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**CURRICULUM VITAE**

**MIGUEL A. GOBERNA**

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**Personal Data**

**Curriculum Vitae**

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**Name:** MIGUEL ANGEL GOBERNA  
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**Academic degrees**

Graduate in Mathematical Sciences, University of Valencia, 20/11/1972

Doctor in Mathematical Sciences, University of Valencia, 14/11/79

**Fields of interest**

- Semi-Infinite Optimization
- Infinite Optimization
- Convex Systems
- Stability in Optimization
- Convex Analysis
- Set-valued Analysis
- Mathematical Education
- History of Mathematics

**Professional experience**

- Lecturer at the Faculty of Economics, University of Valencia, giving courses on Mathematical Economics, 1972-1975.
- Lecturer at the Faculty of Economics, Open University, giving courses on Mathematical Economics, 1975-1983.
- Assistant Professor at the Faculty of Sciences, University of Alicante, giving courses on Calculus, Statistics and Mathematical Programming, 1983-1990.
- Professor at the Faculty of Sciences, 1990-, University of Alicante, giving courses on Optimization, Convex Analysis, Operations Research, Data Analysis, Applied Mathematics, Calculus, and Statistical Quality Control.

**Visited at the following universities and research centres**

- Sheffield City Polytechnique (Sheffield, U.K.), 1 month, 1989.
- Judge Institute of Management Studies (Cambridge, U.K.), 1 month, 1995.
- Universität Trier (Trier, German), 2 weeks, 1995.
- U. N. de Cuyo (Mendoza, Argentina) and U. N. de San Luis (San Luis, Argentina), 1 month, 1998.
- National Cheng Kung University (Tainan, Taiwan), 2 weeks, 1998.
- U. N. de San Luis (San Luis, Argentina), 2 weeks, 2000.
- Benemérita Universidad Autónoma de Puebla (Puebla, Mexico), and Universidad de las Américas (Cholula, Mexico), 2 weeks, 2001.
- U. N. de Cuyo, Mendoza (Argentina), 1 month, 2001.
- Benemérita Universidad Autónoma de Puebla, Puebla (Mexico), 2 weeks, 2002.
- Università Gabriele d'Annunzio (Pescara, Italia), 1 week, 2002.
- U. N. de Cuyo, Mendoza (Argentina), 2 weeks, 2003.
- Centro de Modelamiento Matemático, Universidad de Chile, Santiago (Chile), 1 month, 2003.
- University New South Wales, Sydney (Australia), 1 month, 2003.
- Benemérita Universidad Autónoma de Puebla, Puebla (Mexico), 6 weeks, 2004.
- U. N. de Cuyo, Mendoza (Argentina), 3 weeks, 2004.
- Centro de Modelamiento Matemático, Universidad de Chile, Santiago (Chile), 1 week, 2004.
- Benemérita Universidad Autónoma de Puebla (BUAP), Puebla (Mexico), 1 month, 2005.
- Bulgarian Academy of Sciences, Borovets and Plodviv (Bulgaria), 2 weeks, 2005.
- Instituto de Matemáticas y Ciencias Afines (IMCA), Lima (Perú), 2 weeks, 2005.
- Instituto de Ciencias Básicas de la U. N. de Cuyo, Mendoza (Argentina), 1 month, 2005.
- Centro de Investigación en Física y Matemática Aplicada (CIFMA), Universidad de las Américas, Cholula, Puebla (Mexico), 1 month, 2006.
- Centro de Modelamiento Matemático (CMM), Universidad de Chile, Santiago (Chile), 3 weeks, 2006.
- Instituto de Ciencias Básicas de la U. N. de Cuyo, Mendoza (Argentina), 1 week, 2006.

