



Università di
Lecce



Associazione Italiana
di Ricerca Operativa



Università della
Calabria



Programme



**XXXV Conference of the
Italian Association of Operations Research**

LECCO, Italy
September 7-10, 2004

Contents

Conference Program	2
Software Tutorials	4
Plenary Sessions	4
Keynote (Semi-Plenary) Talks	4
Parallel Sessions	5
Social Events	17
Staying in Lecce	18
Eating in Lecce	19

Conference Programme

Tuesday, September 7	
9.00-	Registration
9.00-13.00	ILOG tutorial SAP tutorial
15.00-16.00	Opening session
16.00-16.30	Commemoration of Stefano Pallottino
16.30-17.00	Coffee break
17.00-18.00	Plenary session I
18.00-19.30	Parallel sessions I
19.30-20.30	Welcome buffet
20.30-	Guided tour to Baroque Lecce

Wednesday, September 8	
8.30-10.00	Parallel sessions II
10.00-11.00	Plenary session II
11.00-11.30	Coffee break
11.30-13.30	Parallel sessions III
15.00-16.00	Plenary session III
16.00-16.30	Coffee break
16.30-18.30	CIRO Meeting
18.30-19.30	ORMA Meeting
20.30-	Social dinner

Thursday, September 9	
8.30-10.00	Parallel sessions IV
10.00-11.00	Plenary session IV
11.00-11.30	Coffee break
11.30-13.00	Parallel sessions V
14.30-16.00	Parallel sessions VI
16.00-16.30	Coffee break
16.30-17.10	Semi-plenary sessions
17.10-19.10	AIRO Meeting
19.10-19.40	Speech of the EURO President
19.40-	AIRO Sport - Volleyball tournament

Friday, September 10	
8.30-10.00	Parallel sessions VII
10.00-11.00	Plenary session V
11.00-11.30	Coffee break
11.30-13.00	Parallel sessions VIII
14.30-15.30	Plenary session VI
15.30-17.00	Parallel sessions IX
17.00-17.30	Coffee break
17.30-19.30	Parallel sessions X

Saturday, September 11	
9.00-15.30	AIRO Trekking

Software Tutorials

Tuesday, September 7, 10.00-13.00: ILOG Tutorial (Room SP4)

Tuesday, September 7, 10.00-13.00: SAP Tutorial (Room SP5)

Plenary Sessions (Room SP4)

Tuesday, September 7, 17.00-18.00 - Chairperson: A. Sassano

- F. Barahona (IBM Watson Center, USA) - ORMA Invited Speaker
Separation of partition inequalities and their role in network design

Wednesday, September 8, 10.00-11.00 - Chairperson: L. Grandinetti

- L. Escudero (Universidad Miguel Hernández, Spain)
On Solving Mixed 0-1 Stochastic Programs

Wednesday, September 8, 15.00-16.00 - Chairperson: M. G. Speranza

- F. Archetti (University of Milan, Italy)
Operations Systems and Life Sciences: Integration Perspectives

Thursday, September 9, 10.00-11.00 - Chairperson: S. Martello

- M. Savelsbergh (Georgia Institute of Technology, USA)
Logistics Challenges and Optimization Opportunities

Friday, September 10, 10.00-11.00 - Chairperson: P. Toth

- G. Laporte (Canada Research Chair in Distribution Management)
Metaheuristics for the Vehicle Routing Problem: Fifteen Years of Research

Friday, September 10, 14.30-15.30 - Chairperson: R. Musmanno

- O. Burdakov (Linköping University, Sweden)
Isotonic Regression: Algorithms and Applications

Keynote (Semi-Plenary) Talks

Thursday, September 9, 16.30-17.10 (Room SP4) Chairperson: S. Salerno

- Pierre L'Ecuyer (Canada Chair in Stochastic Simulation and Optimization)
Uniform Random Number Generation: Overview and Recent Developments

Thursday, September 9, 16.30-17.10 (Room SP5) Chairperson: A. Agnetis

- Annegret Wagler (University of Magdeburg)
On the stable set polytopes of claw-free graphs

Parallel Sessions

Tuesday, September 7					
	Room SP1	Room SP4	Room SP5	Room SP6	Room SP7
18.00-19.30	Internet I	Large Scale Nonlinear Opt. I	Telecommunications I	Packing	Polyhedral Methods in Combinatorial Optimization

Wednesday, September 8					
	Room SP1	Room SP4	Room SP5	Room SP6	Room SP7
8.30-10.00	Internet II	Large Scale Nonlinear Opt. II	Telecommunications II	Electric Power Markets	Vehicle Routing I
11.30-13.30	Game Theory	Large Scale Nonlinear Opt. III	Telecommunications III	Medical Decision Making	Vehicle Routing II

Thursday, September 9					
	Room SP1	Room SP4	Room SP5	Room SP6	Room SP7
8.30-10.00	Logistics I	Nonlinear Programming I	Programming Under Uncertainty	Mathematical models for learning I	Railway Optimization
11.30-13.00	Logistics II	Nonlinear Programming II	Network Optimization I (a session in memory of Stefano Pallottino)	Mathematical models for learning II	Transportation I
14.30-16.00	Logistics III	Scheduling I	Network Optimization II	Combinatorial Optimization I	Transportation II

