

Centre de recherches mathématiques
Université de Montréal

Atelier sur la programmation en nombres entiers mixte (MIP 2007)
Du 30 juillet au 2 août 2007

MIP 2007 Workshop on Mixed Integer Programming
July 30 - August 2, 2007

HORAIRE / *PROGRAM*

Conférences : salle 1360

Pauses-café : salle 1221

Lectures: Room 1360

Coffee Breaks: Room 1221

Le lundi 30 juillet 2007 / *Monday, July 30, 2007*

09:30 - 10:15 Inscription et café croissants (1221) / *Registration and Coffee & Croissants (1221)*

10:15 - 10:30 Introduction / *Opening remarks*

10:30 - 11:15 **Egon Balas** (Carnegie Mellon University)
“Projecting systems of linear inequalities in binary variables”

11:15 - 12:00 **François Soumis** (École Polytechnique de Montréal)
“Solution methods for large scale real life integer programming problems”

12:00 - 14:00 Pause déjeuner / *Lunch Break*

14:00 - 14:45 **Shabbir Ahmed** (Georgia Institute of Technology)
“Probabilistically constrained linear programming”

14:45 - 15:30 **Daniel Bienstock** (Columbia University)
“Solving discrete models in robust portfolio optimization”

15:30 - 16:00 Pause-café / *Coffee break*
(Salle / *Room 1221*)

16:00 - 16:45 **Annegret Wagler** (Otto-von-Guericke-University Magdeburg)
“An exact approach for the network reconstruction problem”

16:45 - 17:30 **Gabor Pataki** (University of North Carolina at Chapel Hill)
“The Parallel Approximation Problem and Subset Sums”

17:30 - 20:00 Cocktail de bienvenue et Session d'affiches (6245) / *Welcoming reception and Poster Session (6245)*

Le mardi 31 juillet 2007 / Tuesday, July 31, 2007

- 09:15 - 10:00** **Volker Kaibel** (Otto-von-Guericke Universität Magdeburg)
“Polyhedral Aspects of Symmetry Breaking in Integer Programming”
- 10:00 - 10:30** **Simge Kucukyavuz** (University of Arizona)
“Generalized Network Inequalities for Fixed-Charge Network Polyhedra”
- 10:30 - 11:00** Pause-café / *Coffee break*
(Salle / *Room* 1221)
- 11:00 - 11:45** **Laurence Wolsey** (Université Catholique de Louvain)
“MIR, Mixing and Network Dual MIPs: A Progress Report”
- 11:45 - 12:30** **Ismael de Farias** (University of Buffalo)
“Simple-set cutting planes for mixed-integer programming”
- 12:30 - 15:00** Pause déjeuner et Session d’affiches / *Lunch Break and Poster Session*
- 15:00 - 15:45** **Ronald Rardin** (University of Arkansas)
“Cutting Planes and Relaxations for Radiation Oncology Optimization under Dose-Volume Constraints”
- 15:45 - 16:30** **Eva K. Lee** (Georgia Institute of Technology)
“Large-Scale Optimization Strategies for Optimal Cancer Treatment Design”
- 19:00** Dîner au restaurant / *Conference Dinner*

Le mercredi 1 août 2007 / *Wednesday, August 1, 2007*

- 09:15 - 10:00 Jacques Desrosiers** (HEC / GERAD)
“Set Covering/Set Partitioning Applications”
- 10:00 - 10:45 Suvrajeet Sen** (University of Arizona)
“Economic Interpretation of Dual Multipliers in Integer Programming: The case of 0-1 MILP”
- 10:45 - 11:15** Pause-café / *Coffee break*
(Salle / *Room* 1221)
- 11:15 - 12:00 Quentin Louveaux** (Université Catholique de Louvain)
“Cutting planes and infeasibility certificates from lattice-point-free polyhedra”
- 12:00 - 12:30 Yanjun Li** (Purdue University)
“Cook, Kannan and Schrijver’s Example Revisited”
- 12:30 - 15:00** Pause déjeuner / *Lunch Break*
- 15:00 - 15:45 Mohit Tawarmalani** (Purdue University)
“Generating strong cuts for nonlinear programs by lifting inequalities”
- 15:45 - 16:30 George Nemhauser** (Georgia Tech)
“Strategic Planning with Start-Time Dependent Variable Costs: A Case Study in Solving Non-linear Integer Models”
- 16:30 - 17:00 Jeff Linderoth** (University of Wisconsin-Madison)
“A Different Perspective on Perspective Cuts”
- 17:30 - 18:00** Réunion d’information et table ronde (1360) / *Business Meeting and Round-table Discussion (1360)*

Le jeudi 2 août 2007 / *Thursday, August 2, 2007*

09:15 - 09:45 Francois Margot (Carnegie Mellon University)

“Testing Cut Generators for ILP”

09:45 - 10:30 Andrea Lodi (University of Bologna)

“On the Strengthening of Mixed Integer Gomory Cuts”

10:30 - 11:15 Cole Smith (University of Florida)

“Enhanced Cutting Planes for a Class of Binary Multi-Level Optimization Algorithms”

11:15 - 11:30 Résumé de la conférence / *Conference Wrap-up and Last Chances*