

## CV of M. Grazia Speranza

### Education

**1980:** Master in Applied Mathematics at the University of Milan;

**1983:** Advanced Diploma in Applied Mathematics at the University of Milan.

### Positions

**1983-1987:** Assistant professor at the Faculty of Sciences at the University of Milan;

**1986-1987:** Collaborator for the Istituto per le Applicazioni della Matematica e dell'Informatica of the CNR;

**1987-1990:** Associate Professor at the Faculty of Sciences at the University of Udine;

**1990-1994:** Associate Professor at the Faculty of Economics and business at the University of Brescia;

**1994-:** Full professor at the Faculty of Economics and business at the University of Brescia;

**from Nov. 1998 to Nov. 2000:** President of the Research Council at the University of Brescia;

**from Nov. 2000 to Nov. 2002:** Vice-Chancellor of the University of Brescia;

**2001-2002:** President of the study program in Economia e gestione dell'informazione e della comunicazione of the Faculty of Economics and business at the University of Brescia;

**from 1/11/2002 to 31/10/2008:** Dean of the Faculty of Economics and business at the University of Brescia. From 2005 member of the Board of the Deans of the Faculties of Economics and business;

**from 1/11/2008 to 31/10/2010:** Visiting Professor at London School of Economics;

**2006-:** President of the Research center on 'Models for the economy and management of transport and logistics'.

### Roles in scientific associations

- Member of the INFORMS Transportation Science and Logistics (TSL) Societys Best Paper Award Committee for 2015;
- Core jury member for the EURO Gold Medal Award in 2015;
- Member of the jury for the VeRoLog Doctoral Dissertation Prize 2015;
- President of TSL (Transportation Science and Logistic) society of INFORMS (The Institute for Operations Research and the Management Sciences) from 2013;
- Member of the Executive Committee of EURO (association of European Operational Research Societies) from 2008 to 2013;
- Vice-President of IFORS (International Federation of Operations Research Societies), representing EURO from 2008 to 2009;
- President of EURO from 2011 to 2012;
- Member of the Committee for the "Best Transportation Science and Logistics Society (TSL) Dissertation Prize" of INFORMS (the Institute for Operations Research and Management Sciences) in 2002;
- Member of the jury for the "EURO Excellence in Practice Award" in 2007 and 2009;
- Chair of the jury for the "EURO Excellence in Practice Award" in 2010;
- Member of the jury for the "Robert M. Herman Lifetime Achievement Award" for INFORMS Transportation Science and Logistics Society (TSL) of INFORMS in 2007 and 2009;
- Chair of the jury for the "Robert M. Herman Lifetime Achievement Award" for INFORMS Transportation Science and Logistics Society (TSL) of INFORMS in 2011 (winner: Prof. Nathan Gartner);
- Member of the jury for the Francesco Paris Award of the EURO Working Group on Financial Modeling;
- Member of the founding group of the EURO Working Group on Routing and Logistics (VeRoLog);
- Member of the Board of the Associazione Italiana di Ricerca Operativa (AIRO) from 1990 to 1996.

### **Scientific interests**

The main scientific interests include:

- optimal methods, branch-and-cut algorithms, branch-and-price algorithms for mixed integer linear programming problems;
- heuristics, metaheuristics, hybrid heuristics for mixed integer linear programming problems;
- optimization problems in logistics and supply chain management;
- vehicle routing problems;
- dynamic routing problems;
- combinatorial optimization;
- worst-case analysis, competitive analysis;
- optimization in finance.

### **Editorial activities**

She has taken editorial responsibilities as:

- associate editor of RAIRO-Operations Research (from 2016);
- editor of the Series 'EURO Advanced Tutorials on Operational Research', Springer;
- associate editor of Transportation Research (from 2000 to 2003);
- member of the Editorial Advisory Board of Transportation Research B (from 2001 to 2003);
- area editor for Logistics, Distribution, Inventory and Transportation of the Asia-Pacific Journal of Operational Research (from 2009 to 2010);
- associate editor of Transportation Science (from 2003);
- editor of ITOR (International Transactions of Operations Research) (from 2009);
- area editor for Optimization problems in finance of 4OR (from 2009);
- associate editor of TOP (official journal of the Spanish Society of Statistics and Operations Research) (from 2012 to 2016);
- editor of the EURO Journal on Transportation and Logistics (from 2011);
- member of the Editorial board of the EURO Journal on Computational Optimization (from 2011);

- editor of the International Journal of Portfolio Optimization (from 2011);
- editor of the Mexican Journal of Operations Research (from 2011);
- editor of the open access journal "Advances in Operations Research";
- member of the Editorial Advisory Board (EAB) of the volume "Hybrid Algorithms for Service, Computing and Manufacturing Systems: Routing, Scheduling and Availability Solutions".

She has been editor of books and special issues of journals:

- editor (with P.Serafini) of the issue: "L'innovazione tecnologica nelle tecniche gestionali", *Ricerca Operativa* 55, 1990;
- editor (with A.Lewandowski and P.Serafini) of the volume "Methodology, implementation and applications of Decision Support Systems", *CISM Courses and Lectures* 320, Springer Verlag, 1991;
- "guest editor" of a special issue of vol.71, 1993 of the European Journal of Operational Research;
- "guest editor" of the special issue "Models and algorithms for planning and scheduling problems" of vol.72, 1997 of Discrete Applied Mathematics;
- "co-editor" of volume *Advances in distribution logistics*, Lecture Notes in Economics and Mathematical Systems, Springer-Verlag, vol.460, 1998;
- "co-editor" of volume *New trends in distribution logistics*, Lecture Notes in Economics and Mathematical Systems, Springer-Verlag, vol. 480, 1999;
- "co-editor" of volume *Quantitative approaches to distribution logistics and supply chain management*, Lecture Notes in Economics and Mathematical Systems, Springer-Verlag, vol. 519, 2002;
- "co-editor" of volume of Annals of Operations Research "Optimization in Transportation", 2004;
- "co-editor" of the special issue of Computers and Operations Research "Odysseus 2003 Second International Workshop on Freight Transportation Logistics", vol. 34, Issue 6, June 2007;
- "co-editor" of the special issue of Networks "Route 2011", Altea (Spain);
- "co-editor" of the special issue of EURO Journal on Computational Optimization on "Matheuristics" (EURO Journal on Computational Optimization, November 2014, Volume 2, Issue 4).

### Invited speaker

She has been invited speaker at conferences:

- "Summer School Programming 90", Varna (Bulgaria), 20-30 May 1990;
- Workshop "Models and algorithms for planning and scheduling problems", Wernigerode (Germany), 22-26 May 1995;
- AIRO conference, Perugia, 16-20 September 1996;
- "International Summer Institute on Production Scheduling", St. Vincent, 15-26 September 1997;
- Symposium on Mathematical models of inventories, Aahrus (Denmark), 19-21 August 1998;
- workshop CNR-CENSIS "Soluzioni intelligenti - La logistica come strategia produttiva ", Rome, 20 April 2000;
- Workshop on "Distribution systems: location and vehicle routing", Montréal, 2-6 December 2002;
- Optimization days 2005, Montréal (Canada), 8-11 May 2005 (together with John Nash);
- Operations Research 2006, Karlsruhe (Germany), 5-8 September 2006;
- 18th RAMP Symposium, 12-13 October 2006, Kyoto (Japan);
- School "Graph Theory, Algorithms and Applications", Erice (Sicily), September 8-16, 2008;
- ROUTE 2009, ROLIGHED, Skodsborg (Denmark) 21-24 June 2009;
- Third Workshop GT Transport et Logistique, Le Havre (France), 6 November 2009;
- TRANSLOG (Transportation and Logistics), Renaca (Chile), 8-11 December 2009;
- Zinal 2010, Zinal (Switzerland), 17-21 January 2010;
- Workshop, Lund (Sweden), 19-21 May 2010;
- ALIO/INFORMS Conference, Buenos Aires (Argentina), 6-9 June 2010;
- Tristan VII, Troms (Norway), 20-25 June 2010;
- Summer school, Breda (The Netherlands), 29 August - 2 September 2011;
- INOC 2011, International Network Optimization Conference, Hamburg (Germany), 13-16 June 2011;
- School "Graph Theory, Algorithms and Applications", Erice (Sicily), 25 September-3 October 2011;

