

MAGDALENA RODRIGUEZ

CURRICULUM VITAE

PERSONAL DATA

Dr. Magdalena Rodríguez Pérez

Citizenship: Spanish

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orcid.org/0000-0003-3589-2371, ResearcherID I-2253-2015, MR Author ID: 769158

EDUCATION

Oct 2005 **Doctorado en Matemáticas (Ph.D. in Mathematics)**, Universidad de Granada (Spain)
Dissertation title: *Doubly periodic minimal surfaces with genus one and parallel ends*
Advisor: Joaquín Pérez Muñoz

Oct 2003 **Diploma de Estudios Avanzados (M.S. in Mathematics)**, Universidad de Granada (Spain)

Jun 2001 **Licenciatura en Matemáticas (B.S. in Mathematics)**, Universidad de Granada (Spain)

EMPLOYMENT HISTORY

From Nov 2016 **“Profesora Titular de Universidad”** (Associate Professor)
Universidad de Granada (Spain)

Jan 2012 – Nov 2016 **“Ramón y Cajal” Fellow** (5-year tenure-track position)
Universidad de Granada (Spain)

Feb 2010 – Dec 2012 **“Juan de la Cierva” Fellow** (3-year post-doctoral position)
Universidad de Granada (Spain)

Feb 2008 – Feb 2010 **“Profesora ayudante doctor”** (Assistant Professor)
Universidad Complutense de Madrid (Spain)

Sep 2007 – Dec 2007 **CNRS Researcher**
Institut de mathématiques de Jussieu (France)

Mar 2007 – Feb 2008 **“Profesora ayudante”** (Assistant Professor)
Universidad Complutense de Madrid (Spain)

Jan 2006 – Dec 2006 **Postdoctoral Fellow** awarded by “La Région Ile-de-France”
Université de Marne-la-Vallée (France)

MANAGEMENT POSITIONS

From Jun 2016 **Associate Dean for Quality and Teaching Equipment**

Faculty of Sciences, University of Granada

From Nov 2015 **Member of the Government board of the R.S.M.E.**

(Spanish Royal Mathematical Society)

PUBLICATIONS

1. *Families of minimal surfaces in $H^2 \times R$ foliated by arcs and their Jacobi fields* (joint with L. Ferrer, F. Martín & R. Mazzeo). [arXiv:1901.04066](https://arxiv.org/abs/1901.04066)
2. *Properly embedded minimal annuli in $H^2 \times R$* (joint with L. Ferrer, F. Martín & R. Mazzeo). *Mathematische Annalen*, 375 (1–2): 541–594 (2019).
3. *On the characterization of minimal surfaces with finite total curvature in $H^2 \times R$ and $PSL(2, R)$* (joint with L. Hauswirth & A. Menezes). *Calculus of Variations and Partial Differential Equations*, 58, 80 (2019). <https://doi.org/10.1007/s00526-019-1505-4>
4. *Minimal graphs over Riemannian surfaces and harmonic diffeomorphisms* (joint with L. Mazet, M. Rodríguez, H. Rosenberg). *American Journal of Mathematics*, 41(5):1149-1177 (2019).
5. *Non-proper complete minimal surfaces embedded in $H^2 \times R$* (joint with G. Tinaglia) *International Mathematics Research Notices*, 2015: 4322-4334 (2015).
6. *On constant mean curvature vertical multigraphs in homogeneous spaces* (joint with J. M. Manzano) *Journal of Geometric Analysis*, 25:336-346 (2015).
7. *Minimal surfaces with positive genus and finite total curvature in $H^2 \times R$* (with F. Martín & R. Mazzeo) *Geometry & Topology*, 18: 141-177 (2014).
8. *Periodic constant mean curvature surfaces in $H^2 \times R$* (joint with L. Mazet & H. Rosenberg) *The Asian Journal of Mathematics*, 18 (5): 829-858 (2014).
9. *Simply-connected minimal surfaces with finite total curvature in $H^2 \times R$* (joint with J. Pyo) *International Mathematics Research Notices*, 2014: 2944-2954 (2014).
10. *Minimal surfaces with limit ends in $H^2 \times R$* *Journal für die Reine und Angewandte Mathematik (Crelle's Journal)*, 685: 123-141 (2013).
11. *Non-simply connected minimal planar domains in $H^2 \times R$* (joint with F. Martín) *Transactions of the American Mathematical Society*, 365, pp 6167-6183 (2013).
12. *Classification of rotational special Weingarten surfaces of minimal type in $S^2 \times R$ and $H^2 \times R$* (with F. Morabito) *Mathematische Zeitschrift*, 273(1-2): 379-399 (2013).
13. *Saddle Towers and minimal k -noids in $H^2 \times R$* (joint with F. Morabito) *Journal of the Institute of Mathematics of Jussieu*, 11 (2): 333-349 (2012).
14. *Parabolic stable surfaces with constant mean curvature* (joint with J.M. Manzano & J. Pérez) *Calculus of Variations and Partial Differential Equations*, 42 (1-2): 137-152 (2011).