- Centro de Investigación en Física y Matemática Aplicada (CIFMA), Universidad de las Américas (Cholula, Puebla, Mexico), 1 month, 2007.
- School of Mathematics, University of Birmingham (Birmingham, GB), 1 week, 2007.
- National Center for Theoretical Sciences, National Cheng Kung University, Tainan (Taiwan), 1 week, 2007.
- Centro de Investigación en Física y Matemática Aplicada de la Universidad de las Américas, Cholula, Puebla (Mexico), 2 weeks, 2008.
- Instituto de Ciencias Básicas de la U. N. de Cuyo, Mendoza (Argentina), 1 month, 2008.
- Universidad Autónoma de Barcelona (UAB), 1 week, 2008.
- Centro de Investigación en Física y Matemática Aplicada de la Universidad de las Américas, Cholula, Puebla (México), 3 weeks, 2009.
- Academy of Sciences, Sofia (Bulgaria), 1 week, 2010.
- Instituto de Ciencias Básicas de la U. N. de Cuyo, Mendoza (Argentina), 3 weeks, 2010.
- Instituto de Matemática y Ciencias Afines, Lima (Perú), 1 week, 2011.
- Dipartimento di Matematica, Politecnico di Milano, Milano (Italy), 2 weeks, 2012.
- Instituto de Matemática Aplicada, CONICET-UNSL, San Luis (Argentina), 2 weeks.
- Facultad de Ciencias Económicas de la U. N. de Cuyo, Mendoza (Argentina), 1 month, 2013.
- School of Mathematics, University of New South Wales (UNSW), Sydney (Australia), 1 month, 2013.
- Facultad de Ciencias Físicas y Matemáticas, Universidad de Concepción Concepción (Chile), 1 week, 2014.
- Universidad Nacional de Áncash Santiago Antúnez de Mayolo, Huaraz (Perú), 1 week, 2014.
- School of Mathematics, University of New South Wales (UNSW), Sydney (Australia), 3 weeks, 2014.
- Escuela de Ciencias de la Universidad de las Américas (UDLAP), Cholula, Puebla, México, 3 weeks, 2015.
- Facultad de Ciencias Económicas, U. N. de Cuyo, Mendoza (Argentina), 1 month, 2015.
- Universidad Autónoma de Barcelona (UAB), 1 week, 2015.
- Department of Mathematics, International University – Vietnam National University en Ho Chi Min City, 2 weeks, 2016.
- School of Mathematics, University of New South Wales (UNSW) Sidney (Australia), 1 month, 2016.

- IMCA (Lima, Perú) and CMM (Quito), 3 weeks, 2017.

## Service

- **Administration:** Head of Department (1983-84, 1986-90, and 1999-03) and vice-dean (1986-90 and 1997-99).
- **Editing:** Editor-in-Chief (2013-2016) and Associate Editor of TOP (2001-2006). Advisory Editor of Alphanumeric (2016-) and Area Editor of NEOS Wiki (2011). Guest Editor of the book *Semi-Infinite Programming: Recent Advances*, Kluwer, Dordrecht, 2001 (with M.A. López).
- **Reviewing:** Reviewer for the scientific journals SIAM Journal on Optimization, Mathematical Programming, Journal of Global Optimization, Optimization Methods and Software, Optimization, Journal of Optimization Theory and Applications, Optimization Letters, Numerical Functional Analysis and Optimization, Pacific Journal of Optimization, Mathematics of Operations Research, Mathematical Methods of Operations Research, Annals of Operations Research, European Journal of Operational Research, Top, Operations Research Letters, Central European Journal of Operations Research, Journal of Mathematical Analysis and Applications, Linear Algebra and Applications, Contributions to Algebra and Geometry, Applied Mathematics and Computation, Comptes Rendus Mathématiques, Positivity, Mathematica Japonica, Information Sciences, Applied Mathematical Modelling, Journal of Industrial and Management Optimization, Iranian Journal of Fuzzy Systems, Zentralblatt Math, Newsletter of EMIS (European Mathematical Information Service), etc.
- **Advising:** Comisión Interministerial de Ciencia y Tecnología, Agencia Nacional de Evaluación y Prospectiva (ANEP), Agencia Estatal de Investigación, Programa Nacional de Matemáticas (del Plan Nacional de Investigación, Desarrollo e Innovación Tecnológica of Spain), Agencia Nacional de Evaluación de la Calidad y Acreditación (ANECA), Agencia Valenciana de Evaluación y Prospectiva (AVAP), The International Science Foundation, Fundação para a Ciência e a Tecnologia (FCT) from Portugal, Australian Research Council, National Council for Scientific Research from Rumania, and Training and Mobility of Researchers Program, from EC.
- **Organizing:** Member of the Scientific (or Program) Committee of Mathematical Models and Methods in Biology and Medicine (Alicante, 1997), Workshop on Semi-Infinite Programming and Related Topics (Alicante, 1999), European Summer Institute ESI XXII (Ankara, 2004), XI Workshop on Well-posedness in Optimization and Related Topics (Alicante, 2007), Int. Workshop on Operations Research (Madrid, 2008), Optimization, Theory, IX International Conference on Parametric Optimization and Related Topics (San Andrés, Colombia, 2008), EUROPT workshop on Advances in Continuous Optimization (Neringa, Lituania, 2008), IX International Conference on Parametric Optimization and Related Topics (Karlsruhe, 2010), III ALEL Meeting on Optimization (Castro Urdiales, Spain, 2011), XIII Workshop on Well-posedness in Optimization and Related Topics (Borovets, Bulgaria, 2011), IV ALEL Meeting

