

MA1

**Beyond the financial crisis: risk control
and pricing methods
chair: Alberto Bemporad**

Room 103

14.00-18.00

1 *Beyond risk-neutral pricing, remaining fair (lesson from the crisis: the right price, not the true one)*

Leonardo Bellucci (MPS Capital services)

2 *Stochastic receding horizon control for dynamic option hedging*

Alberto Bemporad (Università di Siena)

3 *Inverse calibration method in derivatives pricing*

Tommaso Gabriellini (MPS Capital services)

break

4 *2008 volatility regime and efficient portfolio management*

Francesco Sandrini (Pioneers Investments)

5 *OR developments for efficient decision making in crisis periods*

Pierluigi Riva (CEO of Operational Research Systems)

6 *Simultaneous market and credit risk control on a generic corporate bond portfolio during the credit crisis*

Giorgio Consigli, Gaetano Iaquinta (Università di Bergamo), Patrizia Beraldi, Antonio Violi (Università della Calabria)

MA2

**Address your most critical issues in energy & power
and make the World a greener planet**
(ILOG IBM sponsored workshop)

Room 101

14.00-18.00

- Introduction to IBM ILOG Optimization suite (part 1)
- 1
 - IBM ILOG CPLEX
 - IBM ILOG CP Optimizer
 - IBM ILOG OPL Studio
 - IBM ILOG ODM
 - 2 *Break*
 - 3 How optimization addresses your most critical issues in Energy and Power (part 2)
 - 4 Energy and Power success stories
 - Red Electrica: Reduction of production cost and carbon emissions
 - Powel optimization: Greater hydropower revenue generation
 - E.ON Ruhrgas: Pricing and storage optimization of natural gas
 - 5 *Questions and Answers*

Tuesday Sept. 8th 2009

Registration

9.00-10.30

TuA1

PRIN Project - Nonlinear optimization I

chair: Annabella Astorino

Room 145

11.00-13.00

- 1 *Piecewise quadratic approximations for convex programs*
Annabella Astorino, Manlio Gaudio, Enrico Gorgone
- 2 *Sales forecasting for retail, a comparison between learning machines and traditional methods*
Vittorio Latorre, Stefano Lucidi, Marcello Fabiano, Enrico Procacci
- 3 *Optimising node coordinates for the shortest path problem*
Mirko Maischberger
- 4 *Quotient reformulation for the semidefinite programming problem related to the boolean quadratic problem*
Mauro Piacentini, Luigi Grippo, Palagi Laura, Veronica Piccialli
- 5 *Solving Semidefinite Programs by Factorizing the Dual*
Angelika Wiegele, Veronica Piccialli

TuA2

Routing problems I

chair: Giovanni Righini

Room 101

11.00-13.00

- 1 *The Split Delivery Vehicle Routing Problem*
Roberto Baldacci, Enrico Bartolini, Marco Antonio Boschetti, Aristide Mingozzi
- 2 *The Traveling Salesman Problem with Pickups, Deliveries and Handling Costs*
Maria Battarra, Günes Erdogan, Gilbert Laporte, Daniele Vigo
- 3 *A metaheuristic approach for solving the Vehicle Routing Problem with Heterogeneous fleet, Mixed Backhauls, and Time Windows*
Farah Belmecheri, Farouk Yalaoui, Christian Prins, Lionel Amodeo
- 4 *Efficient algorithms for the Double Traveling Salesman Problem with Multiple Stacks*
Marco Casazza, Alberto Ceselli, Marc Nunkesser
- 5 *Vehicle Routing Problem with Conflicts*
Hamdi Khaoula, Labadi Nacima, Yalaoui Alice

TuA3

Scheduling
chair: Dario Pacciarelli

Room 149

11.00-13.00

- 1 *A Branch and Bound Approach to Minimize the Completion time in the Resource-Constrained Project Scheduling Problem with Feeding Precedence Relations*
Lucio Bianco, Massimiliano Caramia
- 2 *An effective algorithm for multi-objective sequence dependent setup times flowshop problem*
Michele Ciavotta, Gerardo Minella, Rubén Ruiz
- 3 *New approximation algorithms for minimizing the total completion time on a single machine under unavailability interval*
Imed Kacem
- 4 *A tabu search algorithm for scheduling pharmaceutical packaging operations*
Luca Venditti, Dario Pacciarelli, Carlo Meloni
- 5 *Minimizing the total weighted tardiness on parallel machines*
Federico Della Croce, Thierry Garaix, Andrea Grosso

TuA4

Knapsack and bin packing
chair: Federico Della Croce

Room 103

11.00-13.00

- 1 *The Bin Packing Problem with Precedence Constraints*
Mauro Dell'Amico, José Carlos Diaz Diaz, Manuel Iori
- 2 *A strong branching approach for the multi-dimensional knapsack problem*
Federico Della Croce, Andrea Grosso
- 3 *Computational experience with a reduction procedure for the 2-kp problem*
Federico Della Croce, Andrea Grosso
- 4 *Solving the bi-objective max-min knapsack problem with a new reformulation*
Raid Mansi, Said Hanafi, Christophe Wilbaut
- 5 *A Lower Bound for the Cutting Stock Problem with a Limited Number of Open Stacks*
Claudio Arbib, Fabrizio Marinelli, Carlo M. Scoppola