15. *The Dirichlet problem for the minimal surface equation - with possible infinite boundary data - over domains in a Riemannian Surface* (joint with L. Mazet & H. Rosenberg)
Proceedings of the London Mathematical Society, 102 (3): 985-1023 (2011).
16. *The extrinsic curvature of entire minimal graphs in $H^2 \times \mathbb{R}$* (joint with J.M. Espinar & H. Rosenberg)
Indiana University Mathematics Journal, 59 (3): 875-890 (2010).
17. *The classification of doubly periodic minimal tori with parallel ends*
Oberwolfach Reports, 6 (4): 2551-2553 (2009).
18. *An end-to-end construction for singly periodic minimal surfaces* (with L. Hauswirth & F. Morabito)
Pacific Journal of Mathematics, 241 (1): 1-61 (2009).
19. *Minimal surfaces with genus zero*
Publicaciones de la RSME, 11: 335-340 (2007).
20. *Limit of Karcher's Saddle towers*
Matemática Contemporânea, 30: 135-143 (2007).
21. *Saddle towers with infinitely many ends* (joint with L. Mazet & M. Traizet)
Indiana University Mathematics Journal, 56 (6): 2821-2838 (2007).
22. *A Jenkins-Serrin problem on the strip*
Journal of Geometry and Physics, 57: 1371-1377 (2007).
23. *The space of doubly periodic minimal tori with parallel ends: Standard Examples*
Michigan Mathematical Journal, 55 (1): 103-122 (2007).
24. *Moduli space of doubly periodic minimal surfaces*
Publicaciones de la RSME, 10: 225-230 (2006).
25. *Doubly periodic minimal tori with parallel ends*
Matemática Contemporânea, 29: 99-126 (2005).
26. *The classification of doubly periodic minimal tori with parallel ends* (joint with J. Pérez & M. Traizet)
Journal of Differential Geometry, 69 (3): 523-577 (2005).

STUDENTS & POSTDOCTORAL FELLOWS

- Jesús Castro Infantes (F.P.U. Ph.D. student, Universidad de Granada).
- José Miguel Manzano Prego (Ph.D. Thesis defended in June 2012, Universidad de Granada), co-advised with Joaquín Pérez.
- Postdoctoral supervisor of Juncheol Pyo (1-months post-doctoral fellow in 2010, Universidad de Granada, with funds from "CEI BioTIC GENIL").
- Postdoctoral supervisor of Filippo Morabito (3-months post-doctoral fellow in 2009, "IMI Visiting Researcher Programme 2009", Universidad Complutense de Madrid).

AWARDS & GRANTS

(Unless otherwise noted I am the Principal Investigator.)

