MARIO GUAJARDO

Professor in Operations Research
NHH Norwegian School of Economics,
Centre for Shipping & Logistics,
Department of Business and Management Science.
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Google Scholar: https://scholar.google.com/citations?user=EJOXzM4AAAAJ

EDUCATION

NHH Norwegian School of Economics, Department of Business and Management Science, Bergen, Norway.

2009-2013 PhD in Management Science

Thesis: "Joint decision making and cost sharing:

Theory and applications in natural resource supply chains"

University of Chile, Department of Industrial Engineering, Santiago, Chile.

2005-2007 Master in Operations Management (graduated with Highest Honours).

Thesis: "Stochastic Dynamic Programming in a Mining Planning Problem".

2000-2007 **Industrial Engineer**, (graduated with Highest Honours).

2000-2005 B.S. Engineering's Sciences (Industrial Engineering concentration).

University of British Columbia, Sauder School of Business, Vancouver, Canada. Visiting exchange student, 2004 Winter.

RESEARCH INTERESTS

Operations research, collaborative logistics, transportation research, cooperative game theory, natural resource supply chains, sports analytics.

PUBLICATIONS IN REFEREED JOURNALS

- 1. Gu, Y., Goez, J. C., Guajardo, M., & Wallace, S. W. (2021). Autonomous vessels: state of the art and potential opportunities in logistics. *International Transactions in Operational Research*, 28(4), 1706-1739.
- 2. Van Bulck, D., Goossens, D., Schönberger, J. R., & Guajardo, M. (2020). An instance data repository for the round-robin sports timetabling problem. *Management and Labour Studies*, 45(2), 184-200.
- 3. Jouida, S. B., Guajardo, M., Klibi, W., & Krichen, S. (2021). Profit maximizing coalitions with shared capacities in distribution networks. *European Journal of Operational Research*, 288(2), 480-495.
- 4. Durán, G. A., Guajardo, M., López, A. F., Marenco, J., & Zamorano, G. A. (2021). Scheduling multiple sports leagues with travel distance fairness: an application to Argentinean youth football. *INFORMS Journal on Applied Analytics*, 51(2), 136-149.
- 5. Crainic, T. G., Guajardo, M., Roy, D., & Wallace, S. W. (2021). Editorial to the Special Issue on Transportation and Logistics with Autonomous Technologies. *International Transactions in Operational Research*, 28(4), 1619-1625.
- 6. Durán, G., Guajardo, M., & Gutiérrez, F. (2021). Efficient referee assignment in Argentinean professional basketball leagues using operations research methods. *Annals of Operations Research*.