Friday, September 10					
	Room SP1	Room SP4	Room SP5	Room SP6	Room SP7
8.30-10.00	Finance	Scheduling II	Network Optimization III	Combinatorial Optimization II	Transportation III
11.30-13.00	Location	Scheduling III	Graphs Algorithms	Combinatorial Optimization III	Transportation IV
15.30-17.00	Knapsack and knapsack-like problems	Scheduling IV	Graph Applications	Combinatorial Optimization IV	OR in Practice (a session in memory of T. Ciriani)
17.30-19.00	Solid Waste Management	Graph Algorithms II	Simulation and Simulation-Optimization	Combinatorial Optimization V	OR in Practice II

Invited session - Internet I (Network of Excellence EuroNGI session) - Chairperson: A. Pacifici

- Michał Pióro
Telecommunication Network Design Problems Related to the Notion of Max-Min Fairness
- Sergio Beker
Optimization Techniques for the Dimensioning and Reconfiguration of MPLS Networks
- M. Naldi
Polyhedral Traffic Matrices for the Design of the Next Generation Internet
- P. Iovanna
Design and Analysis of a Traffic Engineering System for Multi-Layer Networks with a Dynamic Handling of Optical Resources

Invited session - Large Scale Nonlinear Optimization I (FIRB project) - Chairperson: G. Di Pillo

- M. D'Apuzzo, M.L. De Cesare, M. Marino, M.R. Maddalena,
A Solving Environment for Large-Scale Optimization Problems
- M. D'Apuzzo, V. De Simone, D. di Serafino, G. Toraldo
Potential Reduction Solvers for Large-Scale Quadratic Programs
- S. Lucidi, L. Palagi, A. Risi, M. Sciandrone
A convergent decomposition algorithm for training Support Vector Machines
- A. Grosso, M. Locatelli, F. Schoen
Evolutionary strategies in the optimization molecular cluster

Invited session - Telecommunications I (PRIN project) - Chairperson: F. Malucelli

- C. D'Apice, R. Manzo
Queueing networks with positive customers, signals and impatient service
- L. Brunetta, G. Carnevale, S. Tomasin
Joint optimization of transmit power and detection order in UMTS systems
- E. Amaldi, P. Belotti, A. Capone, M. Pinar*
A model and algorithm for provisioning Virtual Private Networks under demand uncertainty
- E. Amaldi, S. Bosio, A. Capone, F. Malucelli
On the new class of covering problems arising in planning wireless LANs

Invited session - Packing (SORSA session) - Chairperson: S. Martello

- R. Baldacci, M. A. Boschetti
Cutting Plane Approaches for the Two-Dimensional Orthogonal Knapsack Problem
- A. Caprara, A. Lodi, S. Martello, M. Monaci
Packing rectangles into a square
- M. Iori, J. J. Salazar Gonzalez, D. Vigo
An Exact Approach for the Capacitated Vehicle Routing Problem with Two-Dimensional Loading Constraints
- X. Wang, B. Wan
A Practical Heuristic Search Strategy for Two Dimensional Cutting Stock Problems

Invited session - Polyhedral Methods in Combinatorial Optimization - Chairperson: F. Rossi

- M. Labbé, M. Servilio
Polyhedral Study for a UMTS Channel Assignment Problem
- M. Giandomenico, A. Letchford
Exploring the Relationship Between Max-Cut and Stable Set Relaxations
- G. Oriolo, A. Wagler
On the stable set polytopes of classes of claw-free graphs
- A. Wagler
On Normal Graphs and the Normal Graph Conjecture

Invited session - Internet II - Chairperson: A. Agnetis

- C. D'Apice, R. Manzo, A. Pechinkin
A queueing system based model for self-similar Internet traffic
- F. Archetti, E. Messina
Stochastic Optimization in Profiling Web Users
- A. Micarelli, F. Sciarrone
Adaptive Information Filtering on the Web
- C. Archetti, L. Bertazzi, M. G. Speranza
A Branch-and-Cut Algorithm for a Vendor-Managed Inventory-Routing Problem

Invited session - Large Scale Nonlinear Optimization II (FIRB project) - Chairperson: G. Di Pillo

- L. Grippo, M. Sciandrone
A nonmonotone derivative free method for nonlinear equations
- M. Gaudio, G. Miglionico
An online algorithm for convex min-max problems.
- G. Liuzzi, S. Lucidi, M. Sciandrone
A derivative-free algorithm for linearly constrained finite minimax problems
- G. Liuzzi, S. Lucidi, V. Piccialli, M. Villani
Induction motors design by a mixed-variable approach

Invited session - Telecommunication II (SORTEL project) - Chairperson: M. Dell'Amico

- M. Baglietto, F. Davoli, M. Marchese, M. Mongelli
Neural Approximation of Open Loop-Feedback Rate Control in Satellite Networks.
- C. D'Apice, R. Manzo, S. Salerno
Performance of queueing systems with Batch Markovian Arrival Processes
- G. Bretti, M. Caramia, R. Natalini, B. Piccoli, A. Sgalambro
Fluidodinamica applicata al traffico su reti: un prototipo di simulatore.
- M. Baglietto, M. Sanguineti, R. Zoppoli
Decentralized optimal dynamic routing in telecommunication networks by parametrization of the decision strategies

