

CURRICULUM VITAE – JEZABEL CURBELO

PERSONAL INFORMATION

Jezabel Curbelo
Ramon y Cajal Researcher
Universitat Politècnica de Catalunya
Departament de Matemàtiques
Diagonal 647, E-08028 Barcelona, Spain
Email jezabel.curbelo@upc.edu

STANDARD ACADEMIC RECORD

PhD in Mathematics (Cum Laude with international Mention) *October 2010- April 2014*
Department of Mathematics, Universidad Autónoma de Madrid, Spain
Thesis directed by Ana M. Mancho titled “Instabilities in geophysical fluid dynamics: the influence of symmetry and the temperature dependent viscosity in convection”

Master’s Degree in Mathematics and its Applications *October 2009-September 2010*
Department of Mathematics, Universidad Autónoma de Madrid, Spain.
Master thesis directed by Ana M. Mancho titled: “Numerical studies on a convection problem with temperature dependent viscosity”

Certificate of Pedagogical Aptitude (CAP)-Teaching Certificate *January 2009-July 2009*
Universidad Alfonso X el Sabio, Instituto Canario Superior de Estudios, Spain

Mathematics Bachelor’s Degree *September 2005-July 2009*
Universidad de La Laguna (ULL), Canary Islands, Spain

RESEARCH RECORD

Ramón y Cajal Researcher *July 2020 - present*
Universitat Politècnica de Catalunya
Departamento de Matemáticas, Barcelona, Spain

Visiting Assistant Researcher UCLA *February 2020-June 2020*
University of California, Los Ángeles
Department of Atmospheric and Oceanic Sciences, California, USA

Assistant Professor (“Profesor Ayudante Doctor”) *September 2016-January 2020*
Departamento de Matemáticas, Universidad Autónoma de Madrid, Spain

Visiting Assistant Researcher UCLA *February - July 2019*
University of California, Los Angeles
Department of Atmospheric and Oceanic Sciences, California, USA.

Invited Professor ENS-LYON *September - October 2017*
École normale supérieure de Lyon
Laboratoire de Géologie de Lyon : Terre, Planètes, Environnement (CNRS, ENS, Lyon1)

ICMAT member *September 2016 - June 2020*
Instituto de Ciencias Matemáticas (ICMAT), Madrid, Spain

Postdoc Juan de la Cierva Formación. *April 2016 - September 2016*
E.T.S.I.A Escuela Técnica Superior de Ingeniería Aeronáutica y del Espacio,
Universidad Politécnica de Madrid, Madrid, Spain

Postdoc LabEX LIO (Laboratoire d’excellence, Lyon Institut des Origines.) *Dec 2014-March 2016*
Laboratoire de Géologie de Lyon : Terre, Planètes, Environnement (CNRS, ENS, Lyon1)

Teaching assistant (“Profesora Ayudante”) *March 2012-November 2014*
Department of Mathematics, Universidad Autónoma de Madrid, Spain

ICMAT member *October 2009-November 2014*
Instituto de Ciencias Matemáticas (ICMAT), Madrid, Spain

PhD student in the JAE-Predoc fellowships program. *October 2009-February 2012*
Instituto de Ciencias Matemáticas ICMAT, Madrid, Spain.

AWARDS

- **2020 “Antonio Valle” SEMA Prize to Young Researchers**,
Best Spanish Applied Mathematician under 33
SEMA- Sociedad Española de Matemática Aplicada
- **2015 Donald L. Turcotte Award**,
American Geophysical Union (AGU). Nonlinear Geophysics Focus Group
Citation: AGU (2015), Curbelo and Ghanbarian-Alavijeh receive the 2015 Donald L. Turcotte Award, Eos, 96, doi:10.1029/2015EO035601. Published on 21 September 2015.
- **2015 “Vicent Caselles” award** , best Spanish Mathematicians under 30
BBVA Foundation - RSME Real Sociedad Matemática Española.