TuA5	Healthcare management I chair: Roberto Aringhieri	
Room 146		11.00-13.00
1	<i>Dimensioning an Emergency Medical Services: the case of Milano</i> <u>Roberto Aringhieri</u>	
2	<i>Paediatric palliative care planning: a simulation based decision support</i> <u>Giada Aspergh</u> , Paola Facchin, Anna Ferrante, Laura Visonà Dalla Pozza, Giorgio Romanin Jacur	
3	<i>Logistic Regression, bootstrapping and Monte Carlo simulation for Estimating the Probability of Death of Infected Hemodialysis Patients</i> <u>Badreddine Jerbi</u> , Hichem Kamoun, Chakib Marrakchi	
4	<i>Perinatal assistance network planning: a simulation based decision support</i> Paola Facchin, Anna Ferrante, <u>Elena Rizzato</u> , Laura Salmaso, Giorgio Romanin Jacur	
5	<i>Optimization Approaches for Week-Hospital Services Planning and Management</i> Domenico Conforti, Francesca Guerriero, <u>Rosita Guido</u> , Maria Letizia Conforti, Marco Matucci-Cerinic	

TuB	Plenary session chair: Massimo Pappalardo	
Room 145	<i>The Critical Nodes Detection Problem in Networks</i> Panos Pardalos	14.15-15.15

TuC1	PRIN project - Nonlinear Optimization II chair: Laura Palagi	
Room 145		15.15-16.45
1	<i>Separation by means of disjoint spheres</i> <u>Annabella Astorino</u> , Immanuel Bomze, Paula Brito, Manlio Gaudio	
2	<i>On Solving Generalized Nash Equilibrium Problems via Optimization</i> Barbara Panicucci, Massimo Pappalardo, <u>Mauro Passacantando</u>	
3	<i>Global optimization of the 2D Irregular Strip Packing problem</i> <u>Andrea Cassioli</u>	
4	<i>A Newton-type method for large scale minimization problems with bound constraints</i> <u>Marianna De Santis</u> , Gianni Di Pillo, Stefano Lucidi	

TuC2		Logistics and transportation chair: Carlo Filippi	
Room 101			15.15-16.45
1	<i>Multi-scenario optimization for empty container repositioning</i> Teodor Gabriel Crainic, <u>Massimo Di Francesco</u> , Paola Zuddas		
2	<i>Quantitative Methods for Estimating Reliable Travel Times in a Vehicle Routing Problem</i> Marta Flamini, <u>Marialisa Nigro</u> , Dario Pacciarelli		
3	<i>Ambush avoidance for vehicle routes in valuables collection and delivery</i> <u>Matteo Salani</u>		
4	<i>Quay crane management at a maritime container terminal</i> Pasquale Legato, Daniel Gullì, Demetrio Laganà, <u>Roberto Trunfio</u>		

TuC3		Classification problems chair: Giovanni Felici	
Room 149			15.15-16.45
1	<i>Hierarchical Topic Extraction</i> <u>Davide Magatti</u> , Fabio Stella		
2	<i>Sensitivity analysis of a hierarchical clustering algorithm for geographical zoning</i> Guido Gentile, <u>Daniele Tiddi</u>		
3	<i>Fast Heuristic solutions of the Feature Selection Problem modeled with Integer Programming</i> <u>Giovanni Felici</u> , Paola Festa, Pietro Marinelli, Benedetto Scoppola, Alessandro Checco		

TuC4		Population-based metaheuristics chair: Alberto Colorni	
Room 103			15.15-16.45
1	<i>Multi-Objective Genetic Algorithm for the Two-dimensional Loading Capacitated Vehicle Routing Problem with Time Windows</i> <u>Selma Khebbache</u> , Prins Christian, Alice Yalaoui		
2	<i>An Ant Colony System for Orienteering Problems with Time Windows</i> <u>Roberto Montemanni</u> , Luca Maria Gambardella		
3	<i>Solving the Sequential Ordering Problem with Particle Swarm Optimization</i> Davide Anghinolfi, Roberto Montemanni, <u>Massimo Paolucci</u> , Luca Maria Gambardella		
4	<i>Parameters' impact on the exploration of an Evolutionary Algorithm</i> <u>Paola Pellegrini</u>		

TuC5

Optimization in finance
chair: Giorgio Consigli

Room 146

15.15-16.45

- 1 *Optimal impulse consumption of a generalized geometric Brownian motion*
Stefano Baccarin
- 2 *Financial optimisation and probability space characterisation in a dynamic setting*
Giorgio Consigli
- 3 *Scenario Trees, Arbitrage, and Multi-Asset ALM Models*
Alois Geyer, Michael Hanke, Alex Weissensteiner
- 4 *Efficient Algorithms for Mean-Variance Portfolio Optimization with Cardinality Constraints*
Francesco Cesarone, Andrea Scozzari, Fabio Tardella