Invited session - Electric Power Markets - Chairperson: C. Triki

- D. Corradino, C. Triki
Portfolio Optimization for Electricity Traders in the Italian Market
- Tomasgard, M. Fodstad, F. Rømo, M. P. Nowak
Natural gas value chain optimization using stochastic integer programming
- A. Alonso-Ayuso, L. F. Escudero, M. T. Ortuño
On using Stochastic Programming for structuring bilateral energy contract portfolios in competitive markets
- C. Gentile, A. Frangioni
A Dynamic Programming Approach for Single-Unit Commitment Problems with Ramping Constraints

Invited session - Vehicle Routing I (SORSA Project) - Chairperson: M. Fischetti

- R. De Franceschi, M. Fischetti, P. Toth
A new ILP-based refinement heuristic for Vehicle Routing Problems
- C. Archetti, A. Hertz, R. Mansini, M.G. Speranza
The split delivery VRP: properties and algorithms
- I. Luzzi
An open source library to easily model and solve MIP problems: a real example
- T. Ibaraki, S. Imahori, K. Nonobe, K. Sobue, T. Uno, M. Yagiura
An Iterated Local Search Algorithm for the Vehicle Routing Problem with Convex Time Penalty Functions

Invited session - Game Theory- Chairperson: F. Patrone

- A. Scarelli, M. Larbani
The dynamic control of the unfaithfulness on a cooperative
- F. Patrone
TUIC games
- S. Moretti, F. Patrone
Application of the Shapley value to microarray data analysis
- R. Delpiano, V. Fragnelli, F. Garin, R. Tadei, I. Vario
Game Theory and Wireless Communication Networks
- R. Nessah, M. Larbani
On Berge Equilibrium

Invited session - Large Scale Nonlinear Optimization III (FIRB project) - Chairperson: G. Di Pillo

- G. Fasano, M. Roma
Issues on preconditioned truncated Newton Methods
- F. Facchinei, C. Kanzow, L. Palagi
Newton method for KKT systems under weak assumptions
- C. Antoni, G. Mastroeni, M. Pappalardo
Modelli ed algoritmi per problemi di equilibrio variazionale.
- B. Panucci, M. Pappalardo, M. Passacantando
A path-based extragradient algorithm for network equilibrium problems - part I
- B. Panucci, M. Pappalardo, M. Passacantando
A path-based extragradient algorithm for network equilibrium problems - part II

Invited session - Telecommunication III (SORTEL project) - Chairperson: M. Dell'Amico

- P. Avella, S. Mattia, A. Sassano
Metric inequalities and the network loading problem
- R. Baldacci, M. Dell'Amico
Heuristic and exact algorithms for the design of urban optical networks
- P. Belotti, F. Malucelli, L. Brunetta
Network design with non-linear node cost function: valid inequalities and a branch-and-cut approach.
- L. De Giovanni, F. Della Croce and R. Tadei
The Internet protocol network design problem with reliability and routing constraints

Invited session - Medical Decision Making: Problems, Methods and Applications - Chairperson: D. Conforti

- E. Tanfani, A. Testi
Modelling Waiting List Prioritisation Via Simulation
- De Gaetano, A. Risi, M. Sciandrone
A patient adaptable ECG beat classifier based on neural networks
- R. Cerutti, M. Cesana, L. De Amicis, E. Faggiuoli, E. Grossi, D. Luciani, M. Stabilini, F. Stella
Quantitative methods for adverse drug reaction signalling
- A. Thanda, M.M. Khin, P. Tin
Stochastic models for some medical decision making problems
- D. Conforti, R. Guido, C. Sanfilippo, R. Bonofiglio
Machine learning approaches for kidney transplant decision making

Invited session - Vehicle Routing II - Chairperson: D. Vigo

- G. Righini, M. Salani
Bidirectional bounded dynamic programming for shortest path problems with resource constraints

- A. Caprara, A. Letchford
Computing Good Allocations for Combinatorial Optimization Games
- F. Malucelli, M. Bruglieri, R. Aringhieri, M. Nonato
A VNS for the optimal sequencing of skip collections and deliveries
- S. Palamara, G. Perboli, R. Tadei
Genetic Local Search for the Capacitated Vehicle Routing Problem
- D. Favaretto, E. Moretti, P. Pellegrini
An Ant Colony System approach for variants of the Traveling Salesman Problem with Time Windows

Thursday September 9, 8.30-10.00

Invited session - Logistics I - Chairperson: L. Bertazzi

- C. Archetti, L. Bertazzi, M. G. Speranza
Approximation Algorithms for the Traveling Salesman Reoptimization Problem
- L. A. Cassani, G. Righini
Heuristic algorithms for the TSP with rear-loading
- P. Beraldi, G. Ghiani, G. Laporte, R. Musmanno
Efficient Neighborhood Search for the Probabilistic Pickup and Delivery Travelling Salesman Problem
- G. Confessore, S. Giordani, S. Rismondo
A Tabu Search Approach for No-Wait Job-Shop Scheduling with Alternative Routes

Invited session - Nonlinear Programming I - Chairperson: A. Fuduli

- H. Ben Amor, J. Desrosiers, A. Frangioni
Stabilization in Column Generation
- G. Giallombardo, D. Ralph
Exploiting convergence of multipliers of NLP methods embedded in decomposition methods for MPCC
- F. Tardella
An extension of the fundamental theorems of Linear and Quadratic Programming and applications
- A. V. Demyanov, A. Fuduli, G. Miglionico
A new bundle update procedure for convex minimization