RESEARCH
PROJECTS
FUNDED IN
COMPETITIVE
CALLS

RYC2018-025169-I Ayuda Ramón y Cajal - Convocatoria 2018
PI: Jezabel Curbelo, 40.000 euros
Youngest female awardee RyC 2018 among all panels

EIN2019-103087 Europa Investigación 2019. Ayudas para el ERC "Starting Grants"(StG)
PI: Jezabel Curbelo, 10.000 euros

AGS-1832842 U.S. NSF Grant, Div Atmospheric & Geospace Sciences 2018 - 2021

SEV-2015-0087 MINECO: ICMAT Severo Ochoa project

MTM2014-56392-R Dinamica de fluidos geofísicos: una perspectiva Computacional y aplicada.

ANR-10-LABX-0066 LABEX Lyon Institute of Origins

MTM2011-26696 Analysis in Fluid Mechanics, ICMAT, 2011-2014

SEV-2011-0087 MINECO: ICMAT Severo Ochoa project

FELLOWSHIPS

JAE-Predoc fellowships *October 2009-February 2012*
Awarded by CSIC (“Spanish National Research Council”), Spain.

Excellence Grant (Given to the top 10 students in Sciences) *September 2008- June 2009*
Awarded by Government of the Canary Islands, Spain.

Collaboration Grant in the Dept. of Mathematical Analysis *September 2008-June 2009*
Universidad de la Laguna.
Awarded by the Government of Spain, Universidad de la Laguna, Spain.

Introduction to Research Scholarship JAE-INTRO *July 2008-September 2008*
Awarded by CSIC, Spain.

PUBLICATIONS

1. Niang, C., Mancho, A.M., García-Garrido, V.J., E. Mohino, B. Rodrigues-Fonseca, J. Curbelo. Transport pathways across the West African Monsoon as revealed by Lagrangian Coherent Structures. *Scientific Reports*, 10, 12543 (2020).
2. Borzdynski O.G., Borondo F., Curbelo J. (2021) Exploring Datasets to Solve Partial Differential Equations with TensorFlow. In: Herrero Á., Cambra C., Urda D., Sedano J., Quintián H., Corchado E. (eds) 15th International Conference on Soft Computing Models in Industrial and Environmental Applications (SOCO 2020). SOCO 2020. *Advances in Intelligent Systems and Computing*, vol 1268. Springer, Cham.
3. J. Curbelo, L. Duarte, T. Alboussiere, S. Labrosse, F. Dubuffet, Y. Ricard. Numerical solutions of compressible convection with an infinite Prandtl number: comparison of the anelastic and anelastic liquid models with the exact equations, *Journal of Fluid Mechanics*, 873, 646-687 (2019)
4. A.M. Mancho, V.J. García- Garrido, J. Curbelo, S. Wiggins. Paths in a turbulent ocean. *Intelligencer Valencia* (2019) ICIAM.
5. J. Curbelo, C. R. Mechoso, A. M. Mancho, Stephen Wiggins. Lagrangian study of the final warming in the southern stratosphere during 2002: Part I. the vortex splitting at upper levels, *Climate Dynamic* (2019) 53: 2779-2792.
6. J. Curbelo, C. R. Mechoso, A. M. Mancho, Stephen Wiggins. Lagrangian study of the final warming in the southern stratosphere during 2002: Part II. 3D structure. *Climate Dynamic* .

