

Dolores R. Santos Peñate

Professor of the University of Las Palmas de Gran Canaria (ULPGC).

CV SUMMARY

Most of the research activity is related to optimization and location problems. Work has also been done in the field of adjustment and updating of social accounting matrices and, to a lesser extent, in the field of bibliometry, maritime transport, routes, and planning in hospitals. In the area of location, the CV includes some work related to the location of public services and facilities with harmful or unwanted effects, although research has been carried out mainly in the field of competitive location models.

Publications (including books)

[1] D.R. Santos-Peñate, Clara M. Campos-Rodríguez, J.A. Moreno-Pérez (2020) A kernel search matheuristic to solve the discrete leader-follower location problem. *Networks and Spatial Economics* 20, 73-98. <http://dx.doi.org/10.1007/s11067-019-09472-7>

[2] Santos-Peñate, D.R., C.M. Campos-Rodríguez, J.A. Moreno-Pérez, (2019) The generalized discrete (r|p)-centroid problem. *International Transactions in Operational Research* 26, 340-363. DOI: 10.1111/itor.12289.

[3] C. Manrique de Lara Peñate, D.R. Santos-Peñate (2017) SAM updating using multi-objective optimization techniques. *Papers in Regional Science* 96(3), 647-668. DOI: 10.1111/pirs.12260.

[4] Santos-Peñate, D.R. (2016) Location Analysis. *Annals of Operations Research* 246(1), 1-3. DOI: 10.1007/s10479-016-2292-3 (Guest Editor)

[5] Suárez-Vega , R., D.R. Santos-Peñate y P. Dorta-González (2014). Location and quality selection for new facilities on a network market. *The Annals of Regional Science* 52(2), 537-560.

[6] Suárez-Vega , R., D.R. Santos-Peñate (2014). The use of GIS tools to support decision making in the expansion of chain stores. *International Journal of Geographical Information Science* 28(3), 553-569.

[7] Suárez-Vega , R., D.R. Santos-Peñate y P. Dorta-González (2012). Location models and GIS tools for retail site location. *Applied Geography* 35, 12-22.

[8] Campos-Rodríguez, C., J.A. Moreno Pérez, D.R. Santos-Peñate (2012) Particle swarm optimization with two swarms for the discrete (r|p)-centroid problem. En: *Computer Aided Systems Theory-EUROCAST 2011. Revised Selected Papers. Lecture Notes in Computer Science*. R.Moreno-Díaz, F. Pichler, A. Quesada-Arencia (Eds) Vol. 6927, 432-439. Springer.

[9] Suárez-Vega , R., D.R. Santos-Peñate y P. Dorta-González (2011). A multi-criteria GIS based procedure to solve a network competitive location problem. *Applied Geography* 31(1), 282-291.

[10] Campos-Rodríguez, C., D.R. Santos-Peñate, J.A. Moreno Pérez (2010). An exact procedure and LP formulations for the leader-follower location problem. TOP 18(1), 97-121.

Research projects and grants

Title: Adaptación al Cambio Climático de los Sistemas Energéticos de la Macaronesia (ACLIEMAC), Código MAC2/3.5b/380.

Financing: FEDER (85%). Programa INTERREG V-A MAC 2014-2020.

Title: Modelos de interacciones espaciales y técnicas de redes complejas para el estudio de redes comerciales y turismo GOB-ESP2019-07

[[Interaction spatial models and complex networks technics to study business and tourism networks](#)]

Financing: Government of Spain. Duration: 01/01/2020-15/10/2020

Title: Análisis del mercado turístico en Canarias a través del uso de datos masivos online y métodos de redes espaciales complejas y optimización (CEI2018-8)

[[Analysis of the tourism market in the Canary Islands through the use of massive online data and complex spatial network methods and optimization](#)]

Financing: Government of Canary Islands. Duration: 01/01/2019-30/09/2019

Title: Red Temática “Localización y problemas afines”

[[Network: Location and related problems](#)]

Financing: Spanish Government.