Invited session - Programming Under Uncertainty - Chairperson: P. Beraldi

- N. Di Domenica, G. Birbilis, G. Mitra, P. Valente
Stochastic Programming and Scenario Generation within a Simulation Framework: An Information Systems Perspective.
- K. M. Rasmussen, J. Clausen
Mortgage Loan Portfolio Optimization Using Multi Stage Stochastic Programming
- P. Beraldi, M.E. Bruni, D. Conforti
A Decomposition Coordination Approach for Solving Nonlinear Mixed Integer Stochastic Programs
- A. Frangioni, A. Manca, P. Zuddas
Scenario Optimization and Decomposition Methods: an Application to Air Traffic Flow Management

Invited session - Mathematical methods for learning I - Chairperson: C. Vercellis

- C. Vercellis
Mathematical methods for learning: an overview
- C. Orsenigo, C. Vercellis
Hard separation in binary and multicategory discrete support vector machines
- M. Sanguineti
Learning and generalization by kernel methods with bounded complexity
- R. Bruni
Fast Classification of Large Data Sets using Binary Knapsack

Invited session - Railway Optimization - Chairperson: P. Toth

- P.L. Guida, V. Colarieti, A. Caprara, M. Monaci, P. Toth
The Train Platforming Problem
- V. Fragnelli, F. Patrone, S. Sanguineti
Relevant Parameters in Designing Railway Infrastructure Access Fees
- V. Cacchiani, A. Caprara, P. Toth
A Linear Programming Approach to the Train Timetabling Problem
- M. Campetella, M. G. Digiaco, F. Alberto
Perché la ricerca operativa è trascurata dalle imprese ferroviarie europee? Focus sul settore del traffico merci europeo

Thursday September 9, 11.30-13.00

Invited session - Logistics II - Chairperson: R. Musmanno

- J.-F. Cordeau, M. Gaudio, G. Laporte, P. Legato, L. Moccia
New optimization models and algorithms in management of container terminals
- D. Favaretto, F. Piccinonno
Modelli integrati per raccolta ordini e consegne nei supermercati on-line
- M. Di Francesco, A. Olivo, P. Zuddas
An empty containers management dynamic model
- M. Falasco, M. Cardinali
A new pattern of industrial logistics for management control: from the Activity Based Costing to the Activity Based Management

Contributed session - Nonlinear Programming II - Chairperson: R. Zoppoli

- A. Alessandri, M. Cuneo, M. Sanguineti
An algorithm for parameters estimation: bounds on the estimation error and application to time-series prediction
- M. Sanguineti, R. Zoppoli
Efficient approximation schemes for functional optimization
- I. Bomze, M. Locatelli, F. Tardella
Towards efficient and cheap bounds for StQPs
- L. Di Giacomo, G. Patrizi
Linear Complementarity System formulation of Combinatorial Problems

Invited session - Network Optimization I - in memory of Stefano Pallottino - Chairperson: G. Gallo

- G. Cattaneo, P. Faruolo, U. Ferraro
A new framework for experimental study of graph algorithms
- F. Carrabs, R. Cerulli
Efficient visiting strategies and data structure for SPT algorithms
- P. Carotenuto, G. Graziano, S. Giordani, S. Ricciardelli
Finding spatial dissimilar paths for hazmat shipments

- R. Cerulli, P.Festa
A routing problem arising in Flexible Manufacturing Systems

Invited session - Mathematical methods for learning II - Chairperson: C. Vercellis

- G. Felici
Model Localization in Classification and Data Mining
- S. Canale, A. Sassano
A supervised clustering technique based on clique partitioning problem
- C. Cifarelli, L. Nieddu
An iterative kernel clustering algorithm for pattern recognition
- F. Stella, C. Miozzo, M. Ranixe
Image mining for car tracking

Invited sessions - Transportation I (PRIN project) - Chairperson: P. Dell'Olmo

- P. Dell'Olmo
Infomobility and design of integrated urban transportation systems
- I. Carpentieri, M. Marina, A. Sciomachen
Evaluation of intermodal nodes in urban networks
- R. Cerulli, S.Pallottino
A multi-source shortest path algorithm
- M. Boccia, G. Bruno, A. Sforza
Optimal location of VMSs for urban traffic management

Thursday September 9, 14.30-16.00

Invited session - Logistics III - Chairperson: P. Dell'Olmo

- M. Gentili, A. Sgalambro
Stochastic and dynamic distribution methods for managing uncertainties of e-commerce
- P. Mirchandani, M. Mecoli, A. Pacifici, G. Felici,
Equilibria in competitive assignment
- P. Antun, A. Lozano, G. Storchi,
Metropolitan hazardous materials transportation corridors
- G. Lulli, D. Paschina, N. Ricciardi
Mathematical models for empty freight car distribution
- M. Gentili, A. Scozzari,
Temporal-dissimilar paths for hazardous materials transportation

Invited session - Scheduling I - Chairperson: F. Rossi

- C. Arbib, F. Marinelli
An asymptotically exact solution to an assortment problem
- C. Filippi, A. Agnetis
IRUP and MIRUP in the bin packing with a fixed number of item types
- G. Ciaschetti, E. Koehler, S. Stiller
Packet Scheduling in UMTS
- A. Agnetis, G. De Pascale
An exact algorithm for a two-agent scheduling problem with different objective functions