- Jan 2020 – Dec 2021 **Problemas variacionales y EDPs elípticas en Geometría**
FEDER – Junta de Andalucía / A-FQM-139-UGR18 (25.650€)
- Jan 2018 – Dec 2020 **Análisis geométrico** – MICINN - FEDER / MTM2017-89677-P
(€ 139.392) PI: Joaquín Pérez Muñoz, Antonio Alarcón
- Jan 2015 – Dec 2018 **Análisis geométrico** – MICINN - FEDER / MTM2014-52368-P
(€ 201.586) PI: Joaquín Pérez Muñoz
- Apr 2014 – Jan 2015 **Minimal and constant mean curvature surfaces in homogeneous 3-manifolds**
CEI BioTIC GENIL / PYR-2014-21 (€ 3.000)
- Apr 2012 – Ago 2012 **“José Castillejo” Grant** awarded by “Ministerio de Educación” (Spain) (€ 13.000)
- Jan 2012 – Dec 2015 **Análisis geométrico** – MICINN - FEDER / MTM2011-22547 (€ 243.210)
PI: Joaquín Pérez Muñoz
- Mar 2011 – Dec 2011 **Superficies en espacios homogéneos**
CEI BioTIC GENIL (CEB09-0010) / PYR-2010-21 (€ 3.000)
- Jun 2011 **“Ramón y Cajal” Fellowship**
Includes € 15.000 in research funds, awarded by “Ministerio de Ciencia e Innovación”.
- Oct 2010 – Sep 2011 **CMC Hypersurfaces with Finite Index in Homogeneous Spaces**
Conselho Nacional de Desenvolvimento Científico e Tecnológico(CNPq), Brazil / Ref.483268/2010-0
(R\$ 20.000) PI: Marcos Petrucio de A. Cavalcante
- Mar 2010 – Mar 2013 **Problemas Variacionales en Geometría** – Junta de Andalucía / FQM-0325
PI: Francisco Urbano
- Feb 2010 – Feb 2014 **Análisis Geométrico y Aplicaciones** – Junta de Andalucía / P09-FQM-5088
(€ 293.068) PI: Antonio Ros Mulero.
- Jul 2009 **“Juan de la Cierva” Fellowship**, awarded by “Ministerio de Ciencia e Innovación” (Spain).
- Oct 2007 – Aug 2012 **Análisis Geométrico** – MCYT / FEDER no. MTM2007-61775
(€ 372.500) PI: Antonio Ros
- April 2007 – April 2009 **Análisis Geométrico y aplicaciones** – Junta de Andalucía / P06-FQM-01642
(€ 78.000) PI: Antonio Ros
- May 2005 **Travel Grant** (€ 1.960) from “Ministerio de Economía, Cultura y Deporte” (Spain)
- Dec 2004 – Feb 2008 **Geometría de superficies: superficies mínimas y otras condiciones de curvatura** – MCYT / FEDER no. MTM2004-02746 (€ 95.260) PI: Antonio Ros
- Jul 2003 **Travel Grant** (€ 2.560) from “Ministerio de Economía, Cultura y Deporte” (Spain)
- Feb 2002 – Feb 2006 **Problemas Variacionales en Geometría**
Junta de Andalucía / FQM-0325 (€ 124.901,66) PI: Francisco Urbano
- Jan 2002 – Jan 2005 **Superficies Minimales y otros problemas de la Teoría Clásica de Superficies**
MCYT / FEDER no. BFM2001-3318 (€ 41.000). PI: Antonio Ros
- Jan 2002 – Dec 2005 **FPU Fellowship** (“*Formación del Profesorado Universitario*” Fellowship)
“FPU” is a 4-years predoctoral fellowship whose aim is training university lecturers.
Awarded by “Ministerio de Economía, Cultura y Deporte” (Spain)

- Academic year 2000/2001 **Beca de colaboración** (“Collaboration” Scholarship)
(350.000 pesetas, € 2.103,54), awarded by “MECD” (Ministerio de Economía, Cultura y Deporte, Spain)
- Academic year 2000/2001 **Premio a los mejores rendimientos académicos** (“best records” award)
(20.000 pesetas, € 120,20), awarded by “Universidad de Granada”.
- Academic year 1999/2000 **Beca de iniciación a la investigación** (“Initiation to research” Scholarship)
(234.000 pesetas, € 1.406,37), awarded by “Universidad de Granada”.
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MAIN RESEARCH VISITS & STAYS

