

CURRICULUM VITAE ET STUDIORUM

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QUALIFICATIONS

Current Position: 15/12/2017 – Present: **Full Professor** of Mathematical Methods of Economics, Finance and Actuarial Sciences at Università degli Studi Niccolò Cusano - Telematica, Roma, Faculty of Economics.

Current Position: 05/05/2014 – 14/12/2017: Associate Professor of Mathematical Methods of Economics, Finance and Actuarial Sciences at Università degli Studi Niccolò Cusano - Telematica, Roma, Faculty of Economics.

01/10/2009-04/05/2014: Assistant Professor at Università degli Studi Niccolò Cusano - Telematica, Roma, Faculty of Economics.

02/05/2007-30/04/2009: Research Fellow in Operations Research, supervisor, Prof. Fabio Tardella, Department of Mathematics for Economics, Financial and Insurance Decisions, Faculty of Economics, University of Rome "La Sapienza".

01/03/2007 – 30/04/2007: Research Contract: "Models and Algorithms for the study of firms dynamics". Supervisor, Prof. Bruno Simeone. Department of Statistics, Probability and Applied Statistics, Faculty of Statistics, University of Rome "La Sapienza".

01/07/2006 – 31/12/2006: Research Contract: "Efficient algorithms for quadratic programming problems with application to the public debt management problem". Supervisor, Prof. Fabio Tardella. Department of Mathematics for Economics, Financial and Insurance Decisions, Faculty of Economics, University of Rome "La Sapienza".

01/01/2006 – 30/06/2006: Research Contract: “The problem of locating facilities on special classes of graphs”. Supervisor, Prof. Bruno Simeone. Department of Statistics, Probability and Applied Statistics, Faculty of Statistics, University of Rome “La Sapienza”.

01/12/2001 – 30/11/2005: Research Fellow in Operations Research, supervisor, Prof. Fabio Tardella. Department of Mathematics for Economics, Financial and Insurance Decisions, Faculty of Economics, University of Rome “La Sapienza”.

1998-2001: Ph.D. student in Operations Research at the Department of Statistics, Probability and Applied Statistics, Faculty of Statistics, University of Rome “La Sapienza”. Ph.D. thesis: “The Location of Path Shaped and Tree Shaped Facilities on Networks”, discussed on 11/05/2001.

23/04/1997: University Degree (Laurea) cum Laude in Statistics, Faculty of Statistics, University of Rome “La Sapienza”. Thesis: “An O.R. Application for the Catholic Jubilee in Rome”, discussed on 23/04/1997.

RESEARCH ACTIVITY

a. Portfolio selection problems and quantitative finance

Asset allocation problems are currently one of the main research topics studied by Andrea Scozzari, both from an application and a theoretical viewpoint. In particular, new models and algorithms were developed for the portfolio selection problem as well as for the index tracking problem. In fact, innovative algorithms were provided based on new results in (non convex) quadratic programming, multi-objective optimization and mixed integer linear programming. These algorithms and methods were applied also to the Enhanced Index Tracking problem that is the problem of selecting a portfolio that should generate excess return with respect to a benchmark index. Some papers were presented at international conferences and published in important international journals.

b. Biproportional allocation problems and design of electoral systems

The Biproportional Allocation Problem (BAP) is a well-known problem which arises in those proportional systems where seats must be allocated to parties within territorial constituencies. From a theoretical viewpoint this problem is intrinsically a discrete problem that preludes new and interesting questions on how to find correct and simple procedures for its solution. In this area, the research started after the identification of a serious anomaly in the past Electoral laws for the election of the chamber of deputies in Italy. This issue relates to the seats distribution in the different electoral constituencies, that, in fact, violates the art. 56 of the Italian Constitution. In his research, Andrea Scozzari is interested in studying different classes of models and methods for Biproportional Apportionment with particular attention to those models characterized by an “error minimization” solution approach. Another topic strictly linked to BAP is political districting that is often formulated as the problem of partitioning a graph, representing a given territory, into connected components. A number of papers were presented at international conferences and published in important international journals.

c. Territory design and facility location problems

This research area considers the territorial design and the facility location problems, which are formulated as networks optimization problems. Network facility location problems consist of locating a specified number of facilities in a network representing a given territorial unit in order to supply a set of costumers. In particular, much interest was devoted to the extensive location problems, that is, the location of paths or complex structures on special classes of graphs. This kind of problems are particularly interesting when locating a public transit line or an emergency route in a network. Most of these problems are deterministic, that is, it is assumed that all the parameters, like the customers' demand, the arcs' lengths or costs are known in advance. However, in many real applications it is impossible to make accurate estimations of those data that very often are affected by uncertainty. This fact has motivated the study of location problems under uncertainty that in the last years attracted an increasing interest of the researchers in this field. A number of papers were presented at international conferences and published in important international journals.

