

**VIII AUSSOIS WORKSHOP
ON COMBINATORIAL OPTIMIZATION**

Aussois, January 5 - 10, 2004

Organizers

Denis Naddef, Grenoble

L. A. Wolsey, Louvain-la-Neuve

Th. M. Liebling, Lausanne

PROGRAM

Monday, January 5, 2004

Morning Session 08:45 – 10:30,

Chair: Maurice Queyranne, Vancouver

Dorit Hochbaum, Berkeley, *New efficient algorithms for the bipartite matching problem and the maximum closure problem*

Adam Letchford, Lancaster, *Computing good allocations for combinatorial optimization games*

Mark Pfetsch, Berlin, *Line planning in public transport*

Morning Session 10:30 – 12:00

Chair Rolf Möhring, Berlin

Akihisa Tamura, Kyoto, *A General Two-Sided Matching Market with Discrete Concave Utility Functions*

Stephan Krause, Braunschweig, *Blocking shortest paths by deleting minimum edge sets*

Alberto Caprara, Torino, *Bidimensional Packing by Bilinear Programming*

Afternoon Session 16:30 – 17:30

Chair: Gerhard Reinelt

Agostinho Agra, Lissabon, *Basic Knapsack Polyhedra and Extensions*

Dirk Theis, Heidelberg, *A faster exact separation algorithm for blossom inequalities*

Afternoon Session 17:45 – 19:15,

Chair: Paolo Toth, Bologna

Juan-José Salazar González, Tenerife, *Solving the Editing-and-Imputation Problem by Branch-and-Cut*

Ivana Ljubic, Vienna, *A New Lower Bounding Procedure for the Prize-Collecting Steiner Tree Problem*

Matteo Fischetti, Padova, *A new refinement procedure for VRP*

Tuesday January 6, 2004

Morning Session 08:30 – 10:00,

Chair: Leslie Trotter, Ithaca

Franz Rendl, Klagenfurth, *Max-cut relaxations for large graphs*

Klaus Wenger, Heidelberg, *Maximally violated mod-p cuts for the Capacitated Vehicle Routing Problem*

Ted Ralphs, Bethlehem, *Decomposition and Dynamic Cut Generation in Integer Programming*

Morning Session 10:30 – 12:00

Chair Jean Fonlupt, Paris

Francisco Barahona, Yorktown Heights, *Fractional Packing of T-joins*

Gianpaolo Oriolo, Roma, *Domination Between Traffic Matrices*

Ekkehard Koehler, Berlin, *Approximating earliest arrival flows with flow-dependent transit times*

Afternoon Session 16:30 – 17:30

Chair: Mike Jünger, Cologne

Agnes Dittel, Darmstadt, *Integer Programming and Protein Folding*

Jonathan Lee, Yorktown Heights, *Parsimonious Binary-Encoding*

Afternoon Session 17:45 – 19:15

Chair: Dominique de Werra, Lausanne

Michel Goemans, Cambridge, *Approximate König's Theorem for Edge Coloring Weighted Bipartite Graphs*

Andrea Lodi Bologna, *The feasibility pump*

Ruslan Sadykov, Louvain-la-Neuve, *Integer Programming and Constraint Programming in Solving a Multi-Machine Assignment Scheduling Problem with Deadlines and Release*

Wednesday, January 7, 2004

Morning Session 08:30 – 10:00

Chair: Martine Labbé, Bruxelles

Eduardo Amaldi, Milano, *On minimum cycle bases in graphs*

Ulrich Brenner, Bonn, *An Efficient Algorithm for Minimum-Cost Flow Problems on Large Unbalanced Bipartite Graphs*

Stan van Hoesel, Maastricht, *Tariff setting in multicommodity networks*

Morning Session 10:30 – 12:00

Chair: Jean-François Maurras, Marseille

Kathie Cameron, Waterloo, *Pivoting to find a second degree-constrained spanning tree.*

Gautier Stauffer, Lausanne, *Clique-circulants and the Stable Set Polytope of Quasi-line Graphs*

Guillermo Durán, Santiago de Chile, *On balanced graphs*

Afternoon Session 16:30 – 17:30

Chair: Tom McCormick, Vancouver

Annegret Wagler, Berlin, *The Normal Graph Conjecture for Circulant Graphs*

Andreas Schulz, Cambridge, *Computational Complexity, Fairness, and the Price of Anarchy of the Maximum Latency Problem*

Afternoon Session 17:45 – 19:15

Chair: Chair: Giovanni Rinaldi, Roma

Dimitris Bertsimas, Cambridge, *Robust Discrete Optimization*

Stephan Thomasse, Lyon, *Three new min/max theorems in directed graphs*

András Sebő, Grenoble, *Bessy-Thomassé polyhedra: algorithms, variants, questions, ...*

Thursday, January 8, 2004

Morning Session 08:30 – 10:00

Chair: Yves Pochet, Louvain-la-Neuve

Robert Weismantel, Magdeburg, *Optimality criterion for a class of nonlinear integer programs*

Denis Cornaz, Paris, *Complete Disjoint Subgraphs and Complete Multipartite Subgraph*

Eric Tannier, Lyon, *Sorting signed permutations by reversals in subquadratic time.*

Morning Session 10:30 – 12:00

Chair: Alexander Martin, Darmstadt

Jean-Paul Doignon, Bruxelles, *The approval-voting polytope*

Diego Klabjan, Urbana Champaign, *Mixed Integer Programming with Variable Upper Bounds*

Olivier Briand, Bordeaux, *Comparison of various approaches of column generation*

Afternoon Session 16:30 – 17:30

Chair: Uwe Zimmermann, Braunschweig

Quentin Louveaux, Louvain-la-Neuve, *Extended formulations for Gomory Corner Polyhedra*

Martin Skutella, Saarbrücken, *An online FPTAS for minimizing the makespan on identical parallel machines with bounded job migration*

Afternoon Session 17:45 – 19:15

Chair: Ridha Mahjoub, Clermont-Ferrand

Dirk Müller, Bonn, *Fast flow augmentation in bit-pattern-represented grid graphs*

Marco Luebbecke, Berlin, *Rectangle Covers Revisited Computationally*

Friday, January 9, 2004

Morning Session, 08:15 – 09:45

Chair: François Margot, Pittsburgh

Jens Vygen, Bonn, *Legalizing a placement with minimum total movement*

Roland Wessäly, Berlin, *The DFG-Research Center: optimizing core and access telecommunication networks*

Jean-François Macq, Louvain-la-Neuve, *Trade-offs on the Location of the Core Node in a Network*

Morning Session, 10:00 – 11:30

Chair: Jack Edmonds

Michelangelo Conforti, Padova, *Solving stable set problems by decomposition*

Andrew Miller, Madison, *Multi-Supplier Procurement: Dual LP Separation and Economic Equilibria*

Hipólito Hernández Pérez, Tenerife, *New Inequalities for the one-commodity Pickup-and-Delivery Travelling Salesman Problem*