on Optimization (Limoges, France, 2012), Congreso Internacional Jorge Juan Santacilia en la España de la Ilustración: memoria y presente (Alicante, 2013), V ALEL Meeting on Optimization (Sevilla, 2014), 7th International Seminar on Optimization and Variational Analysis (Alicante, 2016) and 11th Conference on Parametric Optimization and Related Topics (Praga, 2017). Member of the Steering Committee of the International Conference on Continuous Optimization (ICCOPT), from the Mathematical Programming Society.

### Research projects

- Las Matemáticas en la Formación del Universitario Actual. Supported by **Comisión Asesora Nacional de Investigación Científica y Técnica**. Leadership: M. Valdivia, 1981-1983.
- Introducción de los Medios Audiovisuales en la Enseñanza de las Matemáticas. Patrocinado por los **Programas de Desarrollo de la Investigación e Innovación Educativa**. Leadership: J.T. Pastor, 1982-1983.
- Un Modelo de Prueba de Acceso a la Universidad. Supported by **Consellería de Cultura, Educación y Ciencia de la Generalitat Valenciana**. Leadership: M.A. Lopez, 1985.
- Programación Matemática con Infinitas Restricciones. Fundamentación Teórica y Análisis de sus Aplicaciones. Supported by **Comisión Asesora Nacional de Investigación Científica y Técnica**. Leadership: M.A. López, 1985-1987.
- Elementos para la Planificación de la Universidad de Alicante. Supported by **Diputación Provincial de Alicante**. Leadership: M.A. López, 1985-1987.
- Los Servicios Públicos en los Municipios Alicantinos y su Incidencia en el Crecimiento Demográfico. Supported by **Diputación Provincial de Alicante**. Leadership: M.A. López, 1986.
- Prospectiva sobre la Evolución de la Ciudad de Alicante hasta el Año 2020. Supported by **Ayuntamiento de Alicante**. Leadership: M.A. López, 1986.
- Análisis del Rendimiento de las Sucursales de una Entidad de Crédito: una Aplicación a la Ubicación Óptima de Nuevas Oficinas. Supported by **Caja de Ahorros de Alicante y Murcia**. Leadership: M.A. López, 1987.
- Análisis del Rendimiento y de la Expansión de una Red de Oficinas. Supported by **Caja de Ahorros y M.P. de Segorbe**. Leadership: M.A. López, 1988.
- Guía para Elaborar un Plan Específico de Desarrollo de la Informática en los Niveles no Universitarios de la Comunidad Valenciana. Supported by **Consellería de Educación de la Generalitat Valenciana**, Leadership: M.A. López, 1988.