Invited session - Network Optimization II - Chairperson: F. Guerriero

- S. Ammirato, F. Guerriero, A. Volpentesta
The determination of the hyper-network and of the hyper-paths in a direct hypergraph
- M. Pascoal, M. E. Captivo, J. Clímaco, J. Craveirinha
Quickest path algorithms and an application to Internet packet routing
- M. G. Scutellà
New results about the parametric maximum flow problem and some related reoptimization issues

- P. Festa, S. Pallottino
Shortest paths reoptimization: an auction algorithm

Invited session - Combinatorial Optimization I (SORSA session) - Chairperson: A. Lodi

- G. Rinaldi, P. Ventura
New bounds and optimal solutions for VRP
- E. Malaguti, M. Monaci, P. Toth
A set-covering based heuristic approach for the vertex coloring problem
- S. Boyd, M. Fortini, A. N. Letchford, A. Lodi, K. M. Wenger
On traveling salesman compatible tours
- L. Bianco, G. Confessore, G. Stecca
A multi-agent model for distribution problems in logistics systems

Invited sessions - Transportation II (PRIN project) - Chairperson: P. Mirchandani

- R. De Leone
Constructive heuristics for the Dial-A-Ride problem
- R. W. Calvo, A. Colorni, A. Sodano, F. Valandro
Solving the on-line Dial-a-Ride problem
- M. Cagnoli, S. Francalanci, M. Gentili
Models integration in Rome Intelligent Transportation System
- G. Bruno, G. Improta
Models and methods for the evacuation problem

Friday September 10, 8.30-10.00

Invited session - Finance - Chairperson: R. Mansini

- P. Daniele
Evolutionary variational inequalities applied to financial equilibrium problems in an environment of risk and uncertainty
- E. Faggioli, F. Stella, A. Ventura
Mixtures and constant rebalanced portfolios
- G. Felici, M. Fuoco, M. A. Galante, L. Torosantucci
Evaluation of financial technical analysis by logic data mining
- R. De Leone, E. Marchitto, A. Quaranta
Autoregression and artificial neural networks for financial market forecast

Contributed session - Scheduling II - Chairperson: G. Ghiani

- M. Haouari
Optimal scheduling of a two-stage hybrid flow shop
- P. Mauguère, J. L. Bouquard, J.-C. Billaut
Two-machine flow shop with an operator
- A. Caumont, M. Gourgand, P. Lacomme, N. Tchernev
Taboo algorithm for the jobshop problem with time lags: $JM|L_1, SJ(I)|C_{MAX}$
- K. Kogan
Scheduling parallel machines by the dynamic newsboy problem

Invited session - Network Optimization III (SORSA project) - Chairperson: M. G. Scutellà

- D. Pretolani
Routing in dynamic networks: schemes, models and algorithms
- R. Cerulli, A. Iossa, S. Pallottino
Efficient Preflow Push algorithms for the maximum flow problem
- A. Frangioni

Combining interior point and reoptimization techniques for building efficient min-cost flow algorithms

- P. Cappanera, M. G. Scutellà
Balanced paths in acyclic networks

Contributed session - Combinatorial Optimization II - Chairperson: F. Tardella

- A. Scozzari, F. Tardella
The Boolean probability bounding problem
- E. Amaldi, P. Belotti, R. Hauser
Randomized relaxation methods for the maximum feasible subsystem problem
- G. Lancia, F. Rinaldi
Reducing the k-mer diversity of a string.
- F. Cassidei, M. Falagario
The knapsack container loading problem: an updated view of Pisinger's approach.

Invited session - Transportation III (session jointly organized with SIDT) - Chairperson: A. Sforza

- C. Catta, F. Filippi, G. Gentile
A heuristic algorithm for the immediate-request dial-a-ride problem with time windows and energy constraints
- G. Gentile, L. Meschini, N. Papola
Fast heuristics for continuous dynamic shortest paths and all-or-nothing assignment
- M. Gallo
A bi-level approach for solving the urban transportation network design problem.
- G. Guido, A. Miscimarra
Analysis of urban traffic emissions: a case study

Friday September 10, 11.30-13.00

Invited session - Location - Chairperson: G. Righini

- G. Righini, A. Tironi, L. Zaniboni
A branch-and-price algorithm for the Multi-Weber Problem
- G. Carello, F. Della Croce, R. Tadei
Heuristic for the Generalized Quadratic Assignment Problem with quadratic capacity constraints
- P. Mirchandani, A. Agnetis, A. Pacifici,
Locational Decisions for Barge-tracking Radars
- R. L. Church, M. P. Scaparra
Mathematical models for critical infrastructure protection planning

Contributed session - Scheduling III - Chairperson: M. Paolucci

- F. Pezzella, R. Vichi
A Genetic Algorithm For Distributed And Flexible Job-Shop Scheduling Problems
- G. Stecco
A production scheduling problem as a time dependent TSP: a case study.
- N. Bianchessi, G. Righini
Greedy algorithms for planning and scheduling operations on Earth observing satellites
- Gozzi, M. Paolucci
Analysis of heuristic approaches for the on-line earliness-tardiness parallel machine scheduling problem

Invited session - Graph Algorithms I - Chairperson: P. Dell'Olmo

- M. Caramia, A. Sgalambro,
On the maximum concurrent flow problem with bounded number of paths
- F. Carrabs, R. Cerulli, M. Gentili, G. Parlato

- A linear Time Algorithm for the Minimum Weighted Feedback Vertex Set on Diamonds
- T. Crainic, N. Ricciardi, G. Storchi
The On-Demand Tourist Paths Problem
- J. Granat
The multicriteria routing problems in the telecommunications networks.