AWARDS AND DISTINCTIONS

April 2014: Outstanding Contribution in Reviewing for the international journal: DISCRETE OPTIMIZATION. Motivation: In recognition of the contributions made to the quality of the journal.

2010 – Present: Member of the EURO Working Group on Locational Analysis (EWGLA).

2012 – 2014: External professor collaborating with the PhD Program in "Matemáticas" at the University of Seville.

The survey: *F. Ricca, A. Scozzari, B. Simeone (2011). Political Districting: from classical models to recent approaches*, published in: 4OR A Quarterly Journal of Operations Research, vol. 9, pp. 223-254, was selected for the publication in the special volume of ANNALS OF OPERATIONS RESEARCH entitled "Surveys in Operations Research III (Invited Surveys from 4OR, 2009-2011)" that collects the best surveys published in the past three years in the international journal 4OR.

The work: *Andrea Scozzari, Some insights on the extensive facility location problems on graphs (2011)*, was an invited talk at the Exploratory workshop on Locational Analysis: Trends on theory and applications, held in Seville, Spain, November 28-30 2011. (see <http://www.imus.us.es/ACT/ewla2011/> or <http://www.seio.es/grupos/geloca/>). According to the spirit of these Exploratory workshops - periodically organized by the University of Seville with the aim of sharing and spreading new ideas and results - the workshop gave the opportunity to the invited speakers to present the state of the art in their specific research fields as well as to propose a set of open and challenging problems addressed, in particular, to the community of locators (see, the open problems proposed by Andrea Scozzari <http://www.imus.us.es/ACT/ewla2011/ewla2011-OpenProblems.pdf>).

Seville, May 2007: Member of the commission for the final discussion of the Ph.D. Thesis of Federico Perea "Cooperative analysis on supply chains", Dept. Estadística e Investigación Operativa - Facultad de Matemáticas, Universidad de Sevilla.

Selected referee by the scientific committee for the "INFORMS George Nicholson Student Paper Competition 2011" (selected by prof. Maurice Queyranne) for evaluating the paper: D. King, Efficient Contiguity and Hole Evaluation for Political Districting.

VISITING AND INVITATION AT CONFERENCES AND WORKSHOPS

October 1-3 2014: invited speaker at the "International Workshop on Locational Analysis and Related Problems", organized by IMUS (Instituto de Matemáticas de la Universidad de Sevilla), Sevilla 1-3 October 2014. Title: Partitioning a graph into connected components with fixed centers and optimizing different criteria.

July 8-12, 2014: Invited speaker at the international summer school on "Pluridisciplinary Approaches for the Analysis of Voting Rules" University of Caen (Normandie, France). The school is sponsored by the European Cost action project IC 1206 "Computational Social Choice" (see <http://www.illc.uva.nl/COST-IC1205/>).

November 25-29 2013: Invited speaker at the Ph.D. School in Mathematics, Dep. of Estadística y Investigación Operativa - Facultad de Matemáticas, Universidad de Sevilla. Seminars on "Location problems in networks: Advanced methods".

February 1-3 2013: Invited speaker at the Ph.D. School in Mathematics, Dep. of Estadística y Investigación Operativa - Facultad de Matemáticas, Universidad de Sevilla. Seminars on "Network Location Problems: From classical models to recent approaches".

28/11/2011 – 30/11/2011: Invited presentation at the international Exploratory workshop on locational analysis: Trends on theory and application (EWLA 2012), Seville, Spain. Title of the contribution: "Some insights on the extensive facility location problems on graphs".