- 7. Rezaeinia, N., Góez, J. C., & Guajardo, M. (2021). Efficiency and fairness criteria in the assignment of students to projects. *Annals of Operations Research*.
- 8. Orhan, C. C., & Guajardo, M. (2022). Analytics in developing countries: Methods, applications, and the impact on the UN Sustainable Development Goals. *International Transactions in Operational Research*, 29(4), 2041-2081.
- 9. Durán, G., Guajardo, M., Gutiérrez, F., Marenco, J., Sauré, D., & Zamorano, G. (2021). Scheduling the Main Professional Football League of Argentina. INFORMS *Journal on Applied Analytics* 51(5):361-372.
- 10. Van Bulck D, Goossens D, Schönberger J, Guajardo M (2020). RobinX: a three-field classification and unified data format for round-robin sports timetabling. *European Journal of Operational Research* 280 (2), 568-580.
- 11. Mirhedayatian SM, Crainic TG, Guajardo M, Wallace S (2021). A time-driven two-echelon location-routing problem with synchronization. *Journal of the Operational Research Society* 72 (1), 145-160.
- 12. Cea S, Durán G, Guajardo M, Sauré D, Siebert J, Zamorano G (2020). An analytics Approach to the FIFA Ranking Procedure and the World Cup Final Draw. *Annals of Operations Research* 286 (1), 119-146.
- 13. Osicka O, Guajardo M, Jörnsten K (2020). Cooperation of customers in traveling salesman problems with profits. *Optimization Letters* 14 (5), 1219-1233.
- 14. Osicka O, Guajardo M, van Oost T (2020). Cooperative game-theoretic features of cost sharing in location-routing. *International Transactions in Operational Research* 27 (4), 2157-2183.
- 15. Basso, F., Guajardo, M., & Varas, M. (2020). Collaborative job scheduling in the wine bottling process. Omega, 91, 102021.
- 16. Guajardo M, Rönnqvist M, Flisberg P, Frisk M. Collaborative transportation with overlapping coalitions. *European Journal of Operational Research* 271(1): 238-249, 2018.
- 17. Durán G, Giormenti M, Guajardo M, Pinto P, Rey PA, Stier-Moses NE. Improving access to voting with optimized matchings. *Electoral Studies* 51: 38-48, 2018.
- 18. Guajardo M, Jörnsten K. The Stable Tournament Problem: matching sports schedules with preferences. *Operations Research Letters* 45(5): 461-466, 2017.
- 19. Durán G, Guajardo M, Sauré D. Scheduling the South American Qualifiers to the 2018 FIFA World Cup by Integer Programming. *European Journal of Operational Research* 262(3): 1109-1115, 2017.
- 20. Alarcón F, Durán G, Guajardo M, Miranda J, Muñoz H, Ramírez L, Ramírez M, Sauré D, Siebert M, Souyris S, Weintraub A, Wolf-Yadlin R, Zamorano G. Operations Research Transforms Scheduling of Chilean Soccer Leagues and South American World Cup Qualifiers. Special issue 45th annual competition for the Franz Edelman Award for Achievement in Operations Research and the Management Sciences, *Interfaces* 47(1):52-69, 2017.
- 21. Guajardo M, Hopland AO, Jörnsten K. On cooperative game theory, taxation, and a boys' night out with unhappy ending. *Scandinavian Journal of Business Research* 31(2):159-169, 2017.
- 22. Bonomo F, Catalán J, Durán G, Epstein R, Guajardo M, Jawtuschenko A, Marenco J. An asymmetric multi-item auction with quantity discounts applied to internet service procurement in Buenos Aires public schools. *Annals of Operations Research* 258(2): 569–585, 2017.
- 23. Guajardo M, Rönnqvist M. A review on cost allocation methods in collaborative transportation. *International Transactions in Operational Research* 23(3):371-392, 2016.

- 24. Guajardo M, Jörnsten K, Rönnqvist M. Constructive and blocking power in collaborative transportation. *OR Spectrum* 38(1):25–50, 2016.
- 25. Flisberg P, Frisk M, Rönnqvist M, Guajardo M. Potential savings and cost allocations for forest fuel transportation in Sweden: A country-wide study. *Energy* 85:353–365, 2015.
- 26. Guajardo M, Jörnsten K. Common mistakes in computing the nucleolus. *European Journal of Operational Research* 241(3):931–935, 2015.
- 27. Guajardo M, Rönnqvist M, Halvorsen AM, Kallevik SI. Inventory management of spare parts in an energy company. *Journal of the Operational Research Society* 66(2):331–341, 2015.
- 28. Guajardo M, Rönnqvist M. Operations Research models for coalition structure in collaborative logistics. *European Journal of Operational Research* 240(1):147–159, 2015.
- 29. Guajardo M, Rönnqvist M. Cost allocation in inventory pools of spare parts with service-differentiated demand classes. *International Journal of Production Research* 53(1):220–237, 2015.
- 30. Alarcón F, Durán G, Guajardo M. Referee Assignment in the Chilean Football League using Integer Programming and Patterns. *International Transactions in Operational Research* 21(3): 415–438, 2014.
- 31. Guajardo M, Kylinger M, Rönnqvist M. Joint optimization of pricing and planning decisions in divergent supply chain. *International Transactions in Operational Research* 20(6):889–916, 2013.
- 32. Guajardo M, Kylinger M, Rönnqvist M. Speciality oils supply chain optimization: from a decoupled to an integrated planning approach. *European Journal of Operational Research* 229(2):540–551, 2013.
- 33. Durán G, Guajardo M, Wolf R. Operations Research Techniques for Scheduling Chile's Second Division Soccer League. *Interfaces* 42(3):273-285, 2012.
- 34. Catalán J, Epstein R, Guajardo M, Yung D, Martínez C. Solving multiple scenarios in a combinatorial auction. *Computers & Operations Research* 36(10):2752-2758, 2009.
- 35. Durán G, Guajardo M, Miranda J, Sauré D, Souyris S, Weintraub A, Wolf R. Scheduling the Chilean Soccer League by Integer Programming. *Interfaces* 37(6):539-552, 2007.