Contributed session - Combinatorial Optimization III - Chairperson: G. Felici

- M.A. Boschetti, A. Mingozzi, Ricciardelli
Solving The Set Partitioning Problem Using Lagrangean Relaxation And Column Generation
- E. Amaldi, L. Liberti, N. Maculan, F. Maffioli
Finding minimum fundamental cycle bases in undirected graphs
- S. Oussedik
The Air Traffic Flow Management problem, Constraint Programming versus Integer Programming, a comparative study
- B. Scoppola., E. Scoppola, A. Iovanella
A simulated annealing algorithm for the computation of the maximum clique of a graph.

Contributed session - Transportation IV - Chairperson: G. Improta

- V. Astarita, R. Bertini, G. Guido
The estimation of traffic flow parameters from instrumented vehicles counts
- G. Mazzulla, R. Guzzo
La distribuzione urbana delle merci: modalita' operative e stima delle quantita' movimentate
- D. De Luca Cardillo, V. Carboncini, M. Fontana, G. Giardiello
Car Pooling: a possible solution to traffic problem
- S. Adly, M. A. Mansour, L. Scrimali
Hölderian Stability for a Time-dependent Traffic Network Model

Friday September 10, 15.30-17.00

Invited session - Knapsack and knapsack-like problems - Chairperson: G. Righini

- P. Cappanera, M. Trubian
On solving a 0-1 knapsack problem with a demand constraint
- A. Ceselli
An exact algorithm for the 0-1 penalized knapsack problem
- M. Cagna, G. Rondelli, M. Salani
Greedy and local search algorithms for a bidimensional covering problem
- R. Mansini, U. Pferschy
Knapsack Problems and Securitization of Financial Assets

Contributed session - Scheduling IV - Chairperson: G. Romanin Jacur

- E. Angelelli, M.G. Speranza, Zs. Tuza
Improved bounds for a semi on-line scheduling problem on two parallel processors
- C. Filippi, G. Romanin Jacur
Parallel Machine Scheduling with Sequence Setups, Lot Splitting, Release and Due Dates: a Heuristic Approach
- G. Ghiani, A. Grieco, E. Guerriero, R. Musmanno
Minimizing the Number of Tool Switches in a NC Machine

Invited session - Graph applications - Chairperson: C. Meloni

- P. Detti, C. Meloni, M. Pranzo
Bi-criteria setup coordination in a two stage serial production system
- M. Ciavotta
Evolutionary approach to sequencing problems with setups

- M. Pranzo, L. Adacher, D. Pacciarelli, D. Paluzzi
Aircraft scheduling in a busy airport
- G. Maione, C. Meloni
A new approach to deadlock prevention in manufacturing systems

Contributed session - Combinatorial Optimization IV - Chairperson: P. Nobili

- G. Gallo, C. Sodini
Operations Research methods and models for Conflict prevention
- F. Della Croce, B. Escoffier, C. Murat, V. T. Paschos
Probabilistic coloring of bipartite and split graphs
- A. Galluccio, P. Nobili
A 5/6-approximation algorithm for Max Vertex Cover
- R. Montemanni, L. M. Gambardella, A.K. Das
The minimum power broadcast problem in wireless networks: a simulated annealing approach

Invited session - OR in Practice I - a session in memory of Tito A. Ciriani - Chairperson: G. Perboli

- G. Confessore, S. Rismondo, G. Stecca, A. Tramontano
A combinatorial auction model for the integration of procurement, production planning and inventory management processes
- S. Gliozzi, R. Rucco, M. Scarioni
Fail Management in post trading environment
- T. Bassetto, F. Mason
The determination of districts in an emergency service
- P. Avella, M. Boccia, A. Sforza, I. Vasil'ev
A production problem solved by a network optimisation approach as a specially structured very large scale p -Median problem

Friday September 10, 17.30-19.30

Contributed session - Solid Waste Management - Chairperson: D. Favaretto

- B. Barbagallo, D. Bernardi, G. Confessore, S. Rismondo
A Decision Support System for Waste Collection Management Problem
- R. Aringhieri
Powering a local Energy System by Optimal Solid Waste Management
- F. Alfieri
An Optimization Model for Services Scheduling of a Waste Management Company

Contributed session - Graph Algorithms II - Chairperson: F. Mason

- I. Lari, F. Ricca, B. Simeone
A Weighted Voronoi Diagram Approach To Political Districting
- F. Zirilli
Mathematical models of smart obstacles
- M. Salatino
Location of an urban logistic platform in Cosenza

Contributed session - Simulation and Simulation Optimization - Chairperson: P. Legato

- G. Confessore, P. De Luca, G. Liotta, A. Pacifici
Simulation and optimization for the design of plant layout and material flows: an integrated approach
- G. Ghiani, P. Legato, R. Musmanno, F. Vocaturo
Heuristic Procedures for Discrete Simulation-Optimization
- P. Canonaco, P. Legato, F. Vocaturo