25/05/2009 – 08/06/2009: Research visiting at the Dept. of Estadística e Investigación Operativa - Facultad de Matemáticas, University of Seville. During the visiting period Andrea Scozzari was invited to hold a faculty seminar. Title of the talk: "Polynomially computable bounds for the probability of a union of events", Sala de Juntas de la Facultad de Matemáticas, Seville 06/06/2009.

01/03/2006 – 30/03/2006: Research visiting at the Dept. of Estadística e Investigación Operativa - Facultad de Matemáticas, University of Seville. During the visiting period, Andrea Scozzari was invited to hold a faculty seminar. Title of the talk: "On the location of extensive facilities on networks". Sala de Juntas de la Facultad de Matemáticas, Seville, 22/03/2006.

ORGANIZATION OF SEMINARS AND WORKSHOPS

2017: Member of the Program Committee of the 6th International Conference on Operations Research and Enterprise System held in Porto (Portugal) 23-25 February 2017.

2013: Organization of the conference session on “Network Location Problems” at the *26th European Conference on Operational Research, EURO/INFORMS MMXIII*, Rome, July 1-4 2013.

2008: Italy-Spain Workshop on “Discrete Optimization and Applications”, Department of Mathematics for Economics, Financial and Insurance Decisions, Faculty of Economics, University of Rome “La Sapienza”. Rome, 21/05/2008.

2005: Workshop on “Infomobility and Design of Integrated Systems for Urban Transport”, Faculty of Statistics, University of Rome “La Sapienza”. Rome, 12/12/2005.

2002: Workshop on “Evaluation and Prevention for the Transportation of Hazardous Materials”, Room G. Marconi, Italian National Research Council (CNR), Rome, 14/05/2002.

EDITORIAL AND REFEREE ACTIVITY FOR INTERNATIONAL JOURNALS

2016-present: member of the scientific committee of the journal: *Quaderno di Ricerca: Osservatorio trimestrale sui dati economici italiani*, *Rivista scientifica – CINECA Code E230240 – ISSN 2283-7035* (Mazziero Research (Eds.): <http://www.mazzieroresearch.com/quadernodi-ricerca/>).

Referee for: *European Journal of Operational Research*, *Annals of Operations Research*, *Computer and Operations Research*, *European Journal of Finance*, *Quantitative Finance*, *Journal of Global Optimization*, *OR Spectrum*, *Journal of Optimization Theory and Applications*, *Networks*, *Discrete Applied Mathematics*, *Discrete Optimization*, *Computational Management Science*, *Applications and Applied Mathematics*, *IMA Journal of Management Mathematics*, *Applied Mathematical Modelling*, *Journal of Computer and System Sciences*.

RESEARCH PROJECTS

2014: **Coordinator** of the unit of the faculty of Economics of University Niccolò Cusano in the research project: “Evaluation of the electoral systems”, in collaboration with the University of Rome "La Sapienza and "Ufficio Studi elettorali" of the chamber of deputies.

2010: **Coordinator** of the Research Project: Standard High Performance Computing, supported by CASPUR Institution (Consorzio Interuniversitario per le Applicazioni del Supercalcolo per Università e Ricerca). Title of the project: “Parallel Algorithms for NP-Hard Portfolio Selection Problems” (see <http://hpc.caspur.it/hpc-grants/standard-hpc-grant-2010-winners>).

2003: **Coordinator** of the Research Project “Young Researchers”, University of Rome “La Sapienza”. Title of the project: “Methods and algorithms for covering and location problems for the private and public sectors”.

1999: **Coordinator** of the Research Project “Young Researchers”, University of Rome “Tor Vergata”. Title of the project: “Methods and algorithms for the location of service facilities for the Jubilee 2000”.

2017: International project: “New Mathematical challenges of logistics and integrated transport problems on complex networks: design and optimization” (Prot. n. MTM2016-74983-C2-1-R). Coordinator Prof. Justo Puerto, University of Seville (48 months).

2017: International project: “Quantitative models for electoral systems and efficient algorithms for voting rules”. Coordinator Prof. Federica Ricca, University of Rome La Sapienza (36 months).

2016: Research project supported by Sapienza, University of Rome (prot. C26A15TWH2). Title of the project: “Citation networks in economics”. Coordinator Prof. Carlo D’Ippoliti.