- La Universidad como Fuente de Servicios a la Industria Alicantina. Ayuda a la Investigación del **Patronato Angel García Rogel**. Leadership: M.A. López, 1988.
- Algoritmos Duales para la Programación Matemática con Infinitas Restricciones. Supported by **Dirección General de Investigación Científica y Técnica**. Leadership: M.A. López, 1988-1990.
- Métodos Duales en Programación Semi-Infinita: Fundamentación Teórica de la Convergencia. Supported by **Institució Valenciana D'Estudis i Investigació**. Leadership: M.A. López, 1988-1990.
- Programación Lineal Generalizada: Propiedades Estructurales. Supported by **Dirección General de Investigación Científica y Técnica**. Leadership: M.A. Goberna, 1991-1992.
- El Método Simplex Dual, Métodos de Direcciones Factibles y Teoría de la Estabilidad en Programación Semi-Infinita Lineal. Supported by **Institució Valenciana D'Estudis i Investigació**. Leadership: M.A. Goberna, 1994-1995.
- Programación Semi-Infinita Lineal: Métodos Numéricos y Análisis de Sensibilidad. Supported by **Dirección General de Investigación Científica y Técnica**. Leadership: M.A. López, 1994-1995.
- Programación Lineal Paramétrica con Infinitas Restricciones. Supported by **Generalitat Valenciana**. Leadership: M.A. Goberna, 1995-1996.
- Métodos Numéricos y Análisis de Sensibilidad. Supported by **Dirección General de Investigación Científica y Técnica**. Leadership: M.A. López, 1995-1996.
- Modelos lineales con infinitas restricciones: sistemas de inecuaciones y problemas de optimización. Supported by **Dirección General de Enseñanza Superior**. Leadership: M.A. López, 1997-1999.
- Dualidad y Métodos Numéricos en Optimización Lineal Semi-infinita. Supported by **Dirección General de Enseñanza Superior**. Leadership: M.A. Goberna, 1998-1999.
- Estabilidad, optimalidad y fenómenos de redundancia en programación semi-infinita. Supported by **Dirección General de Enseñanza Superior**. Leadership: M.A. López, 2000-2002.
- Optimización y sistemas semi-infinitos: geometría y estabilidad. Supported by **Ministerio de Ciencia y Tecnología**. Leadership: M.A. Goberna, 2003-2005.
- Inexact nonlinear programming: theory and algorithms (*Partner Investigator*). Supported by FONDECYT (Chile). Leadership: J. Amaya (Centro de Modelamiento Matemático, CMM).
- Análisis convexo y estabilidad en optimización. Supported by **Ministerio de Educación y Ciencia**. Leadership: M.A. López, 2006-2008.
- Avances en optimización convexa: fundamentos, métodos y aplicaciones. Supported by **Ministerio de Ciencia e Innovación**. Leadership: M.A. Goberna, 2009-2011.

- Convex optimization with uncertain data: robustness, regularity, and applications. Supported by **Ministerio de Ciencia e Innovación**. Leadership: M.A. Goberna, 2012-2014.
- New Theory and Methods for Robust Global Optimization: Modern Decision-Making under Data Uncertainty (*Partner Investigator*). Supported by **Australian Research Council**. Leadership: V. Jeyakumar (The University of New South Wales, UNSW), 2012-2014.
- New challenges in continuous optimization, **Ministerio de Economía y Competitividad (MINECO)**, Leadership: M.A. Goberna y F.J. Aragón-Artacho, 2015-2018.

## PUBLICATIONS

### Books in English

- *Linear Semi-Infinite Optimization*, **J. Wiley**, Chichester (U.K.), 1998 (with M.A. López). On line: <http://www.eio.ua.es/ma/LibroLSIPzipeado.zip>
- *Linear Semi-Infinite Programming: A Guided Tour*, IMCA Monographs No. 40, **IMCA**, Lima (Perú), 2005.
- *Post-Optimal Analysis in Linear Semi-Infinite Optimization*, Springer Briefs, **Springer-Verlag**, NY (with M.A. López), 2014.
- *Nonlinear Optimization*, **Springer**, in press (with F.J. Aragón-Artacho, M.A. López and M.M.L. Rodríguez).

### Books in Spanish

- Población y Bienestar Social en los Municipios Alicantinos, **Instituto de Cultura "Juan Gil-Albert"**, Alicante, 1990 (with M.A. López; J.T. Pastor).
- La Cara Oculta de la Matemática (I): La Teoría de Juegos y otras Aplicaciones, **Secretariado de Publicaciones de la Universidad de Alicante**, Alicante, 1990 (with M.A. López; J.T. Pastor).
- Catálogo de Films y Vídeos para la Enseñanza de la Matemática, **Instituto de Ciencias de La Educación de la Universidad de Alicante**, Alicante, 1990 (with M.A. López; J.T. Pastor).
- La Cara Oculta de la Matemática (II): Análisis. **Secretariado de Publicaciones de la Universidad de Alicante**, 1992 (with M.A. López; J.T. Pastor).