- Winter School on optimization in logistics and transportation, Lisbon (Portugal), 16-20 January 2012;
- Winterschool on models for logistics and supply chain management, Breda (The Netherlands), 30 January-3 February 2012;
- International conference on Applied and Computational Mathematics (IACM), Ankara (Turkey), 3-5 October 2012;
- Canadian Operations research conference, Vancouver (Canada), 27-29 May 2013;
- VeRoLog2013 workshop, Southampton (UK), 8-10 July 2013;
- 10th International Workshop on Cutting, Packing and Related Topics, Gaienhofen-Horn, Lake Constance (Germany), September 11-15, 2013;
- GO meeting, Sirmione (Italy), 6-10 July 2014;
- plenary speaker at the 27th European Conference on Operational Research (EURO 2015), Glasgow (UK), July 12-15, 2015;
- Workshop of the Spanish Network on Location Analysis and Related Problems, Barcelona (Spain), November 25-27, 2015;
- Swiss Transport Research Conference, Ascona (Italy), May 17-19, 2017.

She has been invited to give seminars at:

- I.A.S.I. - CNR - Rome
- University of Bergamo
- University of Brescia
- University of Lisbon (Portugal)
- University of Lubiana (Yugoslavia)
- University of Passau (Germany)
- University of Harvard, Massachussets (U.S.A.)
- University of Venice
- University of Wisconsin, Wisconsin (U.S.A.)
- Technical University of Berlin (Germany)
- University of Augsburg (Germany)
- University of St.Gallen (Switzerland)

- University of Pisa
- University of Naples
- University of Copenhagen (Denmark)
- University of Maryland (U.S.A.)
- University of Milan
- ETH Zurich (Switzerland)
- Otto-von-Guericke-University Magdeburg (Germany)
- Braunschweig University (Germany)
- University of Veszprem (Hungary)
- London School of Economics (UK)
- Lancaster University (UK)
- Loughborough University (UK)
- Kent University, Canterbury (UK)
- University of Graz
- Technical University of Graz
- University of Iowa (U.S.A.)
- Universit de Montréal (Canada)
- Northwestern University (U.S.A.)
- University of Southampton (UK)
- University of Salerno
- Ecole des Mines of Nantes (France)
- Technische Universiteit Eindhoven (The Netherlands)
- Université Libre de Bruxelles (Belgium)
- University of Bologna
- Royal Holloway, Egham, Surrey (UK)
- University of Chile, Santiago (Chile)
- Technical University of Catalonia (Spain)

- KT Leuven (Belgium) (Prof. Greet Vanden Berghe)

### **Member of juries for PhD students and international expert**

- Member of the jury for PhD candidate: Roar Groenhaug, University of Trondheim (Norway) as first opponent in 2008.
- Member of the jury for PhD candidate: Ilaria Vacca, University of Lausanne (Switzerland) in 2010.
- Member of the jury for PhD candidate: Qianxin Mu, University of Lancaster (United Kingdom) in 2010.
- Member of the jury for PhD candidate: Eric Prescott-Gagnon, University of Montréal (Canada) in 2011.
- Member of the jury for PhD candidate: Said Dabia, Technische Universiteit Eindhoven (The Netherlands) in 2012.
- Member of the jury for PhD candidate: Jrgen Glomvik Rakke, University of Trondheim (Norway) in 2012.
- Member of the jury for PhD candidate: Dimitris Karamanis, London School of Economics (UK) in 2013.
- Member of the jury for PhD candidate: Giovanni Pantuso, University of Trondheim (Norway) in 2014.
- Member of the jury for PhD candidate: Diego Cattaruzza, Ecole Nationale Supérieure des Mines, Saint-Etienne (France) in 2014.
- Member of the jury for PhD candidate: Adrian Bock, EPFL, Lausanne (Switzerland) in 2014.
- Member of the jury for PhD candidate: Uladzimir Rubasheuski, Molde University College (Norway), in 2015.
- Member of jury for PhD candidate: Mireia Roca Riu, Universitat Politècnica de Catalunya (Spain), in 2015;
- Member of jury for PhD candidate: Anders Gullhav, University of Trondheim (Norway), in 2016.
- Member of committees or external expert for the evaluation of candidates for positions of associate or full professor for the University of Helsinki (Finland), University of Wien (Austria), Georgia Institute of Technology of Atlanta (USA), University of Montréal (Canada), Technische Universiteit Eindhoven (The Netherlands), University of Sydney (Australia), Loyola University Chicago (USA), Ecole Polytechnique de Lausanne (Switzerland), University of Trondheim (Norway), University of Wien (Austria), Tel Aviv Technical University (Israel).



## Conferences organized

She has organized the conferences:

- Giornate AIRO89, Udine, 2-6 October 1989;
- "Giornata di lavoro su rapporti Università-Industria" Trieste, 5 July 1990;
- "Summer School on Decision Support Systems: Methodologies, Software and Applications", 17-21 September 1990, organized with I.I.A.S.A. at C.I.S.M. in Udine;
- "Workshop on Models and Algorithms for Planning and Scheduling Problems", Villa Vigoni, Menaggio, Como, 14-18 June 1993;
- "IV International Workshop on Distribution Logistics", Brescia, 25-27 May 1998;
- "Tristan IV", Ponta Delgada (Portugal), 13-19 June 2001;
- "Odysseus 2003", International Workshop on Freight Transportation and Logistics, Mondello (Palermo), 27-30 May 2003;
- Workshop Information technology in finance, Brescia, 5 May 2004;
- "International Workshop on Distribution Logistics 2006, Brescia, 2-4 October 2006;
- ROUTE 2011, Sitges (Spagna), 31 May-3 June 2011;
- Conference AIRO2011, Brescia, 6-9 September 2011;
- Workshop on 'City logistics', Brescia, 16 September 2011;
- EURO PhD School on 'Routing and logistics', Brescia, June 24 - July 3, 2015;
- Workshop ALIAS, 'Opportunit dellera ICT: active ageing e mobilit', Brescia, 9 December 2015.