TuD1

PRIN project - Nonlinear Optimization III
chair: Mauro Passacantando

Room 145

17.15-18.45

- 1 *The min-max-min paradigm as a mathematical tool for supporting strategic decisions*
Manlio Gaudio, Giovanni Giallombardo, Giovanna Miglionico
- 2 *Domain reduction strategies for special structured global optimization problems*
Alberto Caprara, Marco Locatelli, Michele Monaci
- 3 *Using multiple populations in a real-coded genetic algorithm for the detection of gravitational waves*
Daniela di Serafino, Filippo Riccio, Gerardo Toraldo
- 4 *Decomposition Methods for L1-regularized linear least squares problems*
Luigi Grippo, Lorenzo Lampariello, Francesco Rinaldi

TuD2

Routing problems II
chair: Teodor Gabriel Crainic

Room 101

17.15-18.45

- 1 *The Capacitated Location-Routing Problem*
Roberto Baldacci, Aristide Mingozzi, Roberto Wolfler Calvo
- 2 *An Exact and a "Matheuristic" Algorithm for the Bi-Objective Vehicle Routing Problem with Route Balancing*
Peter Reiter, Walter J. Gutjahr
- 3 *A vehicle routing problem for the distribution of vaccines and antivirals*
Alberto Ceselli, Giovanni Righini, Chetan Sharma
- 4 *Lower Bounds and an Exact Algorithm for the Multi-Trip Vehicle Routing Problem*
Aristide Mingozzi, Roberto Roberti, Paolo Toth

TuD3

Telecommunication networks
chair: Paolo Detti

Room 149

17.15-18.45

- 1 *Wireless Multicasting under Probabilistic Node Failures: A heuristic approach*
Janos Barta, Roberto Montemanni, Valeria Leggieri
- 2 *Minimum Power Multicasting in Wireless Sensor Networks via Paths Ranking*
Roberto Montemanni, Valeria Leggieri
- 3 *An integer programming model for radio-based localization of shipping containers in the presence of incomplete proximity information*
Stefano Abbate, Marco Avvenuti, Barbara Panicucci, Mauro Passacantando, Alessio Vecchio
- 4 *Beta-Coverage to Extend Network Lifetime on Wireless Sensor Networks*
Monica Gentili, Andrea Raiconi

TuD4

Hybrid methods AI/CP/OR
chair: Stefano Gualandi

Room 103

17.15-18.45

- 1 *Support Vector Machine and Integer Programming for time series predictions*
Renato De Leone, Emilia Marchitto, Arnaldo Risi
- 2 *Logic Based Benders' Decomposition to solve Allocation and Scheduling Problems arising in System Design*
Michele Lombardi, Michela Milano
- 3 *Synthesizing Filtering Algorithms in Stochastic Constraint Programming*
Brahim Hnich, Roberto Rossi, S. Armagan Tarim, Steven D. Prestwich
- 4 *Feasibility Pump 2.0*
Matteo Fischetti, Domenico Salvagnin

TuD5

Game theory I
chair: Bruno Viscolani

Room 146

17.15-18.45

- 1 *Robust Allocation Rules in Dynamic Cooperative Games*
Dario Bauso, Judith Timmer
- 2 *Simple Bargaining Problems and Sharing Rules*
Francesc Carreras
- 3 *On the ranking coincidence of some values for cooperative games*
Josep Freixas, Montserrat Pons, Dorota Marciniak
- 4 *Advertising competing brands with symmetric interference*
Bruno Viscolani

Wednesday Sept. 9th 2009

WeA1

Nonlinear optimization
chair: Gianni Di Pillo

Room 145

9.00-10.30

- 1 *A normal form for copositivity detection*
Immanuel Bomze
- 2 *Smoothness and approximation of optimal decision strategies in team optimization problems*
Marcello Sanguinetti, Giorgio Gnecco
- 3 *Approximate dynamic programming by value-function approximation via variable-basis schemes*
Marcello Sanguinetti, Giorgio Gnecco
- 4 *Solving strongly monotone variational and quasi-variational inequalities*
Laura Scrimali, Yurii Nesterov

WeA2

PRIN Project - Distribution logistics I
chair: Roberto Musmanno

Room 101

9.00-10.30

- 1 *A branch-and-price algorithm for multicommodity uncapacitated facility location*
Claudio Arbib, Fabrizio Marinelli, Roberto Rosetti, Mara Servilio
- 2 *The bi-objective travelling salesman with profits on special graphs*
Sofie Coene, Carlo Filippi, Frits C. R. Spieksma
- 3 *Vendor selection: optimizing procurement and shipping costs*
Renata Mansini, Martin Savelsbergh, Barbara Tocchella
- 4 *The Dynamic Traveling Purchaser Problem*
Enrico Angelelli, Renata Mansini, Michele Vindigni

WeA3

Network design
chair: Andrea Pacifici

Room 149

9.00-10.30

- 1 *A Fully Distributed Lagrangean Metaheuristic for the Capacitated Network Design Problem*
Marco Antonio Boschetti, Vittorio Maniezzo
- 2 *On the hazmat transport network design problem*
Maurizio Bruglieri, Edoardo Amaldi, Bernard Fortz
- 3 *A column generation based heuristic approach to two-layer survivable network design*
Silvia Canale, Sara Mattia
- 4 *A heuristic Method to solve the Capacitated m-Ring-Star Problem*
Paolo Toth, Zahra Naji Azimi, Majid Salari