7. S. Madruga, J. Curbelo. Dynamic of plumes and scaling during the melting of a Phase Change Material heated from below. *International Journal of Heat and Mass Transfer*, 126 Part B, 206-220 (2018).
8. V. J. Garcia-Garrido, J. Curbelo, C. R. Mechoso, A. M. Mancho; S. Wiggins. The Application of Lagrangian Descriptors to 3D Vector Fields, *Regular and Chaotic Dynamics*, 23(5), 547-564 (2018)
9. J. Curbelo, V. J. Garcia-Garrido, C. R. Mechoso, A. M. Mancho; S. Wiggins, C. Niang. Insights on the three-dimensional Lagrangian geometry of the Antarctic Polar Vortex. *Nonlinear Processes in Geophysics*, 24, 379-392 (2017).
10. V. J. Garcia-Garrido, J. Curbelo, C. R. Mechoso, A. M. Mancho and S. Wiggins. A Simple Kinematic Model for the Lagrangian Description of Relevant Nonlinear Processes in the Stratospheric Polar Vortex, *Nonlinear Processes in Geophysics*, 24, 265-278 (2017).
11. A. M. Mancho; J. Curbelo, S. Wiggins; V. J. Garcia-Garrido; C. Mendoza. Beautiful geometries underlying Ocean nonlinear processes. *A VOYAGE THROUGH SCALES The Earth System in Space and Time*. pp. 86 - 91. European Geosciences Union, (2015).
12. J. Curbelo, A. M. Mancho. Spectral numerical schemes for time-dependent convection with viscosity dependent on temperature. *Communications in Nonlinear Science and Numerical Simulation*, 19 (2014), 3, 538-553.
13. J. Curbelo, A. M. Mancho. Symmetry and plate-like convection in fluids with temperature-dependent viscosity. *Physics of Fluids* 26, 016602 (2014) (Editor's Pick)
14. J. Curbelo, J. M. Lopez, A.M. Mancho, F. Marques. Confined rotating convection with large Prandtl number: Centrifugal effects on wall modes. *Phys. Rev. E* 89, 013019 (2014)
15. J. Curbelo, A. M. Mancho. Bifurcations and dynamics of a convection problem with temperature-dependent viscosity under the presence of the $O(2)$ symmetry. *Phys. Rev. E* 88, 043005(2013)
16. *J.J. Betancor, A.J. Castro, J. Curbelo, J.C. Fariña, L. Rodríguez-Mesa. Square functions in the Hermite setting for functions with values in UMD spaces. *Annali di Matematica Pura ed Applicata*, 2014
17. A. M. Mancho, S. Wiggins, J. Curbelo, C. Mendoza. Lagrangian descriptors: A method for revealing phase space structures of general time dependent dynamical systems with *Communications in Nonlinear Science and Numerical Simulation*, 18(2013) 12, 3530-3557
18. *J.J. Betancor, A.J. Castro, J. Curbelo, L. Rodríguez-Mesa. Characterization of UMD Banach spaces by imaginary powers of Hermite and Laguerre operators, *Complex Anal. Oper. Theory* 7 (2013) 4, 1019-1048
19. *J.J. Betancor, A. J. Castro, J. Curbelo. Harmonic analysis operators associated with multidimensional Bessel operators, *Proc. Roy. Soc. Edinburgh Sect. A* 142 (2012), 5, 945-974
20. *J.J. Betancor, A.J. Castro, J. Curbelo, J.C. Fariña, L. Rodríguez-Mesa. γ -radonifying operators and UMD-valued Littlewood-Paley-Stein functions in the Hermite setting on BMO and Hardy spaces, *J. Funct. Anal.* 263 (2012) 12, 3804-3856
21. *J.J. Betancor, A.J. Castro, J. Curbelo. Spectral multipliers for multidimensional Bessel operators, *J. Fourier Anal. Appl.* 17 (2011), 5, 932-975

* Alphabetical order

TEACHING ACTIVITIES

Teaching Experience (Facultad de Ciencias, Universidad Autónoma de Madrid, Spain):

- Mathematical Modelling with partial differential equations. Master's degree in Advance Mathematics and Mathematical engineering (G) (16 hours) *Fall 2020*
- Numerical Methods (UG). Second year of Material Engineering and Engineering in industrial technologies (UG) (30 hours) *Fall 2020*
- Numerical methods in partial differential equations, Math(UG). Fourth year of Mathematics (UG) (60 hours) *Fall 2019*
- Mathematics I (UG) First year of environmental Sciences (60 hours) *Fall 2019*

- Numerical methods in partial differential equations, Math(UG). Fourth year of Mathematics (UG) (60 hours) *Fall 2018*
- Mathematical analysis, Math(UG). Second year of Mathematics (60 hours) *Fall 2018*
- Calculus, Computer Science (UG). First year of Computer Science (60 hours) *Spring 2018*
- Calculus, Math(UG), First year of Mathematics (60 hours) *Spring 2018*
- Calculus, Computer Science (UG). First year of Computer Science (60 hours) *Spring 2017*
- Calculus, Math(UG), First year of Mathematics (60 hours) *Spring 2017*
- Numerical analysis I, Math(UG) First year of Mathematics (60 hours) *Spring 2014*
- Mathematical analysis, Math(UG) Second year of Mathematics (60 hours) *Fall 2012*
- Numerical analysis II, Math-Computer Science (UG). Fourth year of Mathematics (UG) and Fifth year of Mathematics-Computer science (UG) (60 hours) *Spring 2012*
- Mathematics I Biology (UG). First year of Biology (60 hours) *Fall 2010*