2014: International research project supported by the Spanish Ministry of Education: “Desafios Matematicos en el Diseno y Optimizacion de Redes Complejas: Aplicaciones”, (Prot. n. MTM2013-46962-C2-1-P) Coordinator, Prof. Justo Puerto.

2008: Italy-Spain Integrated Research Project, University of Rome “La Sapienza”. Title of the project: “Discrete Optimization for multicriteria decision problems”. Coordinator Prof. Fabio Tardella.

2004: Italy-Spain Integrated Research Project, University of Rome “La Sapienza”. Title of the project: “Decision making with multiple agents and multiple criteria”. Coordinator Prof. Bruno Simeone.

2007: PRIN-COFIN National Research Project, University of Rome “La Sapienza”. Title of the project: “Optimization and control methods for the public debt management: static and dynamic models”. Coordinator Prof. Fausto Gozzi.

2003: PRIN-COFIN National Research Project, University of Rome “La Sapienza”. Title of the project: “Optimization methods for risk management (financial, credit, operational): static and dynamic models” Coordinator Prof. Lorenzo Peccati.

2000: Triennial Research project supported by the Italian National Research Council (CNR) and the Italian Civil Protection. Title of the project: “Evaluation and Prevention in the Transportation of Hazardous Materials” Coordinator Prof. Paolo Dell’Olmo.

2013: Research project supported by Sapienza, University of Rome (prot. C26A13KH28). Title of the project: “Stability in financial markets: models and algorithms”. Coordinator Prof. Giulia Rotundo.

2012: Research project supported by Sapienza, University of Rome (prot. C26A12AWJ7). Title of the project: "Optimization methods for the optimal location and management of facilities". Coordinator Dr. Isabella Lari.

2011: Research project supported by Sapienza, University of Rome (prot. C26A11XHRA). Title of the project: "Optimization algorithms and correct procedures for the biproportional allocation problem". Coordinator Dr. Federica Ricca.

2011: Research project supported by University of Roma Tre. Title of the project: "Mathematical models and algorithms for portfolio selection problems". Coordinator Dr. Francesco Cesarone.

2010: Research project supported by Sapienza, University of Rome (prot. C26A10AJHW). Title of the project: "Portfolio management and financial networks analysis". Coordinator Prof. Fabio Tardella.

2006: Research project supported by the University of Rome "La Sapienza". Title of the project: "Submodularity theory and graph models applied to financial problems". Coordinator Prof. Fabio Tardella.

2005: Research project supported by the Faculty of Economics, University of Rome "La Sapienza". Title of the project: "Algorithms for non-convex quadratic problems". Coordinator Prof. Fabio Tardella.

2004: Research project supported by the Faculty of Economics, University of Rome "La Sapienza". Title of the project: "Coherent bounds in probability problems". Coordinator Prof. Fabio Tardella.

2004: Research project supported by the University of Rome "La Sapienza". Title of the project: "Discrete Optimization, Complementarity and Submodularity theory with application to financial problems". Coordinator Prof. Bruno Simeone.

2003: Research Project "Young Researchers", University of Rome "La Sapienza". Title of the project: "Partition and network design problems: Polynomial time algorithms for special classes of graphs".

1999: Research project supported by the Roman Agency for the Catholic Jubilee. Title of the project: "Efficient algorithms for the management of traffic flows in the city of Rome". Coordinator Prof. Giovanni Storchi.

PARTICIPATION AT NATIONAL AND INTERNATIONAL SCHOOLS

2004 DIMACS Tutorial on Social Choice and Computer Science, May 10 - 14, DIMACS Center, CoRE Building, Rutgers University.

2002 Approximation Algorithms for Network Problems, Prof. Y. Rabani and Prof. R. Ravi, Department of Computer Science, University of Rome "La Sapienza", September 24 - October 3.

2002 Integer Programming Conference in Honor of Egon Balas, June 3-5, Carnegie Mellon University, Pittsburgh, PA.

2000 AMORE "Research Seminar on Railway Optimization Problems", October 16-20, Konstanz, Germany.

2000 DONET Spring School on "Computational Combinatorial Optimization", May 15-19, Schloss Dagstuhl, Germany.

1999 29th Course of the International School of Mathematics "G. Stampacchia" on "Applied Combinatorial Optimization", November 1-7 Erice, Italy.