WeA4		
Logistics		
chair: Pasquale Legato		
Room 103		9.00-10.30
1	<i>Rollout Algorithms for a Stochastic Inventory Routing Problem</i> Luca Bertazzi, Francesca Guerriero, <u>Demetrio Laganà</u> , Roberto Musmanno	
2	<i>An Integrated Supplier Selection Model with Uncertain Fuzzy Cost Function</i> Abolfazl Kazemi, <u>Samira Ramezani</u> , Behrooz Pourghannad	
3	<i>A two-echelon location-routing problem: models and heuristic approach</i> <u>Claudio Sterle</u> , Maurizio Boccia, Teodor Gabriel Crainic, Antonio Sforza	
4	<i>Dynamic model for the conflict of producers with the environmental policy</i> <u>József Garay</u> , Antonino Scarelli, Zoltán Varga	

WeA5		
Game theory II		
chair: Stefano Vannucci		
Room 146		9.00-10.30
1	<i>Dynamic vaccination games and variational formulation</i> <u>Annamaria Barbagallo</u> , Monica-Gabriela Cojocaru	
2	<i>Deciding within a competition</i> <u>Lorenzo Cioni</u>	
3	<i>The Libertarian Identification Rule in Finite Atomistic Lattices</i> <u>Stefano Vannucci</u>	
4	<i>Dynamic properties of kidney exchange problems</i> Franco Fragnelli, Fioravante Patrone, <u>Silvia Villa</u>	

WeB1		
PRIN project - Nonlinear Optimization IV		
chair: Marco Locatelli		
Room 145		11.00-13.00
1	<i>On the extension of an inexact primal-dual potential reduction method to convex Quadratic SDP problems (in memory of Marco D'Apuzzo)</i> Marco D'Apuzzo, Valentina De Simone, Daniela di Serafino, <u>Gerardo Toraldo</u>	
2	<i>A gap function approach for solving equilibrium problems</i> <u>Giancarlo Bigi</u>	
3	<i>A computational study on concave programming for cardinality-constrained portfolio selection problems</i> <u>David Di Lorenzo</u> , Giampaolo Liuzzi, Francesco Rinaldi, Fabio Schoen, Marco Sciandrone	
4	<i>Penalty methods for the solution of generalized Nash equilibrium problems</i> <u>Lorenzo Lampariello</u> , Francisco Facchinei	
5	<i>Some models for single sphere classification</i> Annabella Astorino, <u>Antonio Fuduli</u>	

WeB2

Electoral systems
chair: Bruno Simeone

Room 101

11.00-13.00

- 1 *Design of proportional electoral systems. Theory and application to Italy and Spain*
Victoriano Ramírez-González
- 2 *The Give-up Problem for blocked regional lists with multi-winners*
Federica Ricca, Andrea Scozzari, Bruno Simeone
- 3 *Network flow techniques in biproportional appointment*
Paolo Serafini, Bruno Simeone
- 4 *Certificates of Optimality: The Third Way to the Biproportional Apportionment of Parliament Seats*
Bruno Simeone, Paolo Serafini
- 5 *A new family of power indices for voting games*
Vito Fragnelli, Stefania Ottone, Roberto Sattaino

WeB3

A jam session of optimisation techniques for routing problems
chair: Andrea Lodi

Room 149

11.00-13.00

- 1 *An extended formulation for the Traveling Salesman Problem with Time Windows*
Andrea Tramontani, Sanjeeb Dash, Oktay Gunluk, Andrea Lodi
- 2 *Linear recovery robust optimization with real-world application in train routing*
Alberto Caprara, Laura Galli, Sebastian Stiller, Paolo Toth
- 3 *Generalized Covering Salesman Problem*
Zahra Naji-Azimi, Majid Salari, Bruce Golden, S.R. Raghavan, Paolo Toth
- 4 *Robust Train Routing*
Leo Kroon, Gabor Maroti
- 5 *A new linearisation technique for a quadratic formulation of the Train Routing Problem*
Alberto Caprara, Laura Galli, Paolo Toth

WeB4

Combinatorial optimization
chair: **Giuliana Carello**

Room 103

11.00-13.00

- 1 *Employee Workload Balancing by graph partitioning*
Alberto Ceselli, Roberto Cordone, Marco Trubian
- 2 *Practical Solution of the Resource Allocation Problem*
Alberto Caprara, Fabio Furini, Enrico Malaguti
- 3 *Subset Weight Maximization with Two Competing Agents*
Gaia Nicosia, Andrea Pacifici, Ulrich Pferschy
- 4 *An exact algorithm for the Multicommodity Min-cost Flow Over Time Problem*
Enrico Grande, Pitu B. Mirchandani, Andrea Pacifici
- 5 *Constructive Algorithms for a two-dimensional guillotine cutting stock problem with pattern minimization*
Enrico Malaguti, Rosa Medina, Paolo Toth