BOOK CHAPTERS

- 1. Guajardo M. Environmental benefits of collaboration and allocation of emissions in road freight transportation. In: Zeimpekis V, Aktas E, Bourlakis M, Minis I (eds) *Sustainable Freight Transport: Theory, Models, and Case Studies*. Operations Research/Computer Science Interfaces Series, vol 63, pp.79-98, Springer. 2018.
- 2. Flisberg P, Frisk M, Guajardo M, Rönnqvist M. Reallocation of Logistics Costs in a Cooperative Network of Sawmills. In: Diez P, Neittaanmäki P, Periaux J, Tuovinen T, Bräysy O (eds) *Computational Methods and Models for Transport*. Computational Methods in Applied Sciences, vol 45, pp.171-183, Springer. 2018.
- 3. Rönnqvist M, Flisberg P, Frisk M, Guajardo M. The aftermath of implementing collaboration in a network of sawmills: A retrospective analysis on logistics costs. In: Temponi C, Vandaele N (eds) *Information Systems, Logistics, and Supply Chain. ILS 2016*. Lecture Notes in Business Information Processing, vol 262. Springer, Cham, pp 47-60. 2018.

4. Guajardo M, Rönnqvist M, Flisberg P, Frisk M. Coalitions in collaborative forest transportation across multiple areas. In: Temponi C, Vandaele N (eds) Information Systems, Logistics, and Supply Chain. ILS 2016. Lecture Notes in Business Information Processing, vol 262. Springer, Cham, pp 61-73. 2018.

OTHER PUBLICATIONS

- · How O.R. helped reschedule a sports season during the COVID-19 pandemic: The case of Ecuador's Professional Football League. G Durán, M Guajardo, G Zamorano. *OR/MS Today* INFORMS' magazine, April 1, 2021.
- · Programando múltiples ligas deportivas con equidad en distancias de viaje: Una aplicación en el fútbol juvenil argentino. GA Durán, M Guajardo, AF López, J Marenco, GA Zamorano. *Revista Ingeniería de Sistemas* Volumen XXXIII, 5-35, 2019.
- · Durán G, Guajardo M, Gutiérrez F. Asignación de árbitros para las ligas profesionales de básquet de Argentina mediante Investigación de Operaciones. *Revista Ingeniería de Sistemas*, 32, 75-95, 2018.
- · From OR to the World Cup Russia (with love). *Impact*, magazine of The Operational Research Society, Autumn 2017, pp.7-11 (with Durán G, Sauré D).
- · 2018 South American Football World Cup: OR Scores a Goal. IFORS Newsletter, issue June 2017 (with Durán G, Sauré D).
- · Cea S, Durán G, Guajardo M, Sauré D, Siebert J, Zamorano G. Un enfoque analítico para la confección del ranking FIFA y la realización del sorteo del mundial de fútbol. *Revista Ingeniería de Sistemas*, 31, 21-45, 2017.
- · Tutorial: Operations Research for Scheduling South American World Cup Football Qualifiers in Soccer. *IFORS Newsletter*, issue Sept 2016 (with Durán G).
- · Durán G, Guajardo M. OR in Soccer: Chilean Soccer League Scheduling. *OR/MS Today*, Vol. 42, No. 2, 32-35, April 2015.
- · Durán G, Guajardo M. El fixture de las clasificatorias sudamericanas para la copa mundial de fútbol mediante programación entera. *Revista Ingeniería de Sistemas*, 28, 57-83, 2014.
- · Durán G, Guajardo M, Wolf R. Programación del Fixture de la Segunda División del Fútbol de Chile mediante Investigación de Operaciones. *Revista Ingeniería de Sistemas*, 24, 27-46, 2010.
- · Catalán J., Epstein R., Guajardo M., Yung D., Henríquez L., Martínez C., Weintraub G. No Such Thing as a Free Lunch? Combinatorial Auctions for School Meals in Chile. *Analytics*, Fall 2009, 34-38.
- · Catalán J., Epstein R., Guajardo M., Yung D., Henríquez L., Martínez C., Weintraub G. No Such Thing as a Free Lunch? Combinatorial Auctions for School Meals in Chile. *OR/MS Today*, Vol. 36, No. 2, 32-35, April 2009.
- · Durán G., Guajardo M., Weintraub A., Wolf R. OR in Soccer: Scheduling the Chilean League using Mathematical Programming. *OR/MS Today*, Vol. 36, No. 2, 42-47, April 2009.
- · Alarcón F, Durán G, Guajardo M. Un modelo de asignación de árbitros para el torneo de fútbol chileno y un enfoque de resolución en base a patrones. *Revista Ingeniería de Sistemas*, 23, 125-143, 2009.
- · Guajardo M. La investigación en la minería del futuro comienza hoy. A column in *Revista Norte Minero*, p.5, June-2009.
- · Epstein R., Weintraub A., Caro R., Guajardo M. Optimización de la planificación estratégica en empresas mineras. *Trend Management*, 8, 56-62, November 2006.
- · Durán G., Guajardo M., Sauré D. Tecnologías Modernas de Gestión para la Programación del Fútbol Chileno. *Trend Management*, 8, 118-122, May-June 2006.