1998 Summer School in Mathematics organized by "Scuola di Matematica Interuniversitaria" and "Scuola Normale di Pisa", August 2-15, Cortona.

1998 Summer school on logistic problems and solution techniques, Sappada (BL), June 8-12 1998, organized by: Comitato incontri di Studio in Cadore e University Cà Foscari Venice.

TEACHING ACTIVITY

The teaching activity is mainly carried out at the University Niccolò Cusano in the degree course of Business Economics and Management, and in the master degree course of Economics. Although the courses are mainly delivered on line, each academy year, 1 or 2 frontal lectures per week are provided including subjects like calculus and financial mathematics. Andrea Scozzari was also member of several degree board commissions as well as of commissions for the acknowledgement to the master degree courses of the faculty of Economics. He was also supervisors of some degree thesis. In the following there is a complete list of Andrea Scozzari's teaching activity, including the courses carried out in other Italian Universities.

2009/2010-present: Course on calculus at the University Niccolò Cusano, Faculty of Economics. Degree course class L-18, 9 CFU.

2010/2011-present: Course on Financial Mathematics at the University Niccolò Cusano, Faculty of Economics. Degree course class L-18, 9 CFU.

2009/2010-present: Course on Informatics and Operations Research at the University Niccolò Cusano, Faculty of Economics. Degree course class LM-56, 5 CFU, SSD INF/01.

2010/2011-present: Course on Calculus at the University Niccolò Cusano, Faculty of Economics, first level master degree in "Metodologie didattiche per l'insegnamento della matematica".

2008/2009: Game Theory Course (in English) at LUISS University, Faculty of Economics.

2012/2013-2014/2015: Course on Operations Research at Tor Vergata University (Rome), Faculty of Mathematics. Degree course in Computer Science, 6 CFU.

2007/2008 and 2008/2009: Contract professor at the University of Rome "La Sapienza" faculty of Medicine. Course on Operations Research.

2006/2007: Contract professor at the University of Viterbo, faculty of Economics. Master degree course on Mathematics for Economics (6 CFU).

From 2005 to 2007: Operations Research Course, Faculty of "Scienze delle Professioni e Tecniche-Assistenziali", University of Rome "La Sapienza".

Teaching activity within the Master in "Development Policies and Evaluations of the Public Investments". Course on "Decisions under uncertainty". Rome, University Roma TRE, May 30 – June 5, 2006.

2001-2009: Teaching activity within the course in "Decision Support Systems" (tenured by Prof. Fabio Tardella), Faculty of Economics, University of Rome "La Sapienza".

2003-2009: Teaching activity within the seminars series in "Operations Research" (tenured by Prof. Fabio Tardella), Faculty of Economics, University of Rome "La Sapienza" (1 CFU).

2004-2009: Teaching activity within the seminars series in "Probability and Mathematical Statistics" (tenured by Prof. Fabio Tardella), Faculty of Economics, University of Rome "La Sapienza" (1 CFU).

2001: Course on the European Computer Driving License (ECDL), Faculty of Statistics, University of Rome "La Sapienza".

2006-2009: Adjunct Supervisor of the Ph.D. program of Francesco Cesarone, Department of Mathematics for Economics, Financial and Insurance Decisions, Faculty of Economics, University of Rome "La Sapienza". Title of the Thesis: "A new portfolio selection approach: Algorithm, analysis and models". Part of this thesis appeared on: F. Cesarone, A. Scozzari, F. Tardella (2012): A new method for mean-variance portfolio optimization with cardinality constraints. ANNALS OF OPERATIONS RESEARCH, vol. 205, p. 213-234, ISSN: 0254-5330, doi: 10.1007/s10479-012-1165-7.

2002-2005: Adjunct Supervisor of the Ph.D. program of Massimo Liquori, Department of Mathematics for Economics, Financial and Insurance Decisions, Faculty of Economics, University of Rome "La Sapienza". Title of the Thesis: "Vector DNF for Datasets Classifications: Application to the Financial Timing Decision Problem". Part of this thesis appeared on: M. Liquori, A. Scozzari (2008). Vector DNF for Datasets Classifications: Application to the Financial Timing Decision Problem. In: G. FELICI, C. VERCELLIS. Mathematical Methods for Knowledge Discovery and Data Mining. p. 24-39, NEW YORK, NY:Information Science Reference, ISBN: 978-1-59904-528-3, doi: 10.4018/978-1-59904-528-3.