Teacher training and teaching resources courses: more than 15 courses, for instance: Digital online resources for teaching, Problem-based learning, Study of cases, Competency evaluation, Cooperative learning, Moodle 2.0, etc. *2009-Present*

STUDENTS

Final degree project (Departamento de Matemáticas, Universidad Autónoma de Madrid, Spain):

- Jose Antonio Akieme (Math) *Academic year 2017 - 2018*
- Susana López Arias (Math) *Academic year 2017 - 2018*
- Almudena Cano Soriano (Math) *Academic year 2018 - 2019*
co-advised with Florentino Borondo (Department of Chemistry)
- Guzman Gemenio (Math) *Academic year 2018 - 2019*
co-advised with Julia Novo
- Oscar Gómez (Math + Computer Science) *Academic year 2019 - 2020*
co-advised with Florentino Borondo (Department of Chemistry)
- Edith García (Math) *Academic year 2019 - 2020*
co-advised with Florentino Borondo (Department of Chemistry)
- Arturo Turmo (Math + Computer Science) *Academic year 2019 - 2020*
co-advised with Florentino Borondo (Department of Chemistry)

ICMAT: Introduction to Research 2018 (Instituto de Ciencias Matemáticas, Spain):

- José Manuel de Frutos Porras (Math + Computer Science, G) *June - September 2018*
- Víctor Navarro Fernández (Math + Physics, UG) *June - October 2018*
- Sara Abentín de Gregorio (Math + Physics, UG) *June - September 2019*

MathIsShe program (RSME - EJE&CON)

- Ángela Rey Cabezas (Math, UG) *Spring 2018*

ORGANIZATION OF SCIENTIFIC MEETINGS AND SEMINARS

Applied Mathematics Seminars (ICMAT - UAM) *2018 - 2020*

Coordinator
Instituto de Ciencias Matemáticas, Madrid, Spain

ICOSAHOM 2020. International Conference on Spectral and High Order Methods

(International Congress) *July 6th-10th, 2020 (postponed July, 2021)*
Organizer of the Minisymposium: Advances in high order methods for fluid dynamics
Vienna, Austria

The 13th AIMS Conference on Dynamical Systems, Differential Equations and Applications

(International Congress) *June 5th-9th, 2020 (postponed June, 2021).*
Organizer of the Special Session: Nonlinear dynamics and applications to physical-chemical processes
Atlanta, USA

ICIAM 2019. International Congress of Industrial and Applied Mathematics

(International Congress) *July 15th-19th, 2019*
Organizer of the Special Session: The Method of Lagrangian Descriptors and its Applications
Valencia, Spain

3rd International Workshop on Nonlinear Processes in Oceanic and Atmospheric Flows
(International Workshop) 06/07/2016 - 08/07/2016
Organizing committee and local committee
Instituto de Ciencias Matemáticas, Madrid, Spain

III Congress of young researchers. Spanish Royal Mathematical Society (RSME)
(National Conference) 07/09/2015 - 11/09/2015
Organizer of the Special Session: Numerical Analysis and computation
Murcia, Spain

The 10th AIMS Conference on Dynamical Systems, Differential Equations and Applications
(International Conference) 07/07/2014 - 11/07/2014
Organizer of the Special Session: Instabilities and bifurcations in geophysical fluid dynamics
Instituto de Ciencias Matemáticas, Madrid, Spain

6th JAE School of Mathematics (National School) July 2013
School for undergraduate and graduate students who are interested in Mathematics research
Secretary. Instituto de Ciencias Matemáticas, Madrid, Spain

2nd International Workshop on Nonlinear Processes in Oceanic and Atmospheric Flows
(International Workshop) 06/07/2016 - 08/07/2016
Organizing local committee
Instituto de Ciencias Matemáticas, Madrid, Spain

Organizer of I Multidisciplinary Week (SM) (National Workshop) 2/07/2010 - 22/07/2010
Research Workshop for undergraduate and Master students.
Organizer
Universidad Autónoma de Madrid, UAM, Spain

STAYS AT
RESEARCH
CENTERS

UCLA, University of California, Los Angeles (~ 17 months) Five times from October 2016
Visiting Assistant Researcher or Visiting Scholar.
Department of Atmospheric and Oceanic Sciences, California, USA.