Steady state simulation of queuing network models of manufacturing systems for purposes of ranking and selection of the best configuration

- E. Campana, G. Fasano, D. Peri, A. Pinto
Formulation issues on multidisciplinary optimization

Contributed session - Combinatorial Optimization V - Chairperson: P. Avella

- I. Vasil'ev, P. Avella
PBC: A Parallel Branch-and-Cut framework
- C. Mannino, P. Nobile, F. Rossi, S. Smriglio, A. Sassano
Disjunctive cuts through projection for set covering problems
- R. Aringhieri, R. Cordone
Balancing workers' shifts in a junk removal company through a multicommodity multilevel bottleneck assignment approach
- Z. Delrobaii
The comparison of the results of ranking with linear assignment method in job satisfaction and staff performance appraisal.

Contributed session - OR in practice II - Chairperson: M. Haouari

- S. Al-Mutairi, N.D. Burns, C.J. Backhouse
Evaluating the role of decision makers within small-sized companies by using a viable system model
- A. Toloie, S. M. Hoseini Khezri
Compar group decision making method and statistical approach on ranking alternatives
- A. Moino
Programmazione Lineare 2002: il paradosso dell'aumento

Social Events

Welcome Buffet

Date and time: Tuesday September 7, 19:30-20:30

Place: Monastero degli Olivetani, viale San Nicola (200 m from the Conference site)

Free of charge

Guided tour to Baroque Lecce

Date: Tuesday September 7, 20:30-21:30

Meeting Point: Monastero Olivetani, viale San Nicola (200 m from the Conference site)

Free of charge

Social Dinner

Date and time: Wednesday September 8, 20.30

Site: "Circolo Cittadino", via Rubichi, 33 (close to P.zza S. Oronzo)

Fee: 50 €/person

AIRO Sport - Volleyball tournament

Date and time: Thursday September 9, 19:40

Place: Palazzetto dello sport (close to Hotel Tiziano)

Free of charge

Airo Trekking - Excursion to "Porto Badisco"

Date and time: Saturday September 11, 9:00

Meeting Point: Conference Site

Lunch site: Villaggio Mulino a Vento (<http://www.mulinoavento.it>), Uggiano La Chiesa (LE)

Fee: 20 €/person

Staying in Lecce

Brindisi Airport – Lecce (and vice versa)

- At Brindisi airport a public shuttle service to Lecce is available (a one way ticket costs 4,39 €). The journey takes about 30 minutes. The shuttle stop in Lecce is located at "Bar Commercio" (in front of Hotel Tiziano).

Departures from Brindisi Airport: 6:05 – 10:45 – 12:45 – 15:00 – 19:10 – 23:10.

Departures from Lecce: 5:20 – 9:20 – 11:30 – 13:20 – 17:40 – 22:00

- Alternatively, a direct transportation service from Brindisi airport to any hotel in Lecce (and vice versa) is available. A one way ticket costs 14 €. You should book in advance by calling "Crusi Viaggi" (Tel : +39 0832 305522).

Public transportation in Lecce

- A bus service operated by "Autolinee Urbane" (orange and light blue buses) covers the city centre and the suburbs. The cost of a one-way urban trip is 0.52 €.
- A (free of charge) electric mini-bus service covers the pedestrian area in the city center.

Taxis

Phone numbers: +39 0832 246150, +39 0832 247978, +39 0832 306045

Public transportation in Salento

- A special summer transportation service from Lecce to the main tourist attractions in Salento (Gallipoli, Otranto, S. Maria di Leuca, etc.) is available. Please visit <http://www.salentoibus.it> for detailed information.
- In addition, a transportation service (operated by STP) links Lecce to almost every center in Salento. A one-way ticket costs 0.77 €.

Parking in Lecce

- Most hotels in Lecce have their own parking area
- In addition, there is a parking area just in front of the conference site (cost: 2 €/day)

Eating in Lecce

Restaurants

- (*) Picton: Via Idomeneo, 14 - Tel. 0832 332383
- (*) La Vecchia Osteria: Via Da Summo, 3. Tel. 0832 308057
- Alle Due Corti: P.zetta Arco di Prato - Tel. 0832 458432
- Il Giardino dei Mocenigo: Via dei Mocenigo, 15 - Tel: 0832 301108
- Trattoria San Carlino. Via Libertini, 22. Tel: 0832 331856
- Re Idomeneo: Via Libertini, 44. Tel: 0832 307811
- Corte dei Miracoli: Via Galateo, 2. Tel: 0832 279904
- Villa della Monica: Via SS. Giacomo e Filippo, 40. Tel. 0832 458432
- Osteria degli Spiriti: Via Cesare Battisti, 4. Tel. 0832 246274
- Trattoria Casereccia: Via Costadura, 19. Tel. 0832 245178
- Osteria della Divina Provvidenza. Via Taranto, 67. Tel. 0832 277851
- Symposium. Vico dei Verardi, 7. Tel. 0832 277819
- La Magiada: Corso Vittorio Emanuele, 48. Tel. 0832 247081
- Le Arcure: Via Garibaldi, 21. Tel. 0832 246714
- Guido & Figli: Viale XXV Luglio, 14. Tel.: 0832 305868
- La Capannina: Corte Angelo Miali. Tel. 0832 304159
- Mamma Lupa: Via degli Acaja, 12. Tel. 340 7832765
- I Tre Moschettieri: Via Paisiello, 9/a. Tel. 0832 308484