UNIVERSITY CHARGES

2014/2015-present: member of the scientific committee of the Ph.D. program: Governance and Management for Business Innovation, Niccolò Cusano University.

2015-present: Faculty coordinator for the Erasmus+ Program.

2012-2013: Member of the European project commission for promoting visiting and projects with foreign Universities, Niccolò Cusano University.

PUBLICATIONS IN INTERNATIONAL JOURNALS

1. E. Fernández, M. A. Pozo, J. Puerto, SCOZZARI A (in press). Ordered Weighted Average optimization in Multiobjective Spanning Tree Problem. EUROPEAN JOURNAL OF OPERATIONAL RESEARCH, ISSN: 0377-2217, doi: <http://dx.doi.org/10.1016/j.ejor.2016.10.016>.
2. R. Bruni, F. Cesarone, SCOZZARI A, F. Tardella (2017). On exact and approximate stochastic dominance strategies for portfolio selection. EUROPEAN JOURNAL OF OPERATIONAL RESEARCH, vol. 259, pp. 322-329, doi: <http://dx.doi.org/10.1016/j.ejor.2016.10.006>.
3. R. Cerqueti, P. Falbo, C. Pelizzari, F. Ricca, SCOZZARI A (2017). A Mixed Integer Linear Program to Compress Transition Probability Matrices in Markov Chain Bootstrapping. ANNALS OF OPERATIONS RESEARCH, vol. 248, pp. 163-187, doi: [10.1007/s10479-016-2181-9](https://doi.org/10.1007/s10479-016-2181-9).
4. I. Lari, J. Puerto, F. Ricca, SCOZZARI A (2016). Algorithms for uniform centered partitions of trees. ELECTRONIC NOTES IN DISCRETE MATHEMATICS, vol. 55, p. 37-40, doi: <http://dx.doi.org/10.1016/j.endm.2016.10.010>.
5. I. Lari, J. Puerto, F. Ricca, SCOZZARI A (2016). Partitioning a Graph into Connected Components with Fixed Centers and Optimizing Cost-Based Objective functions or Equipartition Criteria. NETWORKS, vol. 67, p. 69-81, doi: [10.1002/net.21661](https://doi.org/10.1002/net.21661)
6. R. Bruni, F. Cesarone, SCOZZARI A., F. Tardella (2015). A Linear Risk-Return Model for Enhanced Indexation in Portfolio Optimization. OR SPECTRUM, vol. 37(3), pp. 735-759, doi: [10.1007/s00291-014-0383-6](https://doi.org/10.1007/s00291-014-0383-6).
7. F. Cesarone, SCOZZARI A., F. Tardella (2015). Linear vs. Quadratic portfolio selection models with hard real-world constraints. COMPUTATIONAL MANAGEMENT SCIENCE, vol. 12(3), pp. 345-370, doi: [10.1007/s10287-014-0210-1](https://doi.org/10.1007/s10287-014-0210-1).
8. E. Boros, SCOZZARI A., F. Tardella, P. Veneziani (2014). Polynomially Computable Bounds for the Probability of the Union of Events. MATHEMATICS OF OPERATIONS RESEARCH, vol. 39, p. 1311-1329, ISSN: 0364-765X, doi: <http://dx.doi.org/10.1287/moor.2014.0657>.
9. J. Puerto, F. Ricca, SCOZZARI A. (2014). Reliability problems in multiple path-shaped facility location on networks. DISCRETE OPTIMIZATION, vol. 12, p. 61-72, ISSN: 1572-5286, doi: <http://dx.doi.org/10.1016/j.disopt.2014.01.003>.