## Member of Program and Scientific Committee

She has been:

- member of the International Advisory Committee dell'International Workshop on Multiple Criteria Decision Support, Helsinki, 7-11 August 1989;
- member of the Organizing Committee of the "VII EURO Summer Institute", Cetraro, June 1991;

- member of the "International Program Committee" del "Workshop on Artificial Intelligence and its Applications", Cairo (Egypt), 6-8 June 1992;
- member of the Review Committee of the "Study Agreement" between Bulgaria Academy of Sciences and I.I.A.S.A., Sofia (Bulgaria), 15-17 April 1992;
- member of the International Program Committee of "I.I.A.S.A. Workshop on Intelligent Decision Support Systems", Terskol (USSR), 23-29 April 1992;
- member of the Program Committee of the Fourth International Workshop on Project Management and Scheduling, Leuven (Belgium), 12-15 July 1994.
- member of the International Program Committee of the International Conference on Operations and Quantitative Management, Jaipur (India), 5-9 January 1997.
- member of the Scientific Committee of the "25th Meeting of the EURO Working group on Financial Modelling", Wien (Austria), November 18-20, 1999;
- member of the International Program Committee of "Odysseus 2000", International Workshop on Freight Transportation and Logistics, Chania, Crete (Greece), 23-26 May 2000;
- member of the International Program Committee of the "Fifth international conference on electronic commerce research" (ICECR-5), Montréal (Canada) 23-27 October 2002;
- member of the International Program Committee of the conference "Logistics management 2003", Braunschweig (Germany) 24-26 September 2003;
- member of the Scientific Committee of the conference "Giornate AIRO 2003", Venice, 2-5 September 2003;
- member of the Program Committee of the ICECR6, Dallas (USA), 23-26 October 2003;
- member of the Scientific Committee of the Conference AIRO Winter 2004, Champoluc (AO), February 2004;
- member of the International Program Committee of TRISTAN V, Guadalupe (France), 13-18 June 2004;
- member of the Scientific Committee of "Giornate AIRO 2004", Lecce, 7-10 September 2004;
- member of the Program Committee of Airowinter 2005, Cortina (Italy), 31 January-5 February 2005;
- member of the Scientific Committee of the XXXVI Euro Working Group on Financial Modeling, Brescia, 5-7 May 2005;

- member of the Program Committee of the MAPSP 2005, Siena, 6-10 June 2005;
- member of the Program Committee of the ICECR7, Gammarth (Tunisia), 9-12 June 2005;
- member of the Program Committee of the conference "Networking and electronic commerce", Lake of Garda (Italy), 6-9 October 2005;
- member of the Scientific Committee of "Giornate AIRO 2005", Camerino, 6-9 September 2005;
- member of the Scientific Committee of "Odysseus 2006", Altea (Spagna), 23-26 May 2006;
- member of the Scientific Committee of "Giornate AIRO 2006", Cesena, 12-15 September 2006;
- member of the International Program Committee TRISTAN VI, Phuket (Thailand), 11-15 June 2007;
- member of the Program Committee of the International Workshop on Distribution Logistics, s-Hertogenbosch (The Netherlands), 11-13 May 2009;
- member of the Scientific Committee of Odysseus 2009, Cesme (Turkey), 26-29 May 2009;
- member of the Program Committee of LM09 - International Conference on Logistics Management, Hamburg (Germany), 2-4 September 2009;
- member of the International Program Committee of CIE39 (International Conference on Computers & Industrial Engineering), Troyes (France), 6-8 July 2009;
- member of the Scientific Committee of Giornate AIRO 2009, Siena, 8-11 September 2009;
- member of the Program Committee of 'Matheuristics', Wien (Austria), 28-30 June 2010;
- member of the Scientific Committee of the XV ELAVIO, Pacoti (Brazil), 2-6 August 2010;
- member of the Program Committee of the 10th ATMOS Workshop (ALGO 2010) University of Liverpool, United Kingdom, 9 September 2010;
- member of the Scientific Program Committee of the VII ALIO EURO Workshop on Applied Combinatorial Optimisation, Porto (Portugal), 4-6 May 2011;
- member of the Program Committee of the 2nd International Conference on Computational Logistics, 19-22 September 2011, Hamburg (Germany);

- member of the Program Committee of the Conference ISOR '11, Algiers (Algeria), 30 May - 2 June, 2011;
- member of the Programme Committee of the IFORS Conference, Melbourne, 10-15 July 2011;
- member of the International Program Committee of the '1st International Conference on Operations Research and Enterprise Systems' - ICORES 2012, Vilamoura (Portugal), 4-6 February 2012;
- member of the Scientific Committee of Odysseus 2012, Mykonos (Greece), 21-25 May 2012;
- member of the Program Committee of the First VEROLOG workshop, Bologna, 18-22 June 2012;
- member of the Program Committee of the ORP3 - Operations Research Peripatetic Postgraduate Programme meeting, Linz (Austria), July 2012;
- member of the Scientific Committee of the Conference AIRO 2012, Vietri sul Mare (Salerno), 4-7 September 2012;
- member of the Program Committee of the 3rd International Conference on Computational Logistics, Shanghai (China), 24-26 September 2012;
- member of the Program Committee of the conference 'Matheuristics', Angra dos Reis (Brazil), 16-21 September 2012;
- member of the International Scientific Committee of the Eight Triennial Symposium on Transportation Analysis (TRISTAN VIII), San Pedro de Atacama (Chile), 9-14 June, 2013;
- member of the Scientific Committee of the Second VEROLOG workshop, Southampton, 7-10 July, 2013;
- member of the Program Committee of the XI Balkan Conference of Operational Research (11th BALCOR 2013), Belgrade (Serbia), 7-10 September, 2013;
- member of the Program Committee of ICCL 2013 (4th International Conference on Computational Logistics), Copenhagen (Denmark), September 25-27, 2013;
- member of the Program Committee of CIE43 (The 43rd Conference on Computers & Industrial Engineering), 16-18 October, 2013, Hong Kong;
- IPC member in the European Conference on Modelling and Simulation (ECMS 2014), Brescia (Italy), May 27-30, 2014;

- member of the International Advisory Committee of VeRoLog 2014, Oslo (Norway), June 22-25, 2014;
- member of the Scientific Committee of the 3rd INFORMS Transportation Science and Logistics Society Workshop (TSLWS 2014), Chicago (USA), June 30- July 2, 2014;
- member of the Scientific Committee of the AIRO conference, Como, September 2-5, 2014;
- member of the Scientific Committee of Odysseus 2015, Ajaccio (France), June 1-5, 2015;
- member of the Scientific Committee of the TSL Workshop 'Recent Advances in Urban Transportation through Optimization and Analytics', Berlin (Germany), 6-8 July, 2015;
- member of the Program Committee of the conference on Information Technologies for Logistics (IT4L) 2015, Lodz (Poland), 13-16 September 2015;
- member of the Scientific Committee of the ICCL (International Conference on Computational Logistics) 2015, Delft (The Netherlands), 23-25 September 2015;
- member of the Program Committee of ISCO 2016 - 4th International Symposium on Combinatorial Optimization, Vietri sul Mare, Salerno (Italy) 18-20 May 2015;
- member of the Scientific Committee dell'ICCL (International Conference on Computational Logistics) 2016, Lisbon (Portugal);
- member of the Advisory Committee of TRISTAN IX, on June 13-17, 2016, Aruba (The Netherlands);
- member of the Program Committee of the 10th International Workshop on Hybrid Metaheuristics, Plymouth, United Kingdom, June 8-10, 2016;
- member of the Program Committee of the 16th Workshop on Algorithmic Approaches for Transportation Modeling, Optimization, and Systems (ATMOS), Aarhus (Denmark), August 22-26, 2016;
- member of the Scientific Committee of the AIRO conference, Trieste, September 6-9, 2016;
- member of the Program Committee of the Workshop on Information Technologies for Logistics (IT4L) 2016, Gdansk, Poland, September 11-14, 2016;
- member of the Scientific board of the Eumos scientific conference on durable transport, Istanbul, Turkey, November 3-4, 2016;

- chair of the Program Committee of IFORS 2017, Quebec City (Canada), July 17-21, 2017.