· Durán G., Guajardo M., Miranda J., Sauré D., Souyris S., Weintraub A., Carmash A., Chaigneau F. Programación Matemática Aplicada al Fixture de la Primera División del Fútbol Chileno. *Revista Ingeniería de Sistemas*, 19, 29-48, 2005.

WORKING PAPERS

· ETC... INCOMPLETE

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HONOURS AND AWARDS

- Finalist of the 2020 Daniel H. Wagner Prize for Excellence in the Practice of Advanced Analytics and Operations Research. Scheduling the Main Professional Football League of Argentina. INFORMS, USA.
- · Best Paper Award in International Transactions in Operational Research, category Surveys and Tutorials, 2019. A review on cost allocation methods in collaborative transportation. IFORS.
- Finalist of the Euro Excellence in Practice Award 2018 (EEPA). Scheduling the South American Qualifiers to the 2018 FIFA World Cup by Integer Programming. EURO XXIX, Valencia, Spain, 8 11 July, 2018.
- · INFORMS Franz Edelman Laureate 2016. Operations Research Transforms Scheduling of Chilean Soccer Leagues and South American World Cup Qualifiers. INFORMS Business Analytics & Operations Research, Orlando, USA.
- · Finalist of the 2014 Best Student Paper Award INFORMS Section on Energy, Natural Resources, and the Environment (ENRE), with the article *Operations Research models for coalition structure in collaborative logistics: Cases in forestry and oil*, Annual Meeting San Francisco 2014.
- Elmaghraby Best Student Paper Award 2012, with the article *Inventory management of spare parts in an energy company* (among 30 articles). ILS Information Systems, Logistics and Supply Chain Conference, Quebec, Canada, August 26-29, 2012.
- · Finalist of the Bergen's Forsker Grand Prix 2011 (Researchers' Contest), with the talk *Mathematics on the ball: Scheduling a Football League*. Bergen, Norway, 23 September, 2011.
- · Best Paper Award OPTIMA 2009 (among 225 articles). Asignación de árbitros para un campeonato de fútbol mediante programación entera. Chile, 7 10 October, 2009.
- Finalist of the Euro Excellence in Practice Award 2009 (EEPA). OR in the Scheduling of the Chilean Football League. EURO XXIII, Bonn, Germany, 5 8 July, 2009.
- \cdot PhD Scholarship granted by the Norwegian School of Economics and Business Administration (NHH), 2009 admission.
- · Graduated with Highest Honours as Masters in Operations Management, University of Chile, 2007.
- · Graduated with Highest Honours as Industrial Engineer, University of Chile, 2007 (ranked 2nd among 139 students.)
- Best Teaching Assistant Award 2005 chosen by Students. Department of Industrial Engineering, University of Chile. Outstanding performance as teaching assistant, chosen democratically by the best ranked student of the Industrial Engineering programme, 2005.
- · Scholarship to study one semester at University of British Columbia, Canada, granted by Programa de Movilidad Estudiantil, University of Chile, 2004.
- Best Teaching Assistant Award 2003 chosen by Academics. Department of Industrial Engineering, University of Chile. Outstanding performance in teaching teams and marking, chosen by the academics of the Department, 2003.