WeB5

PhD thesis I
chair: **Guido Perboli**

Room 146

11.00-13.00

- 1 *Efficient algorithms for finding a minimum cycle basis in undirected graphs*
Edoardo Amaldi, Claudio Iuliano, Romeo Rizzi
- 2 *Logic Mining, Box Clustering, and Graphs*
Vincenzo Spinelli, Bruno Simeone
- 3 *Functional Optimization by Variable-Basis approximation schemes*
Giorgio Gnecco, Marcello Sanguineti
- 4 *Robust Simulation-Optimization Methods using Kriging Metamodels*
Gabriella Dellino
- 5 *Application-oriented Mixed Integer Non-Linear Programming*
Claudia D'Ambrosio, Andrea Lodi

WeC1

Semi-plenary session
chair: Vito Fragnelli

Room 145

14.15-15.15

Game Theory, bankruptcy situations and some applications to channel allocation in mobile telecommunication problems

Joaquín Sanchez Soriano

WeC2	Semi-plenary session chair: Renato De Leone	
Room 101	<i>OR/MS, Strategic Decision Making and Peace Research</i> Giorgio Gallo	14.15-15.15

WeD1	PRIN project - Nonlinear Optimization V chair: Stefano Lucidi	
Room 145		15.15-16.45
1	<i>Separation-based data preprocessing in semisupervised classification</i> Manlio Gaudio, <u>Enrico Gorgone</u> , Diethard Pallaschke	
2	<i>Usage of a set of Lipschitz constants for derivatives in global optimization</i> <u>Dmitri Kvasov</u> , Yaroslav Sergeyev	
3	<i>On the KKT conditions of a generalized Nash equilibrium problem</i> <u>Simone Sagratella</u> , Francisco Facchinei	
4	<i>Learning for Global Optimization</i> <u>Fabio Schoen</u> , Andrea Cassioli, David Di Lorenzo, Marco Locatelli, Marco Sciandrone	

WeD2	Transportation chair: Marco Pranzo	
Room 101		15.15-16.45
1	<i>Impact of rescheduling trains with transfer connections in disturbed traffic conditions</i> <u>Andrea D'Ariano</u> , Francesco Corman, Dario Pacciarelli, Marco Pranzo, Francesca Bacci	
2	<i>A fuzzy multiobjective approach for determining the best rail fleet composition problem</i> <u>Milos Milenkovic</u> , Nebojsa Bojovic, Aleksandar Sunjic	
3	<i>Sensor Location for Route Flow Monitoring on a Transportation Network</i> Raffaele Cerulli, Monica Gentili, <u>Francesco Sbordone</u>	
4	<i>An Integrated Model for Crew Scheduling and Rostering</i> <u>Victor Vera Valdes</u>	

WeD3

Optimization problems on networks
chair: Michele Monaci

Room 149

15.15-16.45

- 1 *On the complexity of the asymmetric VPN problem*
Thomas Rothvoss, Laura Sanità
- 2 *Robust Wireless Network Planning*
Daniel Bienstock, Fabio D'Andreagiovanni
- 3 *A neighborhood based heuristic for a two level hierarchical facility location problem*
Bernardetta Addis, Giuliana Carello, Alberto Ceselli
- 4 *Robustness in Train Timetabling*
Valentina Cacchiani, Alberto Caprara, Matteo Fischetti

WeD4

Business intelligence tools in management (Sponsored session)
chair: Gianluca Murgia

Room 103

15.15-16.45

- 1 *eFM - Business intelligence tools in facility management*
Francesca Bacci, Luca Perciaccante
- 2 *INSIEL MERCATO - La centrale unica di soccorso: una risposta innovativa per affrontare in modo coordinato le emergenze*
Paolo Livoni
- 3 *CSC - IT solutions for highly complex and granular environments*
Tachi Pesando

WeD5

Game practice
chair: Fabio Gastaldi

Room 146

15.15-16.45

- 1 *A bankruptcy approach to ambulances location problems*
Vito Fragnelli, Stefano Gagliardo, Fabio Gastaldi
- 2 *Game Theory and Cryptography*
Antonio Magaña, Rafael Amer, Francesc Carreras, Josè Miguel Giménez
- 3 *Regulating HazMat Transportation: a Game Theory Approach*
Lucio Bianco, Massimiliano Caramia, Stefano Giordani, Veronica Piccialli

Thursday Sept. 10th 2009

ThA	Plenary session chair: Paolo Nobili	
Room 145	<i>Real-time Scheduling: Approximation Algorithms and Hardness Results</i> Friedrich Eisenbrand	9.00-10.00

ThB1	PRIN Project - Multimodal freight distribution I chair: Raffaele Cerulli	
Room 145		10.30-11.30
1	<i>Analysis and Simulation of a Port Container Terminal</i> Pietro Averaimo, Giuseppe Bruno, Francesco Gargano, <u>Andrea Genovese</u> , Gennaro Improta	
2	<i>A GIS based architecture for the assessment of environmental risk in maritime transportation</i> <u>Natalia Golini</u> , Giordano Onorati, Antonino Sgalambro	
3	<i>Game Theory Models in Location Analysis</i> <u>Lina Mallozzi</u>	