**Curriculum Vitae**

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- Álgebra y Fundamentos: Una introducción, *Ed. Ariel*, Barcelona, 2000 (with V.Jornet; R. Puente; M. Rodríguez).
- Optimización Lineal: Teoría, Métodos y Modelos, *Ed. McGraw-Hill*, Madrid, 2004 (with V. Jornet; R. Puente).

**Research papers**

- Farkas-Minkowski systems in semi-infinite programming. *Applied Mathematics and Optimization* 7, 295-308, 1980 (with M.A. López; J.T. Pastor).
- A note about the consistency of an infinite linear inequality system. *Revista de la Unión Matemática Argentina* 31, 197-201, 1984 (with M.A. López; J.T. Pastor).
- Alternative theorems for infinite systems with applications to semi-infinite gamonth. *Nieuw Archief Voor Wiskunde* 4, 218-234, 1984 (with M.A. López; J.T. Pastor; E. Vercher).
- Reduction and discrete approximation in linear semi-infinite programming. *Optimization* 18, 643-658, 1987 (with M.A. López).
- Boundedness relations in linear semi-infinite programming. *Avances in Applied Mathematics* 8, 53-68, 1987.
- A Note about linear inequality systems and duality. *Zeitschrift fur Operations Research* 31, 71-78, 1987 (with V. Jornet).
- Optimal value function in semi-infinite programming. *Journal of Optimization Theory and Applications* 59, 261-279, 1988 (with M.A. López).
- Geometric fundamentals of the simplex method in semi-infinite programming. *Operations Research-Spektrum* 10, 145-152, 1988 (with V. Jornet).
- A theory of linear inequality systems. *Linear Algebra and its Applications* 106, 77-115, 1988 (with M.A. López).
- Performance and Location of Bank Branches. *Research Papers in Banking and Finance (IEF)* 90/15, 1-53, 1990 (with M.A. López; J.T. Pastor).
- Conditions for the uniqueness of the optimal solution in linear semi-infinite programming. *Journal of Optimization Theory and Applications* 72, 225-246, 1992 (with M.A. López).
- Dimension and finite reduction in linear semi-infinite programming. *Optimization* 25, 143-160, 1992 (with M.A. López).
- On the existence of solutions for linear inequality systems, *Journal of Mathematical Analysis and Applications* 192, 133-150, 1995 (with M.A. López; M.A. Mira; J. Valls).

- Unicity in linear optimization. *Journal of Optimization Theory and Applications* 86, 37-56, 1995 (with M.A. López; M. Todorov).
- Optimality theory for semi-infinite linear programming. *Numerical Functional Analysis and Optimization* 16, 669-700, 1995 (with M.A. López).
- Stability theory for linear inequality systems. *SIAM Journal on Matrix Analysis and Applications*, 730-743, 1996 (with M.A. López; M. Todorov).
- Topological stability of linear semi-infinite inequality systems. *Journal of Optimization Theory and Applications* 89, 227-236, 1996 (with M.A. López).
- On Haar's dual problem. *Operations Research-Spektrum* 18, 209-217, 1996 (with V. Jornet).
- Stability theory for linear inequality systems II: Upper semicontinuity of the solution set mapping, *SIAM Journal on Optimization* 7, 1138-1151, 1997 (with M.A. López; M. Todorov).
- Locally polyhedral linear semi-infinite systems. *Linear Algebra and its Applications* 270, 31-253, 1997 (with E. J. Anderson; M.A. López).
- Redundancy in linear semi-infinite systems. *Numerical Functional Analysis and Optimization* 19, 529-548, 1997 (with J.A. Mira; G. Torregrosa).
- Analytical linear inequality systems and optimization, *Journal of Optimization Theory and Applications* 103, 95-119, 1999 (with V. Jornet; R. Puente; M. Todorov).
- On duality in semi-infinite programming and existence theorems for linear inequalities, *Journal of Mathematical Analysis and Applications* 230, 173-192, 1999 (with M.A. López).
- Simplex-like trajectories on quasi-polyhedral convex sets, *Mathematics of Operations Research* 26, 147-162, 2001 (with E. Anderson; M.A. López).
- Directional end of a convex set: Theory and applications, *Journal of Optimization Theory and Applications* 110, 389-411, 2001 (with V. Jornet; M. Rodríguez).
- On the stability of the feasible set in linear optimization, *Set-Valued Analysis* 9, 75-99, 2001 (with M.A. López; M. Todorov).
- On the characterization of some families of closed convex sets, *Contributions to Algebra and Geometry* 43, 153-169, 2002 (with V. Jornet; M. Rodríguez).
- Linear semi-infinite programming: an updated survey, *European Journal of Operational Research* 143, 390-405, 2002 (with M.A. López).
- A sup-function approach to linear semi-infinite optimization, *Journal of Mathematical Sciences* 116, 3359-3368, 2003 (with M.A. López; M. Todorov).
- On linear systems containing strict inequalities, *Linear Algebra and its Applications* 360, 151-171, 2003 (with V. Jornet; M. Rodríguez).
- Saturation in linear optimization, *Journal of Optimization Theory and Applications* 117, 327-348, 2003 (with V. Jornet; M.D. Molina).