- · Outstanding Student Performance Award (around top 6% of 5000 students). Faculty of Physical and Mathematical Sciences, University of Chile, 2000, 2002 and 2003.
- · *Top 10 application scores*, fellowship to the 10 best scores of admission to the "Engineering and Sciences, common Plan" programme, among a total of 560 students. School of Engineering and Sciences, University of Chile, 2000.

TEACHING / SUPERVISION

- · 2012 Lecturer in *Decision Modelling in Business* BAN402, Master programme, NHH Norwegian School of Economics.
- · 2017 Lecturer in *Supply chain management* BUS403, Master programme, NHH Norwegian School of Economics.
- \cdot 2018 2020 Lecturer in *Applications of Business Analytics* BAN424 , Master programme, NHH Norwegian School of Economics.
- · 2012 2015 Guest lecturer in *Bedriftsøkonomiske Beslutninger* (Management Science), BED015 course, bachelor programme NHH Norwegian School of Economics and Business Administration.
- · 2011 Teaching assistant in Dynamic Pricing and Revenue Management, NHH Norwegian School of Economics and Business Administration.
- · 2002 2006 Teaching assistant, School of Engineering and Sciences, University of Chile: Stochastic Models in Engineering Systems (2005, 2006), Operations Management (2004, 2005), Operations Research (2003, 2004, 2005), Optimisation (2003), Applied Mathematics (2002), Ordinary Differential Equations (2002).

Supervisor of:

- · 4 PhD students: Christian Braathen (main supervisor; since 2019), Nahid Rezaeinia (main supervisor; since 2017), Ondrej Osicka (main supervisor; 2016-2020), Seyed Mostafa Mirhedayatian (co-supervisor; 2013-2018). NHH.
- · 45 Master students. NHH.
- · 2009 present Member of evaluation/reviewer committees of six PhD students at: Eindhoven University of Technology (Netherlands), University of Luxembourg, Ghent University (Belgium), University of Chile (Chile), NHH (Norway), Universitat de Lleida (Spain); and four master students (three at University of Chile, one at University of Malta).

APPOINTMENTS IN ACADEMIA

Aug/2019 - Professor, Department of Business and Management Science, NHH, Bergen, Norway.

Aug/2018 - Associate Professor, Department of Business and Management Science, NHH, Bergen, Norway.

Sep/2013 – Aug/2017 Assistant Professor, Department of Business and Management Science, NHH, Bergen, Norway.

Aug/2009 – Aug/2013 PhD Research Scholar, Department of Business and Management Science, NHH, Bergen, Norway.

Jun/2005 - Oct/2007 and Nov/2008 - July/2009 Research assistant, Department of Industrial Engineering, University of Chile.

APPOINTMENTS IN FUNDED PROJECTS

2018-2021 Project owner: SNF – The Centre of Applied Research at NHH. Project: "Logistics and Economics of Autonomous Vessels". Role: Researcher and Work Package leader. Funder: NFR.

2021-2022 Project owner: SAMS Norway. Project: "ZAWAS: Zero-emission Automated/autonomous WAter Shuttles". Role: Researcher. Funder: Innovasjon Norge.

2018-2020 Project owner: Tibber. Project: "Energimarked 2.0 - Verdens første digitale energimarked (World's first digital energy market)". Role: Researcher. Funder: NFR.

CONFERENCE/WORKSHOPS/SEMINARS/SCHOOLS

INVITED PRESENTATIONS

- 2022 Plenary speaker at the Eastern Conference on Football Economics / Western Conference on Football and Finance, Saint Petersburg, Russia (moved online).
- Invited speaker at the O.R. in Practice Global Webinar Series of IFORS, Global Sports Analytics.
- 2021 Invited talk to the seminar series at the Department of Economics and Management, University of Luxembourg.
- 2019 Invited speaker at ELAVIO XXIII Operations Research Summer School for Young Latin American Scholars, Lleida, Spain.
- 2018 Invited as keynote speaker at the Workshop on Fairness in Sports, Ghent, Belgium.
- 2018 Invited speaker at ELAVIO XXII Operations Research Summer School for Young Latin American Scholars, Marbella, Chile.
- 2017 Invited speaker at ELAVIO XXI Operations Research Summer School for Young Latin American Scholars, Miramar and Buenos Aires, Argentina.
- 2013 Invited talk at the Workshop in Management Science & Economics, Department of Industrial Engineering, University of Chile, Santiago, Chile.
- 2011 Invited talks and lectures for practitioners and broad audiences in Norway, e.g., Statoil (Kompetansedager 2011, 2012), NHH students' parents (Foreldrehelg 2018), NHH Alumni (2018), BIR's waste management logistics workshop (2019), Rådgiverseminar on "Smart education" (2019), Innovation cluster on Zero-emission Automated Water Shuttles workshop (2022).