ThB2	Airport Logistics chair: Giovanni Andreatta	
Room 101		10.30-11.30
1	<i>Airport ground service equipment allocation (in memory of Lorenzo Brunetta)</i> <u>Giovanni Andreatta</u> , Lorenzo Capanna, Luigi De Giovanni, Michele Monaci, Luca Righi	
2	<i>Performance assessment for single echelon airport spare part management</i> <u>Annalisa Cesaro</u> , Dario Pacciarelli	
3	<i>The Assignment of Air Traffic Management Slots through Combinatorial Exchanges</i> Lorenzo Castelli, Raffaele Pesenti, <u>Andrea Ranieri</u>	

ThB3	Coloring and related problems chair: Andrea Lodi	
Room 149		10.30-11.30
1	<i>On the Maximum q-colorable Induced Subgraph Problem in Perfect Graphs</i> <u>Nicola Apollonio</u> , Massimiliano Caramia	
2	<i>Graph Multicoloring via CP-based Column Generation</i> <u>Stefano Gualandi</u> , Federico Malucelli	
3	<i>Branch&Bound and Branch&Price Algorithms for the Bin Packing Problem with Conflicts</i> Albert E. Fernandes Muritiba, Manuel Iori, <u>Enrico Malaguti</u> , Paolo Toth	

ThB4	Performance evaluation and management chair: Marcello Falasco	
Room 103		10.30-11.30
1	<i>The market of logistics services: a simulation analysis</i> <u>Nicola Bellantuono</u> , Pierpaolo Pontrandolfo	
2	<i>Projection of inefficient DMU on efficient frontier</i> <u>Valter Boljuncic</u>	
3	<i>Firm strategy with the Balanced Scorecard</i> <u>Marcello Falasco</u> , Marco Cardinali, Enrico Guzzini	

ThB5	PRIN Project - Integrated logistic networks I chair: Riccardo Minciardi	
Room 146		10.30-11.30
1	<i>Quantized Dissensus</i> Dario Bauso, Laura Giarrè, <u>Raffaele Pesenti</u>	
2	<i>The value of information in the transport of dangerous goods under a risk averse decision making</i> Chiara Bersani, Riccardo Minciardi, Michela Robba, Roberto Sacile, <u>Angela Maria Tomasoni</u>	
3	<i>Metamodel-based robust optimization</i> <u>Gabriella Dellino</u> , Jack P.C. Kleijnen, Carlo Meloni	

ThC1		PRIN Project - Multimodal freight distribution II chair: Anna Sciomachen	
Room 145			11.30-13.00
1	<i>Approaching the Multi-Port Master Bay Plan Problem</i> <u>Daniela Ambrosino</u> , Davide Anghinolfi, Massimo Paolucci, Anna Sciomachen		
2	<i>Flexible services for people transportation: a simulation model</i> <u>Pasquale Carotenuto</u> , Artem Serebriany, Giovanni Storchi		
3	<i>A heuristic algorithm for drawing stowage plans for container ships</i> Maria Flavia Monaco, Marcello Sammarra, <u>Gregorio Sorrentino</u>		
4	<i>Arc-based models for finding spatially dissimilar paths in multi-objective and multi-level network flows optimization</i> Paolo Dell'Olmo, Nicoletta Ricciardi, Giovanni Storchi, <u>Antonino Sgalambro</u>		

ThC2		PRIN Project - Distribution logistics II chair: Giampaolo Ghiani	
Room 101			11.30-13.00
1	<i>A branch-and-price-and-cut approach for the Split Delivery Vehicle Routing Problem</i> Claudia Archetti, <u>Nicola Bianchessi</u> , Maria Grazia Speranza		
2	<i>Metaheuristics for the selective arc routing problem with penalties</i> Claudia Archetti, <u>Gianfranco Guastaroba</u> , Maria Grazia Speranza		
3	<i>Heuristic Approaches for the Multiobjective Capacitated Arc Routing Problem</i> Lucio Grandinetti, Francesca Guerriero, Demetrio Laganà, <u>Ornella Pisacane</u>		
4	<i>Complexity of the VRP and SDVRP</i> Claudia Archetti, Dominique Feillet, Michel Gendreau, <u>M.Grazia Speranza</u>		

ThC3		Stable sets on claw-free graphs: recent advances chair: Gianpaolo Oriolo	
Room 149			11.30-13.00
1	<i>Solving the maximum weighted stable set problem in claw free graphs via decomposition</i> Yuri Faenza, <u>Gianpaolo Oriolo</u> , Gautier Stauffer		
2	<i>The stable set polytope of {antihat, claw}-free graphs</i> Anna Galluccio, <u>Claudio Gentile</u> , Paolo Ventura		
3	<i>A reduction algorithm for the weighted stable-set problem in claw-free graphs</i> <u>Paolo Nobili</u> , Antonio Sassano		
4	<i>An extended characterization of the stable set polytope of claw-free graphs</i> Yuri Faenza, Gianpaolo Oriolo, <u>Gautier Stauffer</u>		