- On the stability of the boundary of the feasible set in linear optimization, *Set-Valued Analysis* 1, 203-223, 2003 (with M. Larriqueta; V. Vera de Serio).
- A generic result in linear semi-infinite optimization, *Applied Mathematics and Optimization* 8, 181-193, 2003 (with M.A. López; M. I. Todorov).
- Extended active constraints in linear optimization with applications, *SIAM Journal on Optimization* 14, 608-619, 2003 (with M.A. López; M. I. Todorov).
- On linear inequality systems with smooth coefficients, *Journal of Optimization Theory and Applications* 124, 363-386, 2005 (with L. Hernández; M.I. Todorov).
- Uniform saturation in linear inequality systems, *Top* 13, 167-184, 2005 (with V. Jornet; M.D. Molina).
- On the stability of closed-convex-valued mappings and the associated boundaries, *Journal of Mathematical Analysis and Applications* 306, 502-515, 2005 (with M.A. López; M.I. Todorov).
- On the stability of the extreme point set in linear optimization, *SIAM Journal on Optimization*, 1155-1169, 2005 (with M. Larriqueta; V. Vera de Serio).
- Separating the solution sets of analytical and polynomial systems, *Top* 13, 321-329, 2005 (with L. Hernández; M.I. Todorov).
- Dual characterizations of set containments with strict convex inequalities, *Journal of Global Optimization* 34, 33-54, 2006 (with V. Jeyakumar; N. Dinh).
- Analyzing linear systems containing strict inequalities via evenly convex hulls, *European Journal of Operational Research* 169, 1079-1095, 2006 (with M.M.L. Rodríguez).
- From linear to convex systems: Consistency, Farkas Lemma and applications, *Journal of Convex Analysis* 13, 113-133, 2006 (with N. Dinh; M.A. López).
- On the stability of linear systems with an exact constraint set, *Mathematical Methods of Operations Research* 63, 107-121, 2006 (with J. Amaya).
- On the stability of convex-valued mappings and their relative boundary and extreme point set mappings, *SIAM Journal on Optimization* 17, 147-158, 2006 (with M.I. Todorov; V. Vera de Serio).
- Excess information in parametric linear optimization, *Optimization* 55, 555-568, 2006 (with V. Jornet; M.D. Molina).
- Sensitivity analysis in linear semi-infinite programming: perturbing cost and right-hand-side coefficients, *European Journal of Operational Research* 181, 1069-1085, 2007 (with S. Gómez, F. Guerra; M.I. Todorov).
- Ill-posedness in continuous linear optimization via partitions of the space of parameters, *Comptes Rendues de l'Académie Bulgare des Sciences* 60, 357-364, 2007 (with M.I. Todorov).