### **Other scientific activities**

- Chair of the Program committee of IFORS 2017, Quebec City, 2017.
- Member of the Scientific Advisory Board of the Complex Systems Institute of Toulouse, from 2016.
- Member of the Scientific Advisory Board for the Dept. of Business Administration, University of Wien (Austria).
- Referee for international projects for research institutions in Hong Kong, Israel, Canada, Belgium, United Kingdom, Saudi Arabia, Norway;
- Referee for international journals such as: IEE Transactions, European Journal of Operational Research, Annals of Operations Research, International Journal of Production Economics, Operations Research, Transportation Research, Computers and Operations Research, Omega, International Transactions in Operational Research, Control and Cybernetics, Algorithmica, Journal of Scheduling, Transportation Science.
- Author of the paper "OR/MS on the Faculties of Economic and business", AiroNews X - n.1/2 Spring/Summer 2005.
- Author of the preface of the volume 'Metodi di supporto alle decisioni in condizioni di incertezza' of P.Beraldi et al.
- Member of the Scientific Committee of the Centro Vito Volterra of the CNR.
- Member of the Review Committee of "I.I.A.S.A. Study Agreement: Methodology and Software for Interactive Decision Support - Stage II", Sofia (Bulgaria), 21-24 February 1989;
- Stream organizer for 'Routing' for EURO 2009, 6-9 July 2009, Bonn (Germany).
- Stream organizer for 'Transportation' for IFORS 2011, 11-15 July 2011, Melbourne (Australia).
- Stream organizer for 'Traffic, transportation and logistics' for 'Operations Research 2010 conference', 1-3 September 2010, Munich (Germany).

### **Projects (after 2000)**

- Responsible for:

- Partner, along with University of Milan Bicocca, of project: ALIAS - ALta formazione e Internazionalizzazione per l'Ageing Society (Higher education and internationalization for ageing society) funded by Fondazione Cariplo 2010. Project budget: 519.188 , Fondazione Cariplo direct contribution: 375.086. Project duration: from March 1st, 2011, to February 28th, 2015.
- Sub-contractor of VITROCISSET for 52.500 within project Integrated Multimodal Platform for Urban and extra urban Logistic System Optimization, granted by the Ministero dello Sviluppo Economico - MSE (Italian Ministry of Economic Development) Bando Industria 2015 - Mobilit Sostenibile (Industry Competition 2015 - Sustainable Mobility) on the theme: Systems for safe mobility, integrated between vehicles and infrastructure, for people and/or freight transport. Project consortium: VITROCISSET (Coordinator), Info Solution, Italdata Ingegneria dell'Idea, I.Log iniziative logistiche, OPTISOFT, CNR, Elsag Datamat, Softeco Sismat, Consorzio Milano Ricerche, University of Palermo, Powersoft, EAT European Advanced Technologies, ACT Solutions, Media Plus, University of Rome La Sapienza, Aitek, Planetek Italia, CIPI Centro Interuniversitario sull'Ingegneria delle Piattaforme Informatiche (Interuniversity Center on IT Platforms), Globo Informatica, Click&Find, TXT e-solutions, Project Automation, Creasys, Telespazio. Project duration: 36 months. Total budget: 14, 0 M. Total grant: 6 M.
- Scientific Coordinator of the proposal FP7 Call for Proposals: FP7-PEOPLE-2011-IIF Proposal No. 302205 - acronym CUFTISG concerning Ola Jabali on Coordination in Urban Freight Transport and its Societal Gains. The proposal received a score of 86.70 with an acceptance range from 70 to 100, but it was not funded due to budget limitations.
- Scientific coordinator of project PRIN2009 Models and Algorithms for Optimization of Logistics, with Operating Units: University of Brescia, University of Salento, University of Calabria, Turin Polytechnic, University of L'Aquila. Grants from the Italian Ministry of University and Research (MIUR): 128.727 . 5) Responsible for the agreement with the Consorzio Centro di Ricerca in Matematica Pura e Applicata, Fisciano (SA), about the Integrated Distribution Planning on regional and national scale and the efficient coordination of offer and demand of transportation supporting maritime transportation', 2008, grant: 50.000 .
- Scientific coordinator of project PRIN2007 Optimization of Distribution Logistics, with Operating Units: University of Brescia, University of Salento, University of Calabria, Turin Polytechnic, University of L'Aquila. Grants from MIUR: 80.960 ; grants from University of Brescia: 35.941 .
- Responsible of the agreement with the Department of Electronics, Informatics and Systems of the University of Calabria for the project "RAC-CORSU" - rationalizing and optimizing the urban waste management system, 2007, grant of 15.000 .

- Responsible, as President of the Centro Studi sui modelli per l’Economia e la gestione dei trasporti (Research centre on models for economics and transport management) of the University of Brescia, for a grant of 25.000 received from Autostrade Lombarde SpA in 2006, for research activity on toll systems and toll collection.
- Project partner in LIFE97 ENV/B/000413 (EU) Selective. New methods of selective collection and transport of solid waste, supported by advanced modelling for comparative evaluation of system cost-effectiveness, coordinated by Municipaliteit van Antwerpen for a total budget of 3.183.682,31 and an EU contribution of 852.075,19 . Project duration: from April 1st, 1997 to August 1st, 2000.

### **Awards**

- Honorary fellowship of the Department of Management Science and Technology of the Athens University of Economics and Business.

### **Conferences**

She has participated and given talks at the following conferences:

- Numerical Algorithms for Parallel Processing Systems, Bergamo, 15-26 June 1981.
- N.A.T.O. Advanced Study and Research Institute on ”Deterministic and Stochastic Scheduling”, Durham (UK), 6-17 July 1981.
- International Institute on Stochastics and Optimization, Gargnano (Italia), September 1982.
- Stochastic Optimization: Algorithms and Applications, Gargnano (Italia), September 1983.
- Second National Conference of the Progetto Finalizzato Trasporti of the CNR, February 1984.
- 9 Symposium on Operations Research, Osnabruech (Germany), August 1984.
- Optimization for Traffic Engineering and Control, Capri, 18-25 October 1984.
- Third National Conference of the Progetto Finalizzato Trasporti of the CNR, Taormina, 22-25 May 1985.
- EURO VII (7th European Congress on Operations Research), Bologna, 16-19 June 1985.
- 10 Symposium on Operations Research, Munich (Germany), 26-28 August 1985.



- I.F.I.P. Conference on "System Modelling and Optimization", Budapest, 2-6 September 1985.
- Workshop on: "Mobilità e Trasporti in un'Area Urbana. Problemi, Esperienze, Prospettive", Pisa, 17-18 October 1985.
- Metodi della Ricerca Operativa nella Fabbrica Automatica, Rome, 7-8 April 1986.
- Multi-Attribute Decision Making via OR-based Expert Systems, Passau (Germany), 21-25 April 1986 (on invitation only).
- Flexible Manufacturing Systems, Ann Arbor, Michigan (U.S.A.), 12- 15 August 1986.
- National Conference "L'automazione nei trasporti", Trieste, 28-30 October 1986.
- IV National Conference of the Progetto Finalizzato Trasporti of the CNR, Torino, 10-11 November 1986.
- EURO IX / TIMS XXVIII, Paris (France), 6-8 July 1988.
- EURO Working Group on Project Management and Scheduling, Lisbon (Portugal), 11-15 July 1988.
- First meeting of the Project "A Decision Support System (DSS) for Resource Constrained Project Scheduling (RCPS) Problems" of the International Institute for Applied Systems Analysis (I.I.A.S.A.), Plock (Poland) (on invitation only), May 1988.
- Multi-objective problems of mathematical programming, 26 October - 2 November 1988, Yalta (U.S.S.R.) (on invitation only).
- Second meeting of the Project "A DSS for RCPS", Sopron (Hungary) (on invitation only), February 1989.
- VI EURO Summer Institute on Decision Support Systems, 29 May - 9 June 1989, Madeira (Portugal).
- International Workshop on Multiple Criteria Decision Support, Helsinki (Finland), 7-11 August 1989.
- Giornate AIRO89, Udine, 2-6 October 1989.
- Twenty-ninth Annual Meeting of the Western Regional Science Association, 21-25 February 1990, Molokai (U.S.A.).
- Second International Workshop on Project Management and Scheduling, Compiègne (France), 20-22 June 1990.
- First Italian Conference on Algoritmi e Complessità, Rome, 1-2 October 1990.
- Giornate di Lavoro AIRO 1990, Sorrento, 3-5 October 1990.
- Workshop on Advances in Methodology and Software in DSS, Laxenburg (Austria), 22-24 July 1991.