LGLTPE, Laboratoire de Géologie de Lyon (~ 10 weeks) November - December 2017, 2018
Visiting Scholar invited by Prof. Thierry Alboussière,
Laboratoire de Géologie de Lyon : Terre, Planètes, Environnement (CNRS, ENS, Université Lyon1),
Lyon, France

ENS LYON, École normale supérieure de Lyon (1 month) September - October 2017
Invited Professor
Laboratoire de Géologie de Lyon : Terre, Planètes, Environnement (CNRS, ENS, Université Lyon1),
Lyon, France

ASU, Arizona State University (6 months) March– May, 2011 and March – May, 2013
Two short predoctoral stays. Under the supervision of Juan Lopez
School of Mathematical and Statistical Sciences, Arizona, USA

SEMINARS AND
COLLOQUIA

Seminari de sistemes Dinàmics UB-UPC (online) (23/09/2020)
Universitat Politècnica de Catalunya. Barcelona, Spain
Seminar: Characterizing the spatial distribution of transport and mixing in geophysical contexts by
lagrangian tools

ETSIAE Seminar (17/01/2020)
Universidad Politècnica de Madrid. Madrid, Spain
Seminar talk: Numerical solutions of compressible convection with an infinite Prandtl number

CRM Seminar (13/10/2019)
Centre de Recerca Matemàtica: CRM, Barcelona, Spain
Seminar talk: Numerical studies of compressible convection and melting problems

- Colloquium of the Mathematics Department** (25/05/2018)
 Universidad de La Laguna. Tenerife, Spain
 Colloquium talk: Numerical studies of geophysical flows
- Geolunch** (10/11/2017)
 Laboratoire de Géologie de Lyon : Terre, Planètes, Environnement (CNRS, ENS, Université Lyon1)
 Seminar talk: Lagrangian descriptors: construction, performance and applications.
- NASA, JPL. 2016 Earth Science Seminar** (27/10/2016)
 NASA - Jet Propulsion Laboratory JPL, California Institute of Technology, California, USA
 Seminar talk: "Lagrangian Descriptors: Construction and Application in the Antarctic Polar Vortex "
- Geolunch** (18/03/2016)
 Laboratoire de Géologie de Lyon : Terre, Planètes, Environnement (CNRS, ENS, Université Lyon1)
 Seminar talk: "Compressible convection in geophysical fluids".
- Geolunch** (20/02/2015)
 Laboratoire de Géologie de Lyon : Terre, Planètes, Environnement (CNRS, ENS, Université Lyon1)
 Seminar talk: The influence of symmetry and temperature dependent viscosity in convection.
- Applied mathematics seminar ICMAT-UAM 2014** (02/04/2014)
 Madrid, Spain.
 Seminar talk: "Instabilities in geophysical fluid dynamics: the influence of symmetry and temperature dependent viscosity in convection"
- Junior Seminar ICMAT-UAM 2012** (21/11/2012)
 Madrid, Spain.
 Seminar talk: "How to solve numerically a convection problem?"

INVITED
 PRESENTATIONS

Plenary talk

- IV Congress of young researchers. Royal Spanish Mathematical Society RSME 2017**
September 2017
 Valencia, Spain
 Plenary talk: "Numerical studies of geophysical flows"

Conference talk

- Dynamics Days Europe 2019** *September 2nd – 6th, 2019*
 Rostock, Germany
 Conference talk: "Lagrangian study of phase space geometrical structures in 3D vector fields".
- SIAM Conference on Applications of Dynamical Systems** *May 19th – 23rd, 2019*
 Snowbird Ski and Summer Resort, Snowbird, Utah USA
 Conference talk: "Phase Space Structures in Time-Dependent Three-Dimensional Vector Fields".
- Biennial Congress of the Royal Spanish Mathematical Society RSME 2019** *February 4th-8th, 2019*
 Santander, Spain
 Conference talk: "Two-dimensional compressible convection at infinite Prandtl number ".
- ICOSAHOM 2018 The International Conference On Spectral and High Order Methods** *July 9th-13rd, 2018*
 London, United Kingdom
 Conference talk: Spectral numerical schemes for time-dependent convection with viscosity dependent on temperature.
- CCC 2017 Compressible Convection Conference** *September 18th-21st, 2017*
 Lyon, France
 Conference talk: Numerical solutions of compressible convection with different levels of approximation for infinite Prandtl numbers.