- New Farkas-type constraint qualifications in convex infinite programming, *ESAIM: Control, Optimisation and Calculus of Variations* 13, 580-597, 2007 (with N. Dinh; M.A. López; T.Q. Son).
- Primal, dual and primal-dual partitions in continuous linear optimization, *Optimization* 56, 617-628, 2007 (con M.I. Todorov).
- Stability of the intersection of solution sets of semi-infinite systems, *Journal of Computational and Applied Mathematics* 217, 420-431, 2008 (with M. Larriqueta; V. Vera de Serio).
- Necessary and sufficient constraint qualifications for systems of infinite convex inequalities, *Nonlinear Analysis: Theory, Methods & Applications* 68, 1184-1194, 2008 (with V. Jeyakumar; M.A. López).
- Generic primal-dual solvability in continuous linear semi-infinite programming, *Optimization* 57, 239-248, 2008 (with M.I. Todorov).
- On the stable containment of two sets, *Journal of Global Optimization* 41, 613-624, 2008 (with V. Vera de Serio).
- Stability of the feasible set mapping of linear systems with an exact constraint set, *Set-Valued Analysis* 16, 621-635, 2008 (with J. Amaya; P. Bosch).
- Primal-dual stability in continuous linear optimization, *Mathematical Programming* 116B, 129-146, 2009 (with M.I. Todorov).
- Penalty and smoothing methods for convex semi-infinite programming, *Mathematics of Operations Research* 34, 303-319, 2009 (with A. Auslender; M.A. López).
- Motzkin decomposition of closed convex sets, *Journal of Mathematical Analysis and Applications* 364, 209-221, 2010 (with E. González, J.E. Martínez-Legaz; M.I. Todorov).
- Sensitivity analysis in linear semi-infinite programming via partitions, *Mathematics of Operations Research* 35, 14-25, 2010 (with T. Terlaky; M.I. Todorov).
- On the stability of the feasible set in optimization problems, *SIAM Journal on Optimization* 20, 2254-2280, 2010 (with N. Dinh; M.A. López).
- Convex inequalities without constraint qualification nor closedness condition, and their applications in optimization, *Set-valued and Variational Analysis* 18, 423-445, 2010 (with N. Dinh; M.A. López; M. Volle).
- On Motzkin decomposable sets and functions, *Journal of Mathematical Analysis and Applications* 372, 525-537, 2010 (with J.E. Martínez-Legaz; M.I. Todorov).
- On implicit active constraints in linear semi-infinite programs with unbounded coefficients, *Applied Mathematics and Optimization* 63, 239-256, 2011 (with A. Lancho; M.I. Todorov; V. Vera de Serio).
- Apuntes sobre la contribución española a las matemáticas, *Lecturas Matemáticas* 32, 95-129, 2011.

- Voronoi cells via linear inequality systems, *Linear Algebra and Applications* 436, 2169-2186, 2012 (with M.M.L. Rodríguez; V. Vera de Serio).
- On stable uniqueness in linear semi-infinite optimization, *Journal of Global Optimization* 53, 347-361, 2012 (with M.I. Todorov; V. Vera de Serio).
- On the stability of Voronoi cells, *Top* 20, 411-425, 2012 (with V. Vera de Serio).
- Comments on: Stability in Linear Optimization and Related Topics. A Personal Tour (M.A. López), *Top* 20, 245-249, 2012.
- On the stability of the optimal value and the optimal set in optimization problems, *Journal of Convex Analysis* 19, 927-953, 2012 (with N. Dinh; M.A. López).
- Motzkin decomposition of closed convex sets via truncation, *Journal of Mathematical Analysis and Applications* 400, 35-47, 2013 (with A. Iusem; J.E. Martínez-Legaz; M.I. Todorov).
- Constraint qualifications in linear vector semi-infinite Optimization, *European Journal of Operational Research* 227, 12-21, 2013 (with F. Guerra-Vázquez; M.I. Todorov).
- Robust linear semi-infinite programming duality under uncertainty, *Mathematical Programming* 139B, 185-203, 2013 (with V. Jeyakumar; G. Li; M.A. López).
- Lower semicontinuity of the solution set mapping of linear systems relative to their domains, *Set Valued and Variational Analysis* 21, 67-92, 2013 (with A. Daniilidis; M.A. López; R. Lucchetti).
- On the stability of the Motzkin representation of closed convex sets, *Set-valued and Variational Analysis* 21, 635-647, 2013 (with M.I. Todorov).
- From Farkas lemma to Hahn-Banach theorem, *SIAM Journal on Optimization* 24, 678-701, 2014 (with N. Dinh; M.A. López; T.H. Mo).
- Primal attainment in convex infinite optimization duality, *Journal of Convex Analysis* 21, 1043-1064, 2014 (with M.A. López; M. Volle).
- Robust solutions of multiobjective linear semi-infinite programs under constraint data uncertainty, *SIAM Journal on Optimization* 24, 1402-1419, 2014 (with V. Jeyakumar; G.Y. Li; J. Vicente-Pérez).
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