ThC4	Software tools for management and optimization (Sponsored session) chair: Michele Monaci	
Room 103		11.30-13.15
1	<i>AMPL - Using the AMPL Modeling Language for Access to Advanced Solver Features</i> <u>Robert Fourer</u>	
2	<i>TSTAT - LINGO: An efficient tool for optimization modeling</i> <u>Mark Wiley</u>	
3	<i>OptiRisk Systems - SPInE and FortSP: a combined paradigm of SP and simulation</i> <u>Christian Valente</u>	
4	<i>MAXIMAL SOFTWARE - Why is Maximal now giving away free development copies of MPL?</i> <u>Bjarni Kristjansson</u>	

ThC5	PRIN Project - Integrated logistic networks II chair: Riccardo Minciardi	
Room 146		11.30-13.00
1	<i>The management of a logistic node: stability analysis and performance evaluation of possible scheduling policies</i> <u>Mauro Boccadoro</u> , Francesco Martinelli, Paolo Valigi	
2	<i>Modelling and planning freight transportation operations in railway networks with fast transfer facilities at terminals</i> Davide Anghinolfi, Massimo Paolucci, Simona Sacone, <u>Silvia Siri</u>	
3	<i>Metamodelling of Intermodal Transportation Networks: A Case Study</i> Valentina Boschian, Mariagrazia Dotoli, Maria Pia Fanti, Giorgio Iacobellis, Agostino Marcello Mangini, Gabriella Stecco, <u>Walter Ukovich</u>	
4	<i>Automated negotiation protocols for coordinating two maritime terminals</i> Alessandro Agnetis, <u>Gianluca De Pascale</u>	

ThD	Plenary session chair: Alessandro Agnetis	
Room 145	<i>Planning and scheduling in the service industries</i> Michael Pinedo	14.15-15.15

ThE1	PRIN Project - Multimodal freight distribution III chair: Paolo Dell'Olmo	
Room 145		15.15-16.45
1	<i>A Branch and Bound algorithm to solve the Double Travelling Salesman Problem with Multiple Stacks</i> <u>Francesco Carrabs</u> , Raffaele Cerulli, Maria Grazia Speranza	
2	<i>Multi-Agent Approaches for the Optimization of Logistics in a Multimodal Freight Distribution System</i> Paolo Dell'Olmo, <u>Laura Di Giacomo</u> , Mariagrazia Mecoli, Antonino Sgalambro	
3	<i>A simulated annealing based framework for solving the quay crane scheduling problem by simulation optimization</i> Pasquale Legato, <u>Rina Mary Mazza</u> , Roberto Trunfio	
4	<i>A scheduling algorithm for quay cranes operations</i> Maria Flavia Monaco, <u>Marcello Sammarra</u>	

ThE2	PRIN Project - Distribution logistics III chair: Maria Grazia Speranza	
Room 101		15.15-16.45
1	<i>A Hybrid Heuristic for an Inventory-Routing Problem</i> <u>Claudia Archetti</u> , Luca Bertazzi, Alain Hertz, Maria Grazia Speranza	
2	<i>Analysis of Practical Policies for an Inventory Routing Problem with Minimum Intershipment Time</i> <u>Luca Bertazzi</u> , Lap Mui Ann Chan, Maria Grazia Speranza	
3	<i>Satellites location study on the Two-Echelon Vehicle Routing Problem</i> Teodor Gabriel Crainic, <u>Simona Mancini</u> , Guido Perboli, Roberto Tadei	
4	<i>Shift scheduling in the same-day courier industry with multiple classes of requests</i> Gianpaolo Ghiani, <u>Emanuele Manni</u> , Antonella Quaranta	

ThE3	Data Driven Models for systems biology chair: Enza Messina	
Room 149		15.15-16.45
1	<i>Discovering Relationships among Human Cancer, Gene Expression Profile and Drug Responses: A Relational Clustering Approach</i> <u>Elisabetta Fersini</u> , Ilaria Giordani, Enza Messina, Francesco Archetti	
2	<i>Continuous Time Bayesian Networks for diagnosis of heart disease</i> <u>Elena Gatti</u> , Enrico Fagiuoli, Fabio Stella	
3	<i>A markov base classification and treatment of the anticoagulation patient</i> Francesco Archetti, <u>Ilaria Giordani</u> , Daniela Mari, Enza Messina, Giulia Ogliari	
4	<i>Clustering Analysis of Gene Expression Profiles and Drug Activity Patterns by p-Median Problem with Order</i> <u>Xenia Klimentova</u> , Saverio Salerno, Igor Vasilyev	

ThE4

**Simulation tools for decision support
(sponsored session)
chair: Raffaele Maccioni**

Room 103

15.15-16.45

- 1 *A Production Planning Tool*
Marcello Fabiano, Giuseppe Stecca
- 2 *The ACT Solutions' strategies versus the research world*
Raffaele Maccioni
- 3 *A Support Tool to solve the Container Loading Problem*
Giuseppe Confessore, Claudio Arbib, Sara Melone
- 4 *A Vehicle Routing Tool for large organized retailers*
Graziano Galiano, Marcello Fabiano