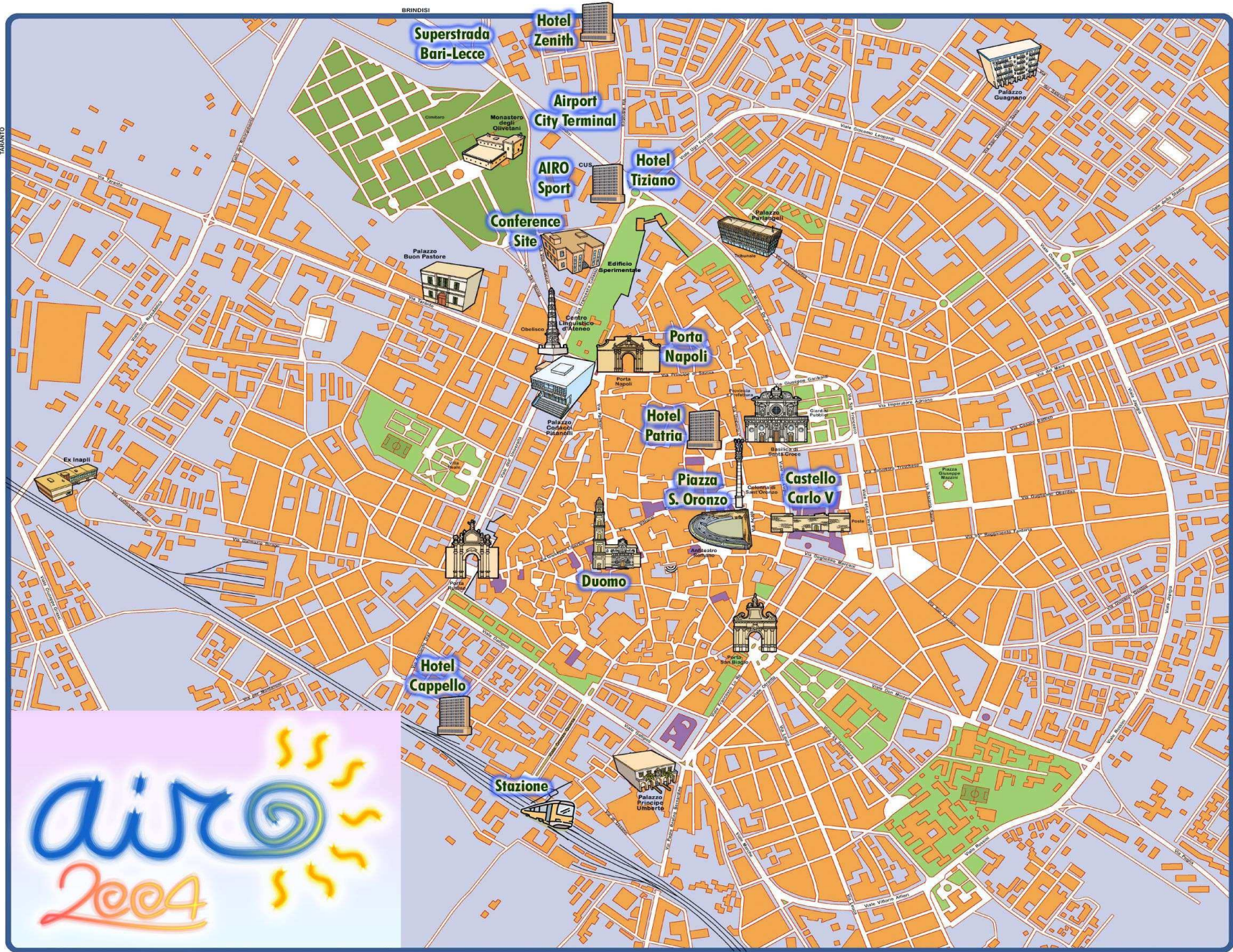
"Risto-Pubs"

- (*) I Latini: Via Palmieri, 46 - Tel. 0832 244111
- I Merli: Via Federico d'Aragona, 29 - Tel. 0832 241874
- Edinburgh: Via dei Mocenigo, 21 - Tel. 0832 248888
- Caledonian: Via Romano Liborio, 7 - Tel. 0832 241796

Pizzerie

- (*) Maccheroni: Via Palmieri, 56, Tel. 0832 277871
- Bella Notte: Via Giambattista del Tufo, 16. Tel. 0832 309177
- Pizzeria Carlo V: P.tta Falconieri, 1. Tel. 0832 243509

(*) Open at lunch time & close to the conference site



BRINDISI
**Superstrada
 Bari-Lecce**

**Hotel
 Zenith**

**Airport
 City Terminal**

**AIRO
 Sport**

**Conference
 Site**

**Hotel
 Tiziano**

Palazzo
 Buon Pastore

Edificio
 Sperimentale

**Porta
 Napoli**

**Hotel
 Patria**

**Piazza
 S. Oronzo**

**Castello
 Carlo V**

Duomo

**Hotel
 Cappello**

Stazione

Palazzo
 Principe
 Umberto

