

Schedule of the Scientific Program

Overview

Monday 17 March	Room M1	Room M2	Room A2
9:30–11:00	Network Optimization 1	Sequencing & Scheduling 1	Vehicle Routing Problems
11:00–11:30	Coffee break		
11:30–12:30	Plenary Rolf Möhring (Room M1)		
12:30–14:00	Lunch break		
14:00–15:30	Network Optimization 2	Algorithms & Heuristics 1	Supply Chain Optimization & Location Analysis
15:30–16:00	Tea break		
16:00–17:00	Travelling Salesman Problems	Graphs & Networks 1	Combinatorial Theory
17:00–18:00	ILOG workshop (Room M1)		
Tuesday 18 March	Room M1	Room M2	Room A2
9:00–11:00	Network Optimization 3	Sequencing & Scheduling 2	Graphs & Networks 2
11:00–11:30	Coffee break		
11:30–12:30	Plenary Moshe Dror (Room M1)		
12:30–14:00	Lunch break		
14:00–16:00	Cutting Planes & Column Generation	Algorithms & Heuristics 2	Graphs & Networks 3
16:00–16:30	Tea break		
Wednesday 19 March	Room M1	Room M2	Room A2
9:00–11:00	Real-life Applications	Algorithms & Heuristics 3	Assignment Problems
11:00–11:30	Coffee break		
11:30–12:30	Plenary Adam N. Letchford (Room M1)		
12:30–14:00	Lunch break		
14:00	End of CO 2008		

Monday 17 March 2008

Session M1: 9:30–11:00

Parallel session M1–A (Room M1)

Session title: Network Optimization 1

Session chair: Arie Koster

9:30–10:00	Paula Carroll: <i>Polyhedral Investigation of the Ring Spur Assignment Problem</i>
10:00–10:30	Rosa Figueiredo: <i>A Tabu Search approach to solve the mixed integer bilevel formulation of a network design problem</i>
10:30–11:00	Cristiana Gomes: <i>A Branch-and-Price Approach to the Bandwidth Allocation Problem in Wireless Networks</i>

Parallel session M1–B (Room M2)

Session title: Sequencing & Scheduling 1

Session chair: Marc Reimann

9:30–10:00	Imed Kacem: <i>2-approximation algorithm for the weighted completion time minimization on a single machine with a fixed non-availability interval</i>
10:00–10:30	Celia A. Glass: <i>Scheduling on parallel machines, with perishability time windows, inspired by the process of micro-biological food testing</i>
10:30–11:00	Marta Flamini: <i>A branch and bound algorithm for a generalized Job Shop Scheduling problem</i>

Parallel session M1–C (Room A2)

Session title: Vehicle Routing Problems

Session chair: Vladimir Deineko

9:30–10:00	Ulrich Pferschy: <i>A Balanced Vehicle Routing Problem</i>
10:00–10:30	Qianxin Mu: <i>Disruption Management in Vehicle Routing and Scheduling</i>
10:30–11:00	Nik Pearson: <i>Good Triangulations Yield Good Tours</i>

Session M2 – Invited plenary presentation (Room M1)

Invited speaker: Rolf Möhring (Technische Universität Berlin, Germany)

Session chair: Chris N. Potts

11:30–12:30	<i>Routing in Graphs with Applications in Traffic and Logistics</i>
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Session M3: 14:00–15:30**Parallel session M3–A (Room M1)**

Session title: Network Optimization 2**Session chair:** Sebastian Orłowski

14:00–14:30 Michael Poss: *Constraints generation for solving a bilayer network design problem*14:30–15:00 Christian Raack: *The cut-set polytope for two-layer network design problems*15:00–15:30 Sebastian Orłowski: *Branch-and-cut techniques for solving realistic two-layer network design problems*

Parallel session M3–B (Room M2)

