

CP-AI-OR'02 School on Optimization

March 22–24, 2002

CP-AI-OR'02

March 25 – 27, 2002

March 22 (Friday)

16h00 – 19h00 School on Optimization – Registration (Hôtel Les Nids)

March 23 (Saturday) School on Optimization

08h30 – 09h00 Opening and registration

09h00 – 11h00 Michael **TRICK**

Integer programming modelling and methods

11h00 – 11h30 Coffee break

11h30 – 13h30 Alexander **BOCKMAYR**

Branch and Infer: A unifying framework for integer and finite domain constraint programming

13h30 – 15h00 Lunch

15h00 – 17h00 Claude **LE PAPE**

Integrating operation research algorithms in constraint programming

March 24 (Sunday) School on Optimization

09h00 – 11h00 Farid **AJILI**

Hybrid constraint solving in ECLIPSE: framework and applications

11h00 – 11h30 Coffee Break

11h30 – 12h30 George **NEMHAUSER**

Branch-and-price: column generation for huge integer programs

12h30 – 14h00 Lunch

14h00 – 15h30 Andrea **LODI** and Filippo **FOCACCI**

Local search and metaheuristics in constraint programming

15h30 – 16h00 Coffee Break

16h00 – 17h30 Carla **GOMES**

Exploiting structure and randomization in combinatorial search

17h30 – 17h45 Closing

18h00 – 20h00 CPAIOR'02 Registration (Port-aux-rocs)

20h00 CPAIOR Welcome Dinner

March 25 (Monday) CPAIOR'02

08h30 – 09h00 *Opening and CPAIOR registration*

09h00 – 10h00 **Invited talk: Robert E. BIXBY**

The new generation of integer programming codes

10h00 – 11h00 **Plenary session 1**

Steven **PRESTWICH**

Randomised backtracking for linear pseudo-boolean constraint problems

Olivier **LHOMME**

Amortized random backtracking

11h00 – 11h15 *Coffee Break*

11h15 – 12h45 **Plenary session 2**

Ulrich **JUNKER**

Preference-based search and multi-criteria optimization

Marco **GAVANELLI**

An implementation of Pareto Optimality in CLP(FD)

Filippo **FOCACCI**, Daniel **GODARD**

A practical approach to multi-criteria optimization problems in constraint programming

12h45 – 14h15 *Lunch*

14h15 – 15h45 **Plenary session 3**

Robert **BOSCH**, Michael **TRICK**

Constraint programming and hybrid formulations for three Life designs

Torsten **FAHLE**

Cost based filtering vs. upper bounds for maximum Clique

Dag **WEDELIN**

Cost propagation: a generalization of constraint propagation for optimization problems

15h45 – 16h00 *Coffee Break*

16h15 – 17h30 **Plenary session 4**

Brahim **HNICH**, Zeynep **KIZILTAN**, Toby **WALSH**

Modelling a balanced academic curriculum problem

Nicolas **BARNIER**, Pascal **BRISSET**

Graph coloring for air traffic flow management

Bowie **OWENS**, Andreas **ERNST**, Maria **GARCIA DE LA BANDA**, Kim **MARRIOTT**

Personnel scheduling using hybrid CLP and meta-heuristic approaches

18h30 – 19h30 *Welcome reception*

20h00 *Conference Dinner*

08h30 – 09h30 **Invited talk: Edward P. TSANG**

Guided local search – CP meets OR

09h30 – 10h30 **Plenary session 5**

Philippe **CODOGNET**, Daniel **DIAZ**

Yet another local search method for constraint solving

Filippo **FOCACCI**, Paul **SHAW**

Pruning sub-optimal search branches using local search

10h30 – 10h45 *Coffee Break*

10h45 – 12h15 **Plenary session 6**

Meinolf **SELLMANN**, Warwick **HARVEY**

Heuristic constraint propagation (using local search for incomplete pruning and domain filtering of redundant constraints for the social golfer problem)

Yongpin **RAN**, Nico **ROOS**, Jaap **VAN DEN HERIK**

Approaches to find a near-minimal change solution for dynamic CSPs

J. Christopher **BECK**, Philippe **REFALO**

Combining local search and linear programming to solve earliness/tardiness scheduling problems

12h15 – 13h45 *Lunch*

13h45 – 15h15 **Plenary session 7**

Michela **MILANO**, Andrea **ROLI**

On the relation between complete and incomplete search: an informal discussion

Mikhail Yu. **LOENKO**

A non-return search algorithm

Laurent **PERRON**

Practical parallelism in constraint programming

15h30 – 19h00 *Excursion*

20h00 *Conference banquet*

08h30 – 09h30 **Invited talk: Jean-Charles RÉGIN**

Global constraints

09h30 – 10h30 **Plenary session 8**

Yves **COLOMBANI**, Susanne **HEIPCKE**

Mosel: an extensible environment for modelling and programming solutions

Carla P. **GOMES**, David **SHMOYS**

The promise of LP to boost CSP techniques for combinatorial problems

10h30 – 10h45 *Coffee Break*

10h45 – 12h15 **Plenary session 9**

Sharlee **CLIMER**, Weixion **ZHANG**

Searching for backbones and fat: a limit-crossing approach with applications

Sophie **DEMASSEY**, Christian **ARTIGUES**, Philippe **MICHELON**

A hybrid constraint propagation-cutting plane procedure for the RCPSP

Louis-Martin **ROUSSEAU**, Michel **GENDREAU**, Gilles **PESANT**

Solving small VRPTW's with constraint programming based column generation

12h15 – 13h45 *Lunch*

13h45 – 15h15 **Plenary session 10**

Weixiong **ZHANG**

Phase transitions, backbones, measurement accuracy, and phase-aware approximations: the ATSP as a case study

Michel **VASQUEZ**

Arc-consistency and tabu search for the frequency assignment problem with polarization

Alfonso **GEREVINI**, Ivan **SERINA**

Local search techniques for solving planning graphs with action costs

15h15 – 15h30 *Closing*