(MTM2010-12053-E) Duration: 2019-2020

(MTM2016-81874-REDT, MTM2014 53828-REDT) Duration: 2017-2019

(MTM2010-12053-E) Duration: 01/10/2011- 30/09/ 2013

(MTM2009-07290-E) Duration: 01/05/2010-30/09/ 2011

Title: “Técnicas de optimización y modelos en redes complejas para la toma de decisiones en Economía” (ECO2014-59067-P)

[[Optimization techniques and models in complex networks for decision making in Economics](#)]

Financing: Government of Spain. Duration: January 2015- December 2018

Title: Fortalecimiento institucional para la formación e investigación científica en comercio internacional y logística (D/025285/09) (cooperan la Universidad de Las Palmas de Gran Canaria y la Universidad de Ibn Zohr de Agadir).

[[Institutional support for teaching and research in international trade and logistics \(Program of university cooperation \(PCI\) 2009, University of Las Palmas de Gran Canaria and University of Ibn Zohr de Agadir\)](#)]

Financing: Government of Spain. Duration: January 2010-December 2010

Title: Estrategias óptimas en economía: análisis espacial, competencia y relaciones intersectoriales (ECO2008-05589).

[[Optimal strategies in Economics: spatial analysis, competition and intersectorial reations](#)]

Financing: Government of Spain. Duration: 01/01/2009-31/12/2011

Responsible researcher: Dolores R. Santos Peñate

Contracts

Title: Asistencia técnica en materia de modelización del uso de los quirófanos del Complejo Hospitalario Universitario Insular Materno Infantil (CHUIMI)

[[Technical assistance in the modeling of the use of operating rooms in the Complejo Hospitalario Universitario Insular Materno Infantil](#)]

Enterprise/Institution: CHUIMI- Government of Canary Islands. Duration: 09/05/2019-2019

Title: Cátedra Marítimo Marina [[Marine Maritime “Cátedra”](#)]

Enterprise/Institution: ULPGC, Astilleros Canarios S.A.

Duration:22/11/2018-22/11/2019

Title: Refuerzo de las capacidades institucionales del Ministerio de Transportes (MTT) para el desarrollo de un puerto de gran escale. Chile. Términos de referencia: Especialista Optimización y Operaciones-Asesoría Pronóstico Naves.

[[Strengthening of the institutional capacities of the Ministry of Transportation \(MTT\) for the development of a large-scale port. Chile. Terms of reference: Specialization in Optimization and Operations-Advisory Ship Forecasting](#)]

Enterprise/Institution: : Banco Interamericano de Desarrollo (BID).

Duration: 23/11/2015-30/06/2016

Title: Elaboración de un modelo de equilibrio general aplicado para el análisis de políticas fiscales en materia de imposición indirecta (FULP-570100)

[[Elaboration of a general equilibrium model applied to the analysis of fiscal policies”](#)]

Enterprise/Institution: Government of Canary Islands. Duration: April 2008-April 2010

Title: Elaboración de un microsimulador para el análisis de políticas fiscales en materia de imposición indirecta (FULP-570101)

[[Building a micro-simulator to analyze fiscal policies](#)]

Enterprise/Institution: Government of Canary Islands. Duration: April 2008-June 2010

Scientific and / or organizing committees

-Foro de Innovaciones Tecnológicas para el Transporte (Transnova). Years 2005 al 2012 (7 editions). Las Palmas de Gran Canaria (even years) y Santa Cruz de Tenerife (odd years).

-I Foro Matemática-Industria de Canarias 2011. Las Palmas de Gran Canaria (project CONSOLIDER).

-Workshop on Locational Analysis and Related Problems 2010, 2011, 2012, 2013, 2014-2015-2016-2017-2019.

-Taller sobre Metaheurísticas Inteligentes en la Planificación Logística en CAEPIA-TTIA 2009, Sevilla, 2009.

Review of articles and editorial work/project evaluation

- Reviewer for: Computers & Operations Research (JCR), Revista de Economía Aplicada (JCR), OR Spectrum (JCR), European Journal of Operational Research (JCR), Journal of Global Optimization (JCR), TOP (JCR), International Journal of Production Economics (JCR), International Journal of Information Technology and &

Decision Making, The Annals of Regional Science (JCR), Transportation Science (JCR), Applied Geography (JCR).
-Guest Editor of "Location Analysis" in "Annals of Operations Research" (vol.246, 2016), JCR.
-Evaluation for ANEP (Spain) and FONDECYT (Chile).