- International Symposium on Mathematical Programming, Amsterdam (The Netherlands), 5-9 August 1991.
- European Chapter on Combinatorial Optimization Conference, Graz (Austria), 13-15 April 1992.
- Workshop on Financial Modelling, Cogne, 23-25 April 1992.
- Workshop on Artificial Intelligence and its Applications, Cairo (Egypt), 6-8 June 1992.
- EURO XII, Helsinki (Finland), 29 June-1 July 1992.
- Third International Workshop on Project Management and Scheduling, Como, 6-8 July 1992.
- First Biennial Soviet-Italian Conference on Methods and Applications of Mathematical Programming, Cetraro (CS), 7-11 September 1992.
- Giornate di Lavoro AIRO 92, Acireale, 23-26 September 1992.
- XVI Convegno Annuale AMASES, Treviso, 10-13 September 1992.
- Workshop on Models and Algorithms for Planning and Scheduling Problems, Villa Vigoni, Menaggio (Como), 14-18 June 1993.
- Conference TIMS XXXII, Anchorage (U.S.A.) 12-15 June 1994.
- Fourth International Workshop on Project Management and Scheduling, Leuven (Belgio), 12-15 July 1994.
- XVIII Convegno AMASES, Modena, 5-7 September 1994.
- Giornate di lavoro AILOG-AIRO 94 - Savona, 28-30 September 1994.
- Working day on supercomputing applications, Verona, 12 October 1994.
- Workshop "Models and algorithms for planning and scheduling problems", Wernigerode (Germany), 22-26 May 1995.
- Second Conference of the Progetto Finalizzato Trasporti 2, Genova, 29-30 May 1995.
- 7th World conference on transport research, Sydney (Australia), 17-21 July 1995.
- Second International Workshop on distribution logistics, Oegsteet (The Netherlands), 16-18 October 1995.
- Symposium on Combinatorial Optimization (CO96), London (UK), 27-29 March 1996.
- ECCO IX-Conference of the European Chapter on Combinatorial Optimization, Dublin (Ireland), 1-4 April 1996.
- Applicazioni di modelli matematici alla gestione dei servizi pubblici: le esperienze of the ASM (Brescia), 20 June 1996.
- Giornate di Lavoro AIRO '96, Perugia, 16-20 September 1996.

- International Workshop on Distribution Logistics III, St. Gallen (Switzerland), 14-16 October 1996.
- International Conference on Operations and Quantitative Management, Jaipur (India), 5-9 January 1997.
- Third Workshop on models and algorithms for planning and scheduling problems, Cambridge (UK), 7-11 April 1997.
- ECCO X, Tenerife (Spain), 14-17 May 1997.
- Giornate di Lavoro AIRO 97, St. Vincent, 16-19 September 1997 (chair of invited session).
- TRISTAN III, S.Juan, Puerto Rico (U.S.A.), 17-23 June 1998.
- Symposium on Mathematical models of inventories, Aarhus (Denmark), 19-21 August 1998.
- XXII Conference AMASES, Genova, 9-12 September 1998.
- Giornate AIRO, Treviso, 23-25 September 1998.
- DEA, MCDM and finance, Helsinki (Finland), 7-9 February 1999.
- 5 International Workshop on Distribution Logistics (IWDL5), Fontainebleau (France), 21-23 October 1999.
- Conference of the Progetto Finalizzato Trasporti 2, Rome, 3-5 November 1999.
- 25 meeting of the EURO Working Group in Financial Modelling, Wien (Austria), 18-20 November 1999.
- Il CNR per la societ italiana, Conference CNR-CENSIS, Rome, 20 April 2000 (invited lecture)
- ECCO XIII, Capri, 18-20 May 2000 (session chair). Odysseus 2000, the First international workshop on freight transportation and logistics, Chania, Crete (Greece), 23-26 May 2000 (session chair).
- 8 meeting of the EURO working group on transportation, Rome, 11-14 September 2000.
- Giornate AIRO, Milan, 18-21 September 2000 (session chair, invited at a round table).
- XXIV Convegno AMASES, Padenghe del Garda (BS), 6-9 September 2000 (session chair).
- IWDL6, St. Gallen (Switzerland), 17-21 February 2001.
- EWG on Financial modelling, Vilnius (Lithuania), 3-5 May 2001.
- TRISTAN IV, Ponta Delgada, Azores islands (Portugal), 13-19 June 2001.
- Eighth Annual Conference of the Multinational Finance Society, Garda, 23-27 June 2001.

- Giornate AIRO, Villasimius 4-7 September 2001 (session chair).
- APMOD 2002, Varenna (Como), 17-19 June 2002 (session chair).
- IFORS 2002, Edimburgh (UK), 8-12 July 2002.
- Giornate AIRO, L'Aquila, 9-13 September 2002 (session chair).
- Workshop on "Distribution logistics", Brussels (Belgium), 21 October 2002.
- Workshop on "Distribution systems: location and vehicle routing", Montreal, 2-6 December 2002 (invited lecture on "Supply chain management")
- Deans conference, San Leo-Rimini, 16-17 May 2003.
- "Odysseus 2003", Palermo, 26-30 May 2003.
- ROUTE 2003, Copenhagen (Denmark) 22-25 June 2003 (session chair).
- Giornate AIRO, Venice, 2-5 September 2003 (session chair).
- Airowinter 2004, Champoluc, 9-14 February 2004.
- 7th International Conference on Electronic Commerce Research, June 10-13, 2004, Dallas (U.S.A.).
- Tristan V, Guadeloupe (France), 13-18 June 2004 (session chair).
- Giornate AIRO, Lecce, 7-10 September 2004 (session chair)
- Airowinter 2005, Cortina (Italy), 31 January - 5 February 2005.
- Optimization days 2005, Montreal (Canada), 8-11 May 2005.
- GERAD 25th anniversary, Montreal (Canada), 11-13 May 2005.
- XXXVI Euro Working Group on Financial Modeling, Brescia, 5-7 May 2005.
- MAPSP 2005, Siena, 6-10 June 2005.
- L'outsourcing logistico, Brescia, 15 April 2005 (chair).
- ROUTE 2005, Bertinoro (BO), 23-26 June 2005 (on invitation only).
- "Giornate AIRO 2005", Camerino, 6-9 September 2005.
- Odysseus 2006, Altea, Spagna, 22-26 May 2006 (session chair).
- Operations Research 2006, Karlsruhe, Germania, 5-8 September 2006.
- "Giornate AIRO 2006", Cesena, 12-15 September 2006.
- 18th RAMP Symposium, 12-13 October 2006, Kyoto (Japan).
- Route 2007, Jekyll Island (U.S.A.), 13-16 May 2007 (on invitation only).
- Tristan VI, Phuket (Thailand), 11-15 June 2007.
- EURO XXII, Prague (Czech Republic), 9-11 July 2007.
- Matheuristics2008, Bertinoro, 18-21 June 2008.
- IFORS conference, Sandton (South Africa), 13-18 July 2008 (chair of invited speaker Luk Van Wassenhove 'Humanitarian logistics')