OTHER PRESENTATIONS

(INCOMPLETE)

- · Benefits sharing in collaborative logistics by cooperative game theory. Invited speaker at the Operations Research Summer School for Young Latin American Scholars (ELAVIO), Lleida, Spain, 1-5 July, 2019.
- · Scheduling the South American Qualifiers to the 2018 FIFA World Cup by Integer Programming. Finalist of the EURO Excellence in Practice Award 2018, EURO XXIX, Valencia, Spain, 8 11 July, 2018.
- · Scheduling Youth Divisions in Argentinian Football. EURO XXIX, Valencia, Spain, 8 11 July, 2018.
- · Finding opportunities for collaborative transportation in a large data set. EURO miniconference on Logistics Analytics. Minsk, Belarus, 18-19 June, 2018.
- · Collaborative location-routing. 7th International Workshop on Freight Transportation and Logistics ODYSSEUS, Cagliari, Italy, 3-8 June, 2018.
- · Operations Research Transformed the Scheduling of South American World Cup Qualifiers: Did it Improve Fairness? Keynote speaker at Workshop on Fairness in Sports, Ghent, Belgium, 12 April, 2018.
- · On the economic and environmental benefits of collaborative transportation and the coalition configuration problem. INFORMS Transportation Science and Logistics Society Workshop, Hong Kong, 7-10 Jan, 2018.

- · Scheduling and Logistics in sports: A true story about transforming the South American Qualifiers to the 2018 FIFA World Cup, 15th CEMS Research Seminar on Supply Chain Management and Logistics, Riezlern, Austria, 17-21 January, 2018.
- · Collaborative Logistics and Cooperative Game Theory. Invited speaker at the Operations Research Summer School for Young Latin American Scholars (ELAVIO), Marbella, Chile, 4-9 March, 2018.
- · Cost Allocation in Collaborative Transportation with Overlapping Coalitions. IFORS, Québéc, Canada, 17-21 July, 2017.
- · Referee assignment in the Argentinean Basketball League. IFORS, Québéc, Canada, 17-21 July, 2017.
- · Métodos matemáticos para mejorar el ranking FIFA y balancear los grupos del Mundial de Fútbol. Congreso de Matemática Aplicada, Computacional e Industrial, Comodoro Rivadavia, Argentina, 2-5 May, 2017.
- · Asignación de Árbitros para la Liga Nacional de Básquet de Argentina mediante Investigación Operativa. Congreso de Matemática Aplicada, Computacional e Industrial, Comodoro Rivadavia, Argentina, 2-5 May, 2017.
- · Operations research and analytics in sports. Invited speaker at the Operations Research Summer School for Young Latin American Scholars (ELAVIO), Miramar, Argentina, 24/Feb-4/March, 2017.
- · Environmental benefits of collaboration and allocation of emissions in road freight transportation. 14th CEMS Research Seminar on Supply Chain Management and Logistics, Riezlern, Austria, 18-22 January, 2017.
- · Environmental benefits and allocation of emissions in collaborative transportation. FIBE, Bergen, Norway, 5-6 January, 2017.
- · Overlapping coalitions in collaborative transportation of forest biomass. INFORMS Annual Meeting, Nashville, USA, 13-16 November, 2016.
- · Operations Research Transforms The Scheduling Of Chilean Soccer Leagues And South American World Cup Qualifiers. INFORMS Annual Meeting, Nashville, USA, 13-16 November, 2016.
- · Using OR to schedule the South American World Cup Qualifiers to Russia 2018. CLAIO, Santiago, Chile, 2-6 October, 2016.
- · On symmetry, breaks within double rounds and the South American World Cup Qualifiers to Russia 2018. 28th EURO Conference, Poznan, Poland, 3-6 July, 2016.
- · Coalition configuration in collaborative transportation for improving forest biomass logistics. 9th Triennial Symposium on Transportation Analysis (TRISTAN IX), Oranjestad, Aruba, 13-17 June, 2016.
- · The aftermath of implementing collaboration in a network of sawmills: A retrospective analysis on logistics costs. 6th ILS Information Systems, Logistics and Supply Chain Conference, Bordeaux, France, 1-4 June, 2016.
- · Coalitions in collaborative forest transportation across multiple areas. 6th ILS Information Systems, Logistics and Supply Chain Conference, Bordeaux, France, 1-4 June, 2016.
- · Operations Research Transforms Scheduling of Chilean Soccer Leagues and South American World Cup Qualifiers. Finalist of the 2016 INFORMS Franz Edelman Award Competition, INFORMS Conference on Business Analytics & Operations Research, Orlando, USA, 10-12 April, 2016.
- · Location of reloading points in a postal service network. Joint Workshop on Location and Network Design Transportation and Logistic LAND TRANSLOG III, Santa Cruz, Chile, 13-17 March, 2016.
- · Horizontal collaboration in value chains: who and how to share the cost with? 13th CEMS Research Seminar on Supply Chain Management and logistics, Riezlern, Austria, 12-16 January, 2016.