- 3 Sep 2018 – 13 Sep 2018 University of Princeton (USA)
- 24 Jul 2017 – 28 Jul 2017 Université Paris-Est (Paris, France)
- 3 Aug 2015 – 10 Aug 2015 IMPA (Rio de Janeiro, Brazil)
- 15 Jun 2015 – 18 Jun 2015 Université Paris-Est (Paris, France)
- 4 May 2015 – 8 May 2015 University of Princeton (USA)
- 19 Jan 2015 – 24 Jan 2015 University of Princeton (USA)
- 12 Oct 2014 – 12 Dec 2014 University of Warwick (United Kingdom)
- 24 Mar 2014 – 30 Jun 2014 University of Warwick (United Kingdom)
- 15 Dec 2013 – 20 Dec 2013 Université de Marne-la-Vallée (France)
- 10 Sep 2013 – 10 Dec 2013 University of Warwick (United Kingdom)
- 17 Sep 2012 – 17 Dec 2012 King's College London (London, United Kingdom)
- 1 Apr 2012 – 31 Aug 2012 King's College London (London, United Kingdom)
- 10 Jun 2011 – 1 Jul 2011 Institut de Mathématiques de Jussieu (Paris, France)
- 11 Dec 2010 – 19 Dec 2010 King's College London (United Kingdom)
- 4 April 2010 – 22 April 2010 IMPA (Rio de Janeiro, Brazil)
- 9 Dec 2008 – 16 Feb 2009 Universidad de Granada (Spain)
- 7 Oct 2008 – 7 Dec 2008 IMPA (Rio de Janeiro, Brazil)
- 20 Sep 2007 – 20 Dec 2007 Institut de mathématiques de Jussieu (Paris, France)
- 2 Jan 2007 – 28 Feb 2007 Institut de Mathématiques de Jussieu (Paris, France)
- 14 Jul 2005 – 13 Aug 2005 Université de Marne-la-Vallée (France)
- 13 Jun 2005 – 14 Jul 2005 Université François Rabelais (Tours, France)
- 28 Mar 2005 – 28 May 2005 Univ. Marne-la-Vallée / Institut de Mathématiques Jussieu (France)
- 23 Aug 2004 – 23 Oct 2004 University of Massachusetts (Amherst, USA)

CONFERENCE / SEMINAR ORGANISATION

- Organizer of the “MatEduca Day” (Granada, 11 February 2020).
- Organizer of the meetings “Jornada RSME-UGR Fin de Grado 2019” (Granada, 6 November 2019) and “Jornada RSME-UGR Fin de Máster 2019” (Granada, 8 November 2019).
- Organizer of the “Pi Day” (Granada, 14 March 2019).
- Organizer of the “III RSME-AMAT Day”, Granada, 29 Mar 2019.
- Organizer of the meetings “Jornada RSME-UGR Fin de Grado” (Granada, 9 Nov 2017) and “Jornada RSME-UGR Fin de Master” (Granada, 25-26 Oct 2018).
- Organizer of the “IEMath-GR / RSME Day on Women and Girls in Science”, Granada, 15-16 Feb 2018.
- Organizer of the meetings “Jornada RSME-UGR Fin de Grado” (Granada, 9 Nov 2017) and “Jornada RSME-UGR Fin de Master” (Granada, 9-10 Nov 2017).
- Organizer of the “II RSME-AMAT Day”, Granada, 6 Oct 2017.
- Organizer of the “IEMath-GR / RSME Day on Research in Mathematics”, Granada, 28 Apr 2017.
- Organizer of the “RSME-AMAT Day”, Granada, 17 Mar 2017.