- International Workshop on Distribution Logistics, s-Hertogenbosch, the Netherlands, 11-13 May 2009.
- Odysseus, Cesme (Turkey), 26-29 May 2009.
- Route 2009, Rolighed (Denmark), 21-24 June 2009.
- EURO XXIII, Bonn (Germany), 5-9 July 2009 (chair of invited session).
- Giornate AIRO, Siena, 8-11 September 2009 (organizer of 3 invited sessions).
- DOMinant workshop, Molde (Norway), 20-23 September 2009 (on invitation only).
- TRANSLOG (Transportation and Logistics), Reaca (Chile), 8-11 December 2009.
- Zinal 2010, Zinal (Switzerland), 17-21 January 2010 (series of lectures).
- Workshop, Lund (Sweden), 19-21 May 2010.
- ALIO/INFORMS Conference, Buenos Aires (Argentina), 6-9 June 2010.
- GO meeting, Ovronnaz (Switzerland), 13-17 June 2010 (on invitation only).
- Matheuristics workshop, Wien (Austria), 28-30 June 2010.
- Tristan VII, Troms (Norway), 20-25 June 2010.
- EUROXIV, Lisbon (Portugal), 11-14 July 2010.
- Route 2011, Altea (Spain).
- Integer Programming Down Under workshop, Newcastle (Australia), 6-8 July 2011 (on invitation only).
- IFORS 2011, Melbourne, Australia, 11-15 July 2011.
- AIRO2011, Brescia, 6-9 September 2011.
- Workshop on 'City logistics', Brescia, 16 September 2011.
- INFORMS 2011 Annual Meeting, Charlotte, NC (U.S.A.), 13-16 November 2011.
- Integer Programming Workshop, Valparaiso (Chile), March 11-14, 2012.
- Computational Management Science, London (UK), April 18-20, 2012. (session chair).
- Odysseus 2012, Mykonos (Greece), May 21-25, 2012.
- VeRoLog 2012, Bologna, June 18-20, 2012.
- EURO XXV, Vilnius (Lithuania), July 8-11, 2012.
- AIRO Conference, Vietri sul Mare (Salerno), September 4-7, 2012.
- CO2012, Oxford (UK), September 17-19, 2012.
- NOW 2013, Siracusa, June 26-28, 2012.

- Odysseus 2012, Mykonos (Greece), May 21-25, 2012.
- First VEROLOG workshop, Bologna, June 18-22, 2012.
- Conference AIRO 2012, Vietri sul Mare (Salerno), September 4-7, 2012.
- Eight Triennial Symposium on Transportation Analysis (TRISTAN VIII), San Pedro de Atacama (Chile), June 9-14, 2013.
- Second VEROLOG workshop, Southampton, July 7-10, 2013.
- European Conference on Modelling and Simulation (ECMS 2014), Brescia (Italy), May 27-30, 2014.
- VeRoLog 2014, Oslo (Norway), June 22-25, 2014.
- AIRO conference, Como, settembre 2-5, 2014.
- Odysseus 2015, Ajaccio (France), June 1-5, 2015.
- TSL Workshop 'Recent Advances in Urban Transportation through Optimization and Analytics', Berlin (Germany), July 6-8, 2015.
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- 27-th EURO Conference, Glasgow (UK), July 12-15, 2015.

### International Journals

- System optimal routing of traffic flows with user constraints using linear programming, (submitted for publication) (con E. Angelelli, I. Arsic, V. Morandi, M. Savelsbergh)
- Comparing Sequential and Integrated Approaches for the Production Routing Problem (submitted for publication) (with N.Absi, C.Archetti, D. Feillet, S. Dauzère-Pérés)
- Adaptive Kernel Search: A Heuristic for Solving Mixed Integer Linear Programs (submitted for publication) (with G. Guastaroba, M. Savelsbergh)
- A branch-and-cut algorithm for the Team Orienteering Problem (submitted for publication) (with N. Bianchessi, R. Mansini)
- The Shared Customer Collaboration Vehicle Routing Problem (submitted for publication) (with E. Fernández, M. Roca-Riu)
- A simulation study of an on-demand transportation system (submitted for publication) (with C. Archetti, D. Weyland)
- A Priori Optimization vs. Re-Optimization: A Comparison for Vehicle Routing (submitted for publication) (with D. Weyland)
- A matheuristic for the multi-vehicle inventory routing problem, to appear in *Inform. J. on Computing* (with C. Archetti, N. Boland)
- Trends in transportation and logistics, to appear in *European Journal of Operational Research*
- Minimizing the logistic ratio in the inventory routing problem, *EURO Journal on Transportation and Logistics* DOI 10.1007/s13676-016-0097-9 (with C. Archetti, G. Desaulniers)
- A heuristic framework for the bi-objective enhanced index tracking problem, to appear in *Omega*, DOI:10.1016/j.omega.2016.01.004 (with C. Filippi, G. Guastaroba)
- The value of integrating loading and routing, *European Journal of Operational Research* 257, 89-105, 2017 (with J-F Côté, G. Guastaroba)

- Proactive route guidance to avoid congestion, *Transportation Research B* 94, 1-21, 2016 (with E. Angelelli, I. Arsik, V. Morandi, M. Savelsbergh)
- Intermediate facilities in freight transportation planning: a survey, 50, 763-789, 2016 *Transportation Science* (with G. Guastaroba, D. Vigo)
- The Vehicle Routing Problem with Occasional Drivers, *European Journal of Operational Research* 254, 472-480, 2016 (with C. Archetti, M. Savelsbergh)
- The inventory routing problem: The value of integration, *International Transactions on Operations Research* 23, 393-407, 2016 (with C. Archetti)
- Linear programming models based on Omega ratio for the Enhanced Index Tracking Problem, *European Journal of Operational Research* 251, 938-956, 2016 (with G. Guastaroba, R.Mansini, W.Ogryczack)
- On the collaboration uncapacitated arc routing problem, *Computers & Operations Research* 67, 120-131, 2016 (with E. Fernandez, D. Fontana)
- A branch-and-cut algorithm for the Orienteering Arc Routing Problem, *Computers & Operations Research* 66, 95-104, 2016 (with C.Archetti, A.Corberan, I.Piana, J.M.Sanchis)
- The multi-compartment vehicle routing problem with flexible compartment sizes, *European Journal of Operational Research* 246, 730-743, 2015 (with Tino Henke, Gerhard Waescher)
- Complexity of routing problems with release dates, *European Journal of Operational Research* 247, 797803, 2015 (with C. Archetti, D. Feillet)
- Introducing a preliminary consists selection in the Locomotive Assignment Problem, *Transportation Research Part E: Logistics and Transportation Review* 82, 217-237, 2015 (with F.Piu, V.Prem Kumar, M.Bierlaire)
- A matheuristic for the Team Orienteering Arc Routing Problem, *European Journal of Operational Research* 245, 392-401, 2015 (with C.Archetti, A.Corberan, I.Piana, J.M.Sanchis)
- Portfolio optimization and transaction costs, in 'Quantitative Financial Risk Management: Theory and Practice', C. Zopounidis, E. Galariotis (eds), ISBN: 978-1-118-73818-4, Wiley, 212-239, 2015 (with R.Mansini, W.Ogryczack)
- A branch-price-and-cut algorithm for the commodity constrained split delivery vehicle routing problem, *Computers & Operations Research* 64, 1-10, 2015 (with C. Archetti, N. Bianchessi)
- Multi-period Vehicle Routing Problem with Due Dates, *Computers & Operations Research* 61, 122-134, 2015 (with C. Archetti, O. Jabali)