- · Potential savings and cost allocations for forest fuel transportation in Sweden. INFORMS Annual Meeting, Philadelphia, USA, 1-4 November, 2015.
- · The Stable Tournament Problem: matching sports schedules with preferences. 27th EURO Conference, Glasgow, Scotland, 12-15 July, 2015.
- The schedule of the South American Qualifiers of the 2018 Football World Cup has no breaks in double rounds. 5th International Conference on Mathematics in Sport, Loughborough, UK, 29 June 1 July, 2015.
- · Potential savings and cost allocations for forest fuel transportation in Sweden: A country-wide study. Bergen Economics of Energy and Environment Research (BEEER), Bergen, Norway, 4-5 May, 2015.
- · Constructive and blocking power in collaborative transportation. 6th International Workshop on Freight Transportation and Logistics ODYSSEUS, Ajaccio, France, 31 May-5 June, 2015.
- · Cooperative game theory in collaborative logistics: models and applications in natural resources. FIBE, Bergen, Norway, 7-9 January, 2015.
- · Cooperative game theory for collaborative logistics in forestry and petroleum industries. Finalist of the Best Student Paper Award INFORMS Section on Energy, Natural Resources, and the Environment (ENRE), INFORMS Annual Meeting, San Francisco, USA, 9-12 November, 2014.
- · FIFA Ranking and World Cup Football Groups: Quantitative Methods for a Fairer System. PATAT, York, UK, 26-29 August, 2014.
- · Allocating costs in inventory pools with different demand classes. ILS, Breda, Netherlands, 24-27 August, 2014.
- · Cost allocation in inventory pools with service-differentiated demand classes. IFORS, Barcelona, Spain, 13-18 July, 2014.
- · Coalition structure and cost allocation in collaborative logistics. Workshop in Management Science & Economics, DII, U. de Chile, Santiago, Chile, 30-December, 2013.
- · Operations Research models for coalition structure in collaborative logistics. NFB Conference, Stavanger, Norway, 22-23 August, 2013.
- · Cost allocation and stable coalition structure models. XXVI EURO INFORMS Joint International Conference, Rome, Italy, 1-4 July, 2013.
- · Scheduling the South American qualifiers for the Football World Cup. 4th International Conference on Mathematics in Sport, Leuven, Belgium, 5-7 June, 2013.
- · Optimization models for cost allocation and coalition structure. OPTIMIZATION DAYS, Montreal, Canada, 6-8 May, 2013.
- · Risk pooling and cost allocation in spare parts inventories. CLAIO, Rio de Janeiro, Brazil, 24-28 September, 2012.
- · Integrating production and distribution decisions in the speciality oils supply chain. CLAIO, Rio de Janeiro, Brazil, 24-28 September, 2012.
- · Referee assignment in the Chilean football league using integer programming and patterns. CLAIO, Rio de Janeiro, Brazil, 24-28 September, 2012.
- · Inventory of spare parts: control, pooling and cost allocation. Séminaire Petit déjeuner FORAC, Université Laval, Quebec, Canada, 6 September, 2012.
- · Inventory management of spare parts in an energy company. Elmaghraby Best Student Paper Award (among 30 articles), 4th ILS Information Systems, Logistics and Supply Chain Conference, Quebec, Canada, 26-29 August, 2012.
- · Allocating inventory costs in spare parts pooling games. NFB Conference, Kristiansand, Norway, 16-17 August, 2012.
- · Divergent supply chain optimization: from a decoupled to an integrated planning approach. ORP3, EURO Conference for young OR researchers, Linz, Austria, 16-20 July, 2012.
- · From a decoupled to an integrated planning approach in the supply chain of specialty oils. EURO XXV, Vilnius, Lithuania, 8-11 July, 2012.