- Organizer of the special session “Geometric Analysis, Differential Geometry and Quantization” del “Second joint Conference of the Belgian, Royal Spanish and Luxembourg Mathematical Societies”, Logroño (Spain), 6-8 Jun 2016.
- Organizer of the “Geometric Variational Problems and Geometric Analysis” session in the “First Joint Meeting SBM-SBMAC-RSME”, Fortaleza (Brazil), 7-10 Dec 2015, joint with Marcos Petrucio Cavalcante.
- Organizer of the “Differential Geometry” session in the “III Congreso de Jóvenes Investigadores RSME”, Murcia (Spain), 7-11 Sept 2015, joint with Raquel Villacampa.
- Member of the Scientific Committee of the meeting “RSME 2015”, Granada (Spain), 2-6 Feb 2015.
- Organizer of the “Young Researchers Math Seminar”, Granada (Spain), from April 2015 to May 2016
- Organizer of the “Geometric Analysis” session in the First Joint International Meeting RSME-SCM-SEMA-SIMAI-UMI (FJIM 2014), Bilbao (Spain), 30 Jun – 4 Jul 2014, joint with Barbara Nelli.
- Organizer of the “Geometric Analysis Workshop 2009”, Universidad Complutense de Madrid (Spain), 21-23 September 2009.
- Organizer of the Ph.D. Students of Mathematics' seminar, Universidad de Granada (Spain), 2005.

INVITED TALKS

- Sep 2019 Geometric Analysis, Submanifolds, and Geometry of PDE's (Torino, Italy) – plenary speaker
- Mar 2019 IX Workshop on Differential Geometry (Maceio, Brazil)
- Nov 2018 Workshop on Mean Curvature and Regularity (Princeton, USA)
- Jun 2018 Recent advances in Geometric Analysis (Pisa, Italy)
- Feb 2018 20th School of Differential Geometry (Joao Pessoa, Brazil) – plenary speaker
- Jan 2018 Seventh Iberoamerican Congress on Geometry (Valladolid, Spain)
- Jan 2018 Minimal Surfaces and related topics (Granada, Spain)
- Dec 2017 First Joint Meetin Argentina- Spain in Mathematics (Buenos Aires, Argentina) – plenary speaker
- Sep 2017 The third Japanese-Spanish workshop on Differential Geometry (Madrid, Spain)
- Dec 2016 Geometry Day (Granada, Spain)
- Aug 2016 First Joint Meeting Brazil – Italy in Mathematics (IMPA, Rio de Janeiro, Brazil)
- Jul 2016 7th European Congress of Mathematics (Berlin, Germany)
- Jun 2016 I Coloquio de Geometria en el Sur + Este (Murcia, Spain)
- Dec 2015 End of Year London Geometry Conference (London, UK)
- Dec 2015 First Joint Meeting Brazil-Spain in Mathematics (Fortaleza, Brazil) – invited speaker
- Mar 2015 Fifth Workshop on Differential Geometry (Maceio, Brazil)
- Nov 2014 Pure Mathematics Seminar, University of Leicester (United Kingdom)
- Oct 2014 Yorkshire Durham Geometry Day, University of York (United Kingdom)
- Sep 2014 Third Joint Meeting SMM-RSME (Zacatecas, Mexico)
- Jun 2014 Analysis group Seminar, University of Warwick (United Kingdom)
- Feb 2014 2nd Japanese-Spanish Workshop on Differential Geometry (Tokyo, Japan)
- Nov 2013 Geometry and Analysis Seminar, Imperial College London (United Kingdom)
- Oct 2013 Analysis Seminar, University of Warwick (United Kingdom)