- A survey on two-echelon routing problems, *Computers & Operations Research* 55, 185-199, 2015 (with R. Cuda, G. Guastaroba)
- Multi-commodity vs. single-commodity routing, *Transportation Science* 50, 461-472, 2014 (with C. Archetti, A. Campbell)
- Arc routing problems with profits, in *Arc routing problems: Problems, Methods, and Applications*, A. Corberan, G. Laporte (eds), MOS/SIAM Series on Optimization 20, SIAM, Philadelphia, 2014, 281-300 (with C. Archetti)
- Vehicle routing problems with profits, in *Vehicle Routing: Problems, Methods, and Applications*, Second Edition, P. Toth, D. Vigo (eds), MOS/SIAM Series on Optimization 18, SIAM, Philadelphia, 2014, 273-298 (with C. Archetti, D. Vigo)
- The Team Orienteering Arc Routing Problem, *Transportation Science* 48, 442-457, 2014 (with C. Archetti, A. Corberan, I. Piana, J.M. Sanchis)
- A survey on matheuristics for routing problems, *EURO Journal on Computational Optimization* 2, 223-246, 2014 (with C. Archetti)
- Polynomial Cases of the Economic Lot Sizing Problem with Transportation Cost Discounts, *European Journal of Operational Research* 237, 519-527, 2014 (with C. Archetti, L. Bertazzi)
- The Locomotive Assignment Problem: a survey on optimization models, *International Transactions on Operations Research* 21, 327-352, 2014 (with F. Piu)
- The directed profitable Location Rural Postman Problem, *European Journal of Operational Research* 236, 811-819, 2014 (with C. Arbib, M. Servilio, C. Archetti)
- Association of European Operational Research Societies, in *Wiley Encyclopedia of Operations Research and Management Science*, Cochran, J.J., Cox, L.A., Keskinocak, P., Kharoufeh, J.P., Smith, J. Cole (eds.), John Wiley & Sons, Inc., 2011.
- Formulations for an inventory routing problem, *International Transactions in Operational Research* 21, 353-374, 2014 (with C. Archetti, N. Bianchessi, S. Irnich)
- Branch-and-Cut Algorithms for the Split Delivery Vehicle Routing Problem, *European Journal of Operational Research* 238, 685-698, 2014 (con C. Archetti, N. Bianchessi)
- A Heuristic for BILP Problems: The Single Source Capacitated Facility Location Problem, *European Journal of Operational Research* 238, 438-450, 2014 (with G. Guastaroba)

- Complexity and approximation for Traveling Salesman Problems with profits, *Theoretical Computer Science* 531, 54-65, 2014 (with E. Angelelli, C. Bazgan, Zs. Tuza)
- Twenty years of linear programming based portfolio optimization, *European Journal of Operational Research* 234, 518-535, 2014 (with R.Mansini, W. Ogryczak)
- Incomplete service and split deliveries in a routing problem with profits, *Networks* 63, 135-145, 2014 (with C.Archetti, N.Bianchessi, A. Hertz)
- The Split Delivery Capacitated Team Orienteering Problem, *Networks* 63, 16-33, 2014 (with C.Archetti, N.Bianchessi, A. Hertz)
- The Distance Constrained Multiple Vehicle Traveling Purchaser problem, *European Journal of Operational Research* 235, 73-87, 2014 (con N.Bianchessi, R.Mansini)
- An ILP-refined tabu search for the Directed Profitable Rural Postman Problem, *Discrete Applied Mathematics* 163, 3-16, 2014 (with C.Archetti, G.Guastaroba)
- The Vehicle Routing Problem with Divisible Deliveries and Pickups, *Transportation Science* 49, 271-294, 2013 (with C. Archetti, G. Nagy, N. A. Wassan)
- The Capacitated Team Orienteering Problem with Incomplete Service, *Optimization Letters* 7, 1405-1417, 2013 (with C.Archetti, N.Bianchessi)
- Asymptotic analysis of periodic policies for the inventory routing problem, *Naval Research Logistics* 60, 525-540, 2013 (con L.Bertazzi, A.Chan)
- Reoptimizing the Rural Postman Problem, *Computers & Operations Research* 40, 1306-1313, 2013 (with C.Archetti, G.Guastaroba)
- Inventory Routing Problems with multiple customers, *EURO Journal on Transportation and Logistics* 2, 255-275, 2013 (con L.Bertazzi)
- Optimal solutions for routing problems with profits, *Discrete Applied Mathematics* 161, 547-557, 2013 (with C.Archetti, N.Bianchessi)
- A branch-and-bound algorithm for the double TSP with two stacks, *Networks* 61, 58-75, 2013 (with F.Carrabs, R. Cerulli)
- Inventory Routing Problems: An introduction, *EURO Journal on Transportation and Logistics* 1, 2012, 307-326 (with L.Bertazzi)
- Kernel Search for the Capacitated Facility Location Problem, *Journal of Heuristics* 18, 877-917, 2012 (with G.Guastaroba)
- A branch-and-cut algorithm for the pickup and delivery Traveling Salesman Problem with multiple stacks, *Networks* 60, 212-226, 2012 (with J.-F. Cote e, C. Archetti, M. Gendreau, J.-Y. Potvin)

- CORAL: An exact algorithm for the Multidimensional Knapsack Problem, *INFORMS Journal on Computing* 24, 399-415, 2012 (with R.Mansini)
- A hybrid algorithm for an inventory-routing problem, *INFORMS Journal on Computing* 24, 101-116, 2012 (with C.Archetti, L.Bertazzi, A. Hertz)
- Kernel Search: An application to the index tracking problem, *European Journal of Operational Research* 217, 54-68, 2012 (with G.Guastaroba)
- Kernel search: A new heuristic framework for portfolio selection, *Journal of Computational Optimization and Applications* 51, 345-361, 2012 (with E.Angellelli, R.Mansini)
- Vehicle routing problems with split deliveries, *International Transactions on Operations Research* 19, 3-22, 2012 (with C.Archetti)
- Investigating the effectiveness of robust portfolio optimization techniques, *Journal of Asset Management* 12, 260-280, 2011 (with G.Guastaroba, G.Mitra)
- A column generation approach for the Split Delivery Vehicle Routing Problem, *Networks* 58, 241-254, 2011 (with C.Archetti, N.Bianchessi)
- Two uniform machines with nearly equal speeds: Unified approach to known sum and known optimum in semi on-line scheduling, *Journal of Combinatorial Optimization*, 21, 458-480, 2011 (con G. Dosa, Zs. Tuza)
- Complexity of the VRP and SDVRP, *Transportation Research Part C*, 19, 741-750, 2011 (with C. Archetti, D. Feillet, M. Gendreau)
- Analysis of the maximum level policy in a production-distribution system, *Computers and Operations Research* 38, 1731-1746, 2011 (with C. Archetti, L.Bertazzi, G.Paletta)
- Exact solutions to the double Travelling Salesman Problem with multiple stacks, *Networks* 56, 229-243, 2010 (with C.Archetti, H.Petersen)
- Geometric representation for semi on-line scheduling on uniform processors, *Optimization Methods & Software (OMS)* 25, 421-428, 2010 (with E.Angellelli, J.Szoldatics, Zs. Tuza)
- Kernel Search: A general heuristic for the Multi-dimensional Knapsack Problem, *Computers and Operations Research* 37, 2017-2026, 2010 (with E.Angellelli, R.Mansini)
- The undirected capacitated arc routing problem with profits, *Computers and Operations Research* 37, 1860-1869, 2010 (with C.Archetti, D.Feillet, A. Hertz)
- Reoptimizing the 0–1 knapsack problem, *Discrete Applied Mathematics* 158, 1879-1887, 2010 (with C.Archetti, L.Bertazzi)