- · Inventory management and pooling of spare parts in an energy company. EURO XXV, Vilnius, Lithuania, 8-11 July, 2012.
- · Speciality oils supply chain optimization: from a decoupled to an integrated planning approach. 5th Nordic Optimization Symposium, Trondheim, Norway, 7-9 June, 2012.
- · Scheduling games and referees in football: the last song of a Red Hot Chilean Rocker. 3rd SCOR Student Conference in Operational Research, Nottingham, UK, 20-22 April, 2012.
- · Divergent supply chain in an oil company decoupled and integrated planning. 5th International Workshop on Freight Transportation and Logistics ODYSSEUS 2012, Mykonos, Greece, 21-25 May, 2012.
- · Decoupled and integrated planning models for divergent supply chain in an oil company. INFORMS Annual Meeting, Charlotte, USA, 13-16 November, 2011.
- · Inventory management of spare parts in an energy company. INFORMS Annual Meeting, Charlotte, USA, 13-16 November, 2011.
- · Inventory management of spare parts in an energy company. 10th International Society for Inventory Research (ISIR) Summer School, Istanbul, Turkey, 22-26 August, 2011.
- · Inventory management of spare parts in an energy company. EurOMA Doctoral Seminar, Cambridge, UK, 1 2 July, 2011.
- · Alarcón F, Durán G, Guajardo M. Integer programming and a pattern approach for the assignment of referees to the Chilean football tournament. Tercer Seminario de la Red Latinoamericana Prosul "Optimización Discreta y Grafos: Teoría, Algoritmos y Aplicaciones", Santiago, Chile, 27 28 October, 2010.
- · Alarcón F, Durán G, Guajardo M. Assigning referees to a Chilean football tournament by integer programming and patterns. PATAT 2010, Belfast, Northern Ireland, 10 13 August, 2010.
- · Alarcón F, Durán G, Guajardo M. Asignación de árbitros para un campeonato de fútbol mediante programación entera. **Best Paper Award** (among 225 articles), OPTIMA 2009, Termas de Chillán, Chile, 7 10 October, 2009.
- · Catalán J., Epstein R., Guajardo M., Yung D., Martínez C. Solving multiple scenarios in the combinatorial auction of school meals in Chile. EURO XXIII, Bonn, Germany, 5 8 July, 2009.
- · Durán G, Guajardo M, Miranda J, Sauré D, Souyris S, Weintraub A, Wolf R. *OR in the Scheduling of the Chilean Football League*. **Finalist of the EURO Excellence in Practice Award 2009**, EURO XXIII, Bonn, Germany, 5 8 July, 2009.
- · Durán G, Guajardo M, Wolf R. El uso de metodologías de optimización en la programación de torneos deportivos: una revisión de aplicaciones en el mundo real. Seminario-taller de la Red Latinoamericana Prosul "Optimización discreta y grafos: Teoría, Algoritmos y Aplicaciones". Buenos Aires, Argentina, 19 20 May, 2009.
- · Durán G., Guajardo M., Weintraub A., Wolf R. OR in the scheduling of the Chilean Soccer League. EURO XXII, Prague, Czech Republic, 8 11 July, 2007.
- · Durán G., Guajardo M., Weintraub A. *Programación matemática aplicada al fixture del torneo de fútbol chileno: experiencias recientes*. XII Escuela Latinoamericana de Verano en Investigación Operativa (ELAVIO), Itaipava, Brazil, 5 9 February, 2007.
- · Epstein R., Guajardo M. Enfoque de programación lineal para resolver un modelo de programación dinámica estocástica aplicada a la planificación de extracción minera. XIII Congreso Latino-Iberoamericano de Investigación Operativa (CLAIO), Montevideo, Uruguay, 27 30 November, 2006.

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- · Member of the board of the Norwegian Operations Research Society, 2014-2016.
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