- Jul 2013 Seminar Topics in Geometric Analysis, Freie Universität Berlin (Germany)
- Jun 2013 Variational Problems and Geometric PDE's (Granada, Spain)
- Mar 2013 Geometry Seminar, Universidad de Granada (Spain)
- Jan 2013 Congress of the RSME 2013 (Santiago de Compostela, Spain)
- Dec 2010 Geometry Seminar, Kings' College London (London, United Kingdom)
- Jun 2010 Geometry Seminar, Granada (Spain)
- Apr 2010 Algebraic, Geometric and Analytical Aspects of Surface Theory (Buzios, Brazil)
- Oct 2009 Analysis and Applications Seminar, ICMat (Madrid, *Spain*)
- Oct 2009 Arbeitsgemeinschaft "Minimal surfaces" (Oberwolfach, Germany)
- Jul 2009 First Joint Meeting SMM-RSME (Oaxaca, Mexico)
- Jun 2009 Complex Geometry Seminar, ICMat (Madrid, *Spain*)
- Jul 2008 Geometry Seminar, Universidad de Granada (*Spain*)
- May 2008 Geometric Analysis Workshop about constant mean curvature surfaces (Cartagena, *Spain*)
- Feb 2008 Complex Geometry Seminar, ICMat (Madrid, *Spain*)
- Feb 2008 Geometry Seminar, Universidad de Granada (*Spain*)
- Dec 2007 Geometry Seminar, Institut de Mathématiques de Jussieu (Paris, France)
- Nov 2007 Primer encuentro de jóvenes investigadores de la REAG (Valencia, *Spain*)
- Aug 2007 International Congress on Minimal and Constant Mean Curvature Surfaces (Buzios, Brazil)
- Nov 2006 Geometry Seminar, Institut de Mathématiques de Jussieu (Paris, France)
- May 2006 Geometry Seminar, Universidad de Granada (Spain)
- Jul 2005 Geometry Seminar, Université François Rabelais (Tours, France)
- Jun 2005 Workshop on Moduli Spaces of Properly Embedded Minimal Surfaces (Palo Alto, USA)
- May 2005 Geometry Seminar, Institut de Mathématiques de Jussieu (Paris, France)
- Oct 2004 Geometry Seminar, University of Massachusetts (Amherst, Massachusetts, USA)
- Oct 2004 Geometry Seminar, University of Connecticut (Storrs, Connecticut, USA)

OTHER TALKS

- Jul 2006 XIV School on Differential Geometry (Salvador de Bahia, Brazil)
- Sep 2005 XIV Workshop on Geometry and Physics (Bilbao, Spain)
- Feb 2005 Ph.D. Students Seminar, Universidad de Granada (Spain)
- Jul 2004 XIII School on Differential Geometry (Sao Paulo, Brazil)
- Feb 2004 EDGE Conference on Variational Problems on Surfaces (Granada, Spain)
- Jul 2003 ISAMA- Bridges Conference (Granada, Spain)

POSTERS

- Feb 2011 Centennial Congress "RSME 2011" (*Ávila, Spain*)
- Feb 2007 IV International Meeting on Lorentzian Geometry (Santiago de Compostela, Spain)
- Sep 2006 XV Workshop on Geometry and Physics (Puerto de la Cruz, Spain)
- Ago 2006 ICM 2006 (Madrid, Spain)

- Nov 2005 III International Meeting on Lorentz Geometry (Castelldefels, Spain)
- Feb 2005 MAT.ES 2005 (Valencia, Spain)

SCIENTIFIC EVALUATIONS / REVIEWS

- Member of the evaluation committee, in the area of Mathematics, for applications in “Juan de la Cierva 2017 funded by the Spanish “Ministerio de Economía y Competitividad”.
- Member of the evaluation committee, in the area of Mathematics, for applications in “Ramón y Cajal Program 2013” funded by the Spanish “Ministerio de Economía y Competitividad”.
- Thesis examiner for Marcos Paulo Tassi, December 2019, University of Granada (Spain) / Universidade Federal São Carlos (Brazil).
- Thesis examiner for Jesús Antonio Bueno Linares, March 2019, University of Granada (Spain).
- Thesis examiner for Jesús Pérez García, December 2016, University of Granada (Spain).
- Thesis examiner for Francisco Vanderson Moreira de Lima, August 2015, IMPA (Brazil).
- Thesis examiner for Abigail Silva Duarte Folha, April 2010, Universidade Federal do Rio de Janeiro (Brazil).
- Served as referee for the Spanish approval of Filippo Morabito's Ph.D., September 2010.
- Served as referee for: Advances in Geometry, American Journal of Mathematics, Calculus of Variations and Partial Differential Equations, Communications in Analysis and Geometry, Geometry and Topology, Illinois Journal of Mathematics, Journal für die reine und angewandte Mathematik (Crelle's Journal), Journal of the London Mathematical Society, Mathematische Annalen, Pacific Journal of Mathematics, Revista Iberoamericana, Topology and its Applications, Transactions of the AMS, among others.
- Collaborator for the EMS Newsletter (2012).