ThE5

**Scheduling under uncertainty
chair: Federico Della Croce**

Room 146

15.15-16.45

- 1 *Flowshop rescheduling under different types of disruptions*
Ketrina Katragjini, Eva Vallada, Rubèn Ruiz, Kostanca Katragjini
- 2 *Fuzzy project scheduling with progress payment*
Elham Merrikhi, Abolfazl Kazemi
- 3 *A model for coordinating uncertain wind power production and pumped storage hydro production*
Maria Teresa Vespucci, Marida Bertocchi, Francesca Maggioni, Mario Innorta
- 4 *Cost/risk balanced management of scarce resources using stochastic optimization*
Alexei Gaivoronski, Giovanni Sechi, Paola Zuddas

Friday Sept. 11th 2009

FrA1

Mixed-integer linear and nonlinear programming
chair: Veronica Piccialli

Room 145

9.00-11.00

- 1 *A Feasibility Pump Algorithm for Non-Convex Mixed Integer Non-Linear Programming Problems*
Claudia D'Ambrosio, Antonio Frangioni, Leo Liberti, Andrea Lodi
- 2 *A (Stabilized) Structured Dantzig-Wolfe Decomposition Method with Applications*
Antonio Frangioni, Bernard Gendron
- 3 *Projected Perspective Reformulations with Applications*
Antonio Frangioni, Claudio Gentile, Enrico Grande, Andrea Pacifici
- 4 *Some properties of the Boolean Quadric Polytope*
Endre Boros, Isabella Lari
- 5 *Quadratic $\{-1,0,1\}$ Optimization*
Christoph Buchheim, Alberto Caprara, Andrea Lodi

FrA2

Phd thesis II
chair: Paola Festa

Room 101

9.00-11.00

- 1 *Algorithms for Network Design and Routing Problems*
Enrico Bartolini, Vittorio Maniezzo
- 2 *Combinatorial and Robust Optimisation Models and Algorithms for Railway Applications*
Alberto Caprara, Laura Galli, Paolo Toth
- 3 *Constraint Programming Techniques for Mixed Integer Linear Programs*
Domenico Salvagnin, Matteo Fischetti
- 4 *Robust Network Design*
Laura Sanità, Gianpaolo Oriolo
- 5 *Enhanced Mixed Integer Programming Techniques and Routing Problems*
Andrea Lodi, Paolo Toth, Andrea Tramontani

FrA3

**Supply chain management
chair: Renata Mansini**

Room 149

9.00-11.00

- 1 *Modeling and Optimization of a Military Supply Chain with multiple commodities*
S.K. Bhagavatula, K. Kyamakya
- 2 *Regulation of input flow and optimization for supply chains*
Carmine De Nicola, Raffaella Frattaruolo, Rosanna Manzo, Saverio Salerno
- 3 *An Integrated Fuzzy Approach for Supplier Selection Process in Multi-objective framework*
Abolfazl Kazemi, Masoud Deldar, Behrooz Pourghannad
- 4 *Heuristic solutions to a customer model for the VMI policy in a multi-product framework*
Demetrio Laganà, Daniel Gulli, Pasquale Legato, Roberto Musmanno
- 5 *Improving supply system's reliability against random disruptions: Strategic protection investments*
Maria Paola Scaparra

FrA4

**Healthcare management II
chair: Walter Ukovich**

Room 103

9.00-11.00

- 1 *A Continuous Petri Net Model for the Management and Design of Emergency Cardiology Departments*
Mariagrazia Dotoli, Maria Pia Fanti, Agostino Marcello Mangini, Walter Ukovich
- 2 *Advanced Decision Support to Optimal Care of Chronic Heart Failure Patients: the FP6 European Project HEARTFAID*
Domenico Conforti
- 3 *An experience in localizing the HL7 Version 3 standard for the Italian Healthcare: Clinical Document Architecture (CDA) Rel.2 - Prescription*
Laura Giarre, Renato Calamai
- 4 *A Multi-Objective Block Scheduling Model for Surgical Operations Management*
Domenico Conforti, Francesca Guerriero, Rosita Guido
- 5 *Integer programming models for injured people evacuation in medium and maxi emergencies*
Edoardo Amaldi, Stefano Coniglio, Claudio Iuliano

FrA5

City logistics
chair: Nicoletta Ricciardi

Room 146

9.00-11.00

- 1 *A real-time information system for public transportation in case of unexpected events, delays and service interruptions*
Alberto Colorni, Diego Ciccarelli, Alessandro Luè, Roberto Nocerino
- 2 *Intra-city demand and uncertainty in City Logistics planning*
Teodor Gabriel Crainic, Fausto Errico, Nicoletta Ricciardi, Walter Rei
- 3 *Configuration of traffic parameters to improve car flows*
Alfredo Cutolo, Ciro D'Apice, Rosanna Manzo
- 4 *Optimization of car flows on Barcelona networks*
Luigi Rarità, Ciro D'Apice, Benedetto Piccoli, Dirk Helbing
- 5 *New benchmark results for the CVRP and the VRPTW*
Roberto Baldacci, Aristide Mingozzi, Roberto Roberti

FrB

Plenary session
chair: Gianni Di Pillo

Room 145

11.30-12.30

Matrix relaxations for combinatorial optimization
Franz Rendl

Room 145

Closing session

12.30-12.45