linfati)
- A comparative study of heuristic algorithms on buffer allocation problem (Leyla Demir, Semra Tunali, Deniz Türsel Eliiyi)
- New modelling approaches for production networks (Simone Göttlich)

C. Stream: Combinatorial and Hybrid Regulatory Systems - Game Theory

Session: Allocation Problems 2 (5) (Chair: Ahmet Alkan)

- Solving the unsolvable roommate problems (Elena Inarra)
- Production Economies with Single Peaked Preferences: Pareto Optimal and Strategy Proof Rules (Ipek Gursel Tapki)
- Characterization of the Core in Full Domain Marriage Problems (Duygu Nizamogullari)
- An axiomatic characterization of the interval Baker Thompson rule (Sirma Zeynep, Alparslan Gok)
- On Information Acquisition in Matching Markets (Ahmet Alkan, Zeynel Harun)

D. Stream: Graph Theory and Network Problems

Session: Layout and Location Problems (5) (Chair: Yunus Eroğlu)

- The Quadratic Assignment Problem with Imprecise Data: The Case of Job Assignment Requiring Coordination (Chiang Kao)
- Simple dynamic location problem with uncertainty: a primal-dual heuristic approach (Maria do Céu Marques, Joana Matos Dias)
- A Semidefinite Optimization Approach to Single-Row and Space-Free Multi-Row Facility Layout (Philipp Hungerländer, Franz Rendl, Miguel Anjos)
- Effective Algorithms for some hard Facility Location Problems. (Alexander Kurochkin, Edward Gimadi)
- Wind Farm Layout Design Optimization: Discrete versus Continuous Search Spaces (Yunus Eroğlu, Serap Ulusam Seckiner)

16:40-17:00 Closing Session