10. J. Puerto, F. Ricca, SCOZZARI A. (2014). Unreliable point facility location problems on networks. DISCRETE APPLIED MATHEMATICS, vol. 166, p. 188-203, ISSN: 0166-218X, doi: 10.106/j.dam.2013.10.013.
11. I. Lari, F. Ricca, SCOZZARI A. (2014). Bidimensional Allocation of seats via zero-one matrices with given line sums. ANNALS OF OPERATIONS RESEARCH, vol. 215, p. 165-181, ISSN: 1572-9338, doi: 10.1007/s10479-013-1440-2.
12. F. Cesarone, SCOZZARI A., F. Tardella (2013). A new method for mean-variance portfolio optimization with cardinality constraints. ANNALS OF OPERATIONS RESEARCH, vol. 205, p. 213-234, ISSN: 0254-5330, doi: 10.1007/s10479-012-1165-7.
13. SCOZZARI A., F. Tardella, S. Paterlini, T. Krink (2013). Exact and heuristic approaches for the index tracking problem with UCITS constraints. ANNALS OF OPERATIONS RESEARCH, vol. 205, p. 235-250, ISSN: 0254-5330, doi:10.1007/s10479-012-1207-1.
14. R. Bruni, F. Cesarone, SCOZZARI A., F. Tardella (2013). No arbitrage and a linear portfolio selection model. ECONOMICS BULLETIN, vol. 33, p. 1247-1258, ISSN: 1545-2921.
15. F. Ricca, SCOZZARI A., B. Simeone (2013). Political Districting: from classical models to recent approaches. ANNALS OF OPERATIONS RESEARCH, vol. 204, p. 271-299, ISSN: 0254-5330, doi:10.1007/s10479-012-1267-2.
16. R. Bruni, F. Cesarone, SCOZZARI A., F. Tardella (2012). A new stochastic dominance approach to enhanced index tracking problems. ECONOMICS BULLETIN, vol. 32, p. 3460-3470, ISSN: 1545-2921.
17. F. Ricca, SCOZZARI A., P. Serafini, B. Simeone (2012). Error Minimization Methods in Biproportional Apportionment. TOP, vol. 20, p. 547-577, ISSN: 1134-5764, doi: 10.1007/s11750-012-0252-x.
18. F. Pukelsheim, F. Ricca, B. Simeone, SCOZZARI A. P. Serafini (2012). Network flow methods for electoral systems. NETWORKS, vol. 59, p. 73-88, ISSN: 0028-3045, doi: 10.1002/net.20480.
19. J. Puerto, F. Ricca, SCOZZARI A. (2012). Range minimization problems in path-facility location on trees. DISCRETE APPLIED MATHEMATICS, vol. 160, p. 2294-2305, ISSN: 0166-218X, doi: 10.1016/j.dam.2012.05.020.
20. I. Lari, F. Ricca, SCOZZARI A., R.I. Becker (2011). Locating Median Paths on Connected Outerplanar Graphs. NETWORKS, vol. 57, p. 294-307, ISSN: 0028-3045, doi: 10.1002/net.20426.
21. J. Puerto, F. Ricca, SCOZZARI A. (2011). Minimax Regret Path Location on Trees. NETWORKS, vol. 58, p. 147-158, ISSN: 0028-3045, doi: 10.1002/net.20453.
22. F. Ricca, SCOZZARI A., B. Simeone (2011). Political Districting: from classical models to recent approaches. 4OR, vol. 9, p. 223-254, ISSN: 1619-4500, doi: 10.1007/s10288-011-0177-5.
23. F. Ricca, SCOZZARI A., B. Simeone (2011). The Give-up Problem for blocked regional lists with multi-winners. MATHEMATICAL SOCIAL SCIENCES, vol. 62, p. 14-24, ISSN: 0165-4896.

24. F. Cesarone, SCOZZARI A., F. Tardella (2009). Efficient Algorithms for Mean-Variance Portfolio Optimization with Hard Real-World Constraints. *GIORNALE DELL'ISTITUTO ITALIANO DEGLI ATTUARI*, vol. LXXII, p. 37-56, ISSN: 0390-5780.
25. J. Puerto, F. Ricca, SCOZZARI A. (2009). Extensive Facility Location Problems on Networks with Equity Measures. *DISCRETE APPLIED MATHEMATICS*, vol. 157, p. 1069-1085, ISSN: 0166-218X.
26. SCOZZARI A., F. Tardella (2009). On the complexity of some subgraph problems. *DISCRETE APPLIED MATHEMATICS*, vol. 157, p. 3531-3539, ISSN: 0166-218X.
27. J. Puerto, F. Ricca, SCOZZARI A. (2009). The Continuous and Discrete Path-Variance Problem on Trees. *NETWORKS*, vol. 53, p. 221-228, ISSN: 0028-3045.
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