Session title: Algorithms & Heuristics 1**Session chair:** Thomas Erlebach

14:00–14:30 Wanpracha Chaovalitwongse: *Approximating Several Covering/Packing Problems*14:30–15:00 Benny Vaksendiser: *Algorithms for Storage Allocation Based on Client Preferences*15:00–15:30 Thomas Erlebach: *Approximating Geometric Coverage Problems*

Parallel session M3–C (Room A2)

Session title: Supply Chain Optimization & Location Analysis**Session chair:** Maria A. Osorio

14:00–14:30 Maria Paola Scaparra: *A multi-level optimization model for improving the robustness of capacitated service and supply systems*14:30–15:00 Oğuz Solyalı: *Strong formulations for the one-warehouse multi-retailer problem*15:00–15:30 Maria A. Osorio: *On the use of Surrogate Constraint Analysis to fix binary variables in the CFLP*

Session M4 1600–18:00**Parallel session M4–A (Room M1)**

Session title: Travelling Salesman Problems / ILOG Workshop**Session chair:** Edward Gimadi

16:00–16:30 Petrică C. Pop: *A Strong Integer Programming Formulation of the Generalized Travelling Salesman Problem*16:30–17:00 Edward Gimadi: *On asymptotic optimality of polynomial algorithm for multi-TSP in Euclidean space*17:00–18:00 **ILOG CPLEX 11 workshop**

Parallel session M4–B (Room M2)

Session title: Graphs & Networks 1**Session chair:** Eric McDermid

16:00–16:30 Péter Biró: *Integral stable allocation problem on graphs*16:30–17:00 Eric McDermid: *Keeping partners together: Algorithmic results for the Hospitals / Residents problem with couples*17:00–18:00 *See session M4–A*

Parallel session M4–C (Room A2)

Session title: Combinatorial Theory**Session chair:** Oliver Jenkinson

16:00–16:30 Fredrik Kuivinen: *Submodular functions on diamonds*16:30–17:00 Oliver Jenkinson: *Balanced words and majorization*17:00–18:00 *See session M4–A*

Tuesday 18 March 2008

Session T1: 9:00–11:00

Parallel session T1–A (Room M1)

Session title: Network Optimization 3

Session chair: Petrică Pop

9:00–9:30 Teresa Gomes: *An effective algorithm for obtaining the set of all minimal cost pairs of disjoint paths with dual arc costs*

9:30–10:00 Lucile Denœud: *A Graph-Partitioning-Based-Heuristic for Optical Network Planning Problems*

10:00–10:30 Nicolas Sonnerat: *Galaxy Cutsets in Graphs*

10:30–11:00 Petrică C. Pop: *On The Generalized Minimum Spanning Tree Problem*

Parallel session T1–B (Room M2)

Session title: Sequencing & Scheduling 2

Session chair: Bo Chen

9:00–9:30 Ivan Rykov: *Asymptotically exact approach to solving RCPSP with one resource type*

9:30–10:00 Vitaly Strusevich: *Solving Make-or-Buy Trade-off Problems by Submodular Optimization*

10:00–10:30 Roberto Rossi: *Scheduling Internal Audit Activities: A Stochastic Combinatorial Optimization Problem*

10:30–11:00 Chris N. Potts: *Online Scheduling with Known Arrival Times*

Parallel session T1–C (Room A2)

Session title: Graphs & Networks 2

Session chair: Vadim Lozin

9:00–9:30 Bert Marchal: *A local search algorithm for determining tree decompositions of graphs*

9:30–10:00 Synara Brito: *Forest-clique partitions of cographs*

10:00–10:30 Jakub Mareček: *Zykov Revisited: Engineering an Exact Solver for Graph Colouring*

10:30–11:00 Vadim Lozin: *Stability Preserving Transformations of Graphs*

Session T2 – Invited plenary presentation (Room M1)

Invited speaker: Moshe Dror (University of Arizona, USA)

Session chair: Richard Eglese

11:30–12:30 *Another Look at Euclidean TSP and Packing: "This" Almost Never Happens*