- On the effectiveness of scenario generation techniques in single-period portfolio optimization, *European Journal of Operational Research* 192, 500-511, 2009 (with G.Guastaroba, R.Mansini).
- Short term strategies for a dynamic multi-period routing problem, *Transportation Research C* 17, 106-119, 2009 (with E.Angelelli, N.Bianchessi, R.Mansini).
- Models and simulations for portfolio rebalancing, *Computational Economics* 33, 237-262, 2009 (with G. Guastaroba, R. Mansini)
- The capacitated team orienteering and profitable tour problems, *Journal of the Operational Research Society* 60, 831-842, 2009 (with C.Archetti, D.Feillet, A. Hertz)
- Comparison of policies in dynamic routing problems, *Journal of the Operational Research Society* 61, 686-695, 2009 (with E.Angelelli, N.Bianchessi, R.Mansini)
- To split or not to split: That is the question, *Transportation Research E* 44, 114-123, 2008 (with C.Archetti, M.Savelsbergh).
- An optimization-based heuristic for the split delivery vehicle routing problem, *Transportation Science* 42, 22-31, 2008 (with C.Archetti, M.Savelsbergh).
- Semi on-line scheduling on two uniform processors, *Theoretical Computer Science* 393, 211-219, 2008 (with E.Angelelli, Zs. Tuza).
- A comparison of MAD and CVaR with real features, *Journal of Banking and Finance* 32, 1188-1197, 2008 (with E.Angelelli, R.Mansini).
- Metaheuristics for the team orienteering problem, *Journal of Heuristics* 13, 49-76, 2007 (with C.Archetti, A.Hertz).
- Competitive analysis for dynamic multi-period uncapacitated routing problems, *Networks* 49, 308-317, 2007 (with E.Angelelli, M.Savelsbergh).
- Conditional value at risk and related linear programming models for portfolio optimization, *Annals of Operations Research* 152, 227-256, 2007 (with R. Mansini, W. Ogryczak).
- Competitive analysis of a dispatch policy for a dynamic multi-period routing problem, *Operations Research Letters* 35, 713-721, 2007 (with E.Angelelli, M.Savelsbergh).
- Semi on-line scheduling on three processors with known sum of the tasks, *Journal of Scheduling* 10, 263-269, 2007 (with E.Angelelli, Zs. Tuza).
- A branch-and-cut algorithm for a vendor managed inventory routing problem, *Transportation Science* 41, 382-391, 2007 (with C.Archetti, L.Bertazzi, G.Laporte).

- Analysis of practical policies for a single link distribution system, *Naval Research Logistics* 54, 497-509, 2007 (with L.Bertazzi, A.Chan).
- New bounds and algorithms for on-line scheduling: two identical processors, known sum and upper bound on the tasks, *Discrete Mathematics and Theoretical Computer Science* 8, 1-16, 2006 (with E.Angelelli, Zs. Tuza).
- A tabu search algorithm for the split delivery vehicle routing problem, *Transportation Science* 40, 64-73, 2006 (with C.Archetti, A. Hertz).
- Worst-case analysis for split delivery vehicle routing problems, *Transportation Science* 40, 226-234, 2006 (with C.Archetti, M.Savelsbergh).
- Worst-case analysis of the full load policy in the single link shipping problem, *International Journal of Production Economics* 93-94C, 217-224, 2005 (with L.Bertazzi).
- Improved rounding procedures for the discrete version of the capacitated EOQ problem, *European Journal of Operational Research* 166, 25-34, 2005 (with L.Bertazzi).
- Complexity and reducibility of the skip delivery problem, *Transportation Science* 39, 182-187, 2005 (with C.Archetti, R.Mansini).
- Minimizing the total cost in an integrated Vendor-Managed Inventory System, *Journal of Heuristics* 11, 393-419, 2005 (with L.Bertazzi, G.Paletta).
- An exact approach for portfolio selection with transaction costs and rounds, *IIE Transactions* 37, 919-929, 2005 (with R. Mansini).
- Scheduling groups of tasks with precedence constraints on three dedicated processors, *Discrete Applied Mathematics* 134, 141-168, 2004 (with R.Mansini, Zs. Tuza).
- An improved heuristic for the period traveling salesman problem, *Computers and Operations Research* 31, 1215-1222, 2004 (with L. Bertazzi, G. Paletta).
- The on-line multiprocessor scheduling problem with known sum of the tasks, *Journal of Scheduling* 7, 421-428, 2004 (with E.Angelelli, A.B. Nagy, Zs. Tuza)
- Vehicle routing in the 1-skip collection problem, *Journal of the Operational Research Society* 55, 717-727, 2004 (with C.Archetti).
- On LP solvable models for portfolio selection, *Informatica* 14 (1): 37-62, 2003 (with R.Mansini, W.Ogryczack).
- An efficient fully polynomial approximation scheme for the subset-sum problem, *Computer and System Sciences* 66, 349-370, 2003 (with H.Kellerer, R.Mansini, U.Pferschy).

- Semi on-line scheduling on two parallel processors with upper bound on the items, *Algorithmica* 37, 243-262, 2003 (with E.Angelelli, Zs. Tuza).
- Semi-absolute deviation rule for mutual funds portfolio selection, *Annals of Operations Research* 124, 245-265, 2003 (with L.Chiodi, R.Mansini).
- Reoptimizing the Traveling Salesman Problem, *Networks* 42, 154-159, 2003 (with C.Archetti, L.Bertazzi).
- LP solvable models for portfolio optimization: a classification and computational comparison, *IMA Journal of Management Mathematics* 14, 187-220, 2003 (with R.Mansini, W.Ogryczack).
- Deterministic order-up-to level policies in an inventory routing problem, *Transportation Science* 36, 119-132, 2002 (with L.Bertazzi, G.Paletta).
- The periodic vehicle routing problem with intermediate facilities, *European Journal of Operational Research* 137, 233-247, 2002 (with E. Angelelli).
- A multidimensional knapsack problem for the asset-backed securitization, *Journal of the Operational Research Society* 53, 822-832, 2002 (with R.Mansini).
- The application of a vehicle routing model to a waste collection problem: two case studies, *Journal of the Operational Research Society* 53, 944-952, 2002 (with E. Angelelli).
- Continuous and discrete shipping strategies for the single link shipping problem, *Transportation Science* 36, 314-325, 2002 (with L.Bertazzi).
- Rounding procedures for the discrete version of the capacitated Economic Order Quantity problem, *Annals of Operations Research (Mathematics of Industrial Systems)* 107, 33-49, 2001 (with L.Bertazzi).
- Two linear approximation algorithms for the subset sum problem, *European Journal of Operational Research* 120, 289-296, 2000 (with H.Kellerer, R.Mansini).
- Exact and heuristic solutions for a shipment problem with given frequencies, *Management Science* 46, 973-988, 2000 (with L.Bertazzi, W.Ukovich).
- Selecting portfolios with fixed costs and minimum transaction lots, *Annals of Operations Research* 99, 287-304, 2000 (with R. Mansini, H.Kellerer).
- Minimizing logistic costs in multistage supply chains, *Naval Research Logistics* 46, 399-417, 1999 (with L.Bertazzi).
- Heuristic algorithms for the portfolio selection problem with minimum transaction lots, *European Journal of Operational Research* 114, 219-233, 1999 (with R. Mansini).

- On-line approximation algorithms for partitioning items in extendable bins, *Annals of Operations Research* 86, 491-506, 1999 (with Zs. Tuza).
- Inventory control on sequences of links with given transportation frequencies, *International Journal of Production Economics* 59, 261-270, 1999 (with L.Bertazzi).
- Approximation algorithms for partitioning items in unequal bins to minimize the total size, *Discrete Applied Mathematics* 94, 181-191, 1999 (with P.Dell'Olmo).
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