Session T3: 14:00–16:00

Parallel session T3–A (Room M1)

Session title: Cutting Planes & Column Generation

Session chair: Socorro Rangel

14:00–14:30 Manuel Kutschka: *Separation of $\{0, \frac{1}{2}\}$ -Chvátal-Gomory cuts in general integer programs*

14:30–15:00 Konstantinos Kaparis: *Separation Algorithms for 0-1 Knapsack Polytopes*

15:00–15:30 Stefan Ropke: *Computer aided discovery of families of valid inequalities*

15:30–16:00 Socorro Rangel: *Special cutting patterns and reduction of saw machine set ups in the cutting stock problem*

Parallel session T3–B (Room M2)

Session title: Algorithms & Heuristics 2

Session chair: Daniele Catanzaro

10:30–11:00 Tuan-Vu Tran: *Global Constrained Optimization of a Safety Transformer using Branch-and-Bound method*

14:30–15:00 Dmitriy Drusvyatskiy: *Scheduling Tasks on Parallel Machines with Network-Based Restrictions*

15:00–15:30 Shinji Imahori: *Improved best-fit heuristics for rectangular strip packing and bin packing problems*

15:30–16:00 Daniele Catanzaro: *Estimating phylogenies under maximum likelihood: A very large-scale neighborhood approach*

Parallel session T3–C (Room A2)

Session title: Graphs & Networks 3**Session chair:** Paula Zabala

14:00–14:30	Marcin Kamiński: <i>Quadratic programming on graphs without long odd cycles</i>
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14:30–15:00	Géraldine Heilporn: <i>On a Network Pricing Problem with Connected Toll Arcs</i>
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15:00–15:30	Jakub Mareček: <i>Where is the Symmetry in Vertex Colouring?</i>
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15:30–16:00	Paula Zabala: <i>The $(k, k - 1)$-coloring problem</i>
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Wednesday 19 March 2008

Session W1: 9:00–11:00

Parallel session W1–A (Room M1)

Session title: Real-life Applications

Session chair: André Gustavo dos Santos

9:00–9:30 Janny Leung: *Timetable Synchronisation for Rail Mass Transit*

9:30–10:00 Laura Galli: *Solution of the Train Platforming Problem*

10:00–10:30 Mara Servilio: *Large-scale Call Center Agents Scheduling*

10:30–11:00 André Gustavo dos Santos: *Airline Crew Scheduling: A hybrid approach using metaheuristics to improve an exact column generation algorithm*

Parallel session W1–B (Room M2)

Session title: Algorithms & Heuristics 3

Session chair: Dolores Romero Morales

9:00–9:30 Haris Aziz: *Computing voting power in easy weighted voting games*

9:30–10:00 Sofie Coene: *Profit-based Latency Problems on the Line*

10:00–10:30 Olivier Hudry: *Complexity of the computation of a linear order at minimum distance from a tournament*

10:30–11:00 Dolores Romero Morales: *Discretizing Variables for Support Vector Machines by Means of Purity Measures*

Parallel session W1–C (Room A2)

Session title: Assignment Problems

Session chair: Frits Spieksma

9:00–9:30 Socorro Rangel: *A modified Lagrangian bound for a class of many-to-many assignment problems*

9:30–10:00 Laura Bahiense: *Ship accommodations layout problem as a k-constraints quadratic assignment problem*

10:00–10:30 Yury Glazkov: *Asymptotically optimal algorithms for m-layer planar 3-dimensional assignment problem*

10:30–11:00 Frits Spieksma: *Multi-Index Assignment Problems: Applications and Approximation*

Session W2 – Invited plenary presentation (Room M1)

Invited speaker: Adam N. Letchford (Lancaster University, UK)

Session chair: Vitaly Strusevich

11:30–12:30 *The Maximum Cut and Maximum Clique Problems: Linear versus Semidefinite Programming*