2015 AGU Fall Meeting*December 2015*

San Francisco, USA.

Conference talk: Plate-like convection in fluids with temperature-dependent viscosity

III Congress of young researchers. Royal Spanish Mathematical Society 3CJI R.S.M.E 2015*September 2015*

Murcia, Spain

Conference talk: Numerical models of compressible convection in geophysical and astrophysical flows

The 10th AIMS Conference on Dynamical Systems, Differential Equations and Applications

Instituto de Ciencias Matemáticas, Madrid, Spain

July 2014

Conference talk: Plate-like convection induced by symmetries in fluids with temperature-dependent viscosity

First Meeting of Young Researchers in Mathematics I PEJIM 2011 *September 28th – 30th, 2011*

Universidad de La Laguna, Canary Island, Spain.

Seminar talk: “Numerical study of geophysical flows: effects of temperature dependent viscosity, rotation and symmetry”

CONTRIBUTIONS
TO CONFERENCESConference talk (selection)**21st Conference on Atmospheric and Oceanic Fluid Dynamics****19th Conference on Middle Atmosphere***June 26th-30th, 2017*

Portland, Oregon USA

Conference talk: “The Final Warming of the Southern Stratosphere from a Lagrangian Perspective”

The 68th Annual Meeting of the American Physical Society’s Division of Fluid Dynamics

(DFC)

November 22th-24th, 2015

Boston, Massachusetts, USA.

Conference talk “Compressible convection in geophysical fluids: comparison of anelastic, anelastic liquid and full numerical simulations”

SIAM Conference on Applications of Dynamical Systems*May 19th – 23rd, 2013*

Snowbird Ski and Summer Resort, Snowbird, Utah USA

Conference talk: “Numerical Integration of a convection problems with temperature dependent viscosity: Simulations and Result”.

I Congress of young researchers.*September 5th – 9th, 2011*

Spanish Royal Mathematical Society R.S.M.E, Soria, Spain

Conference talk: “Large Prandtl number confined rotating convection: centrifugal and temperature-dependent viscosity effects”

I Spanish Young Researchers Meeting in Mathematics I ENJIM 2010 *September 1st–3rd, 2010*

Sevilla, Spain

Conference talk: “Numerical studies on a convection problem with temperature dependent viscosity”.

Poster (selection)**DynVarMIP/CMIP6 and SPARC DynVar & SNAP Workshop***October 22nd-25th, 2019*

Universidad Complutense de Madrid, Spain

Poster: “Spatial Distribution of Eddy Mixing in the Northern Winter Stratosphere/Upper Troposphere”

International Congress of Mathematicians SEOUL ICM 2014*August 13rd - 21st, 2014*

Coex, Seoul, Korea

Poster presentation: “The influence of symmetry and temperature dependent viscosity in the instabilities developed in fluid convection”

Fourth International Symposium. Bifurcations and instabilities in fluid Dynamics

BIFD

July 18th – 21st, 2011

Barcelona, Spain.

Poster presentation: “Time-dependent solutions of a fluid which viscosity depends on temperature”

Like a las Matemáticas (Universidad de la Laguna) Curso de Extensión Universitaria transdisciplinares online Speaker “¡Tierra, aire, agua,... MATEMÁTICAS! (15/10/2020)”	<i>October 2020</i>
Semana de la Ciencia (UAM) Speaker “Cintas, puentes y poliedros”	<i>2019</i>
European Researchers’ Nights. MSCA-NIGHT Speaker “El Teorema de los Cuatro Colores”, Media Lab Prado. Madrid	<i>2019</i>
11 de Febrero. Día Internacional de la Mujer y la Niña en la Ciencia Speaker: “No quiero ser princesa, quiero ser... ¡científica!” Referencia: 20.11.21.58.23	<i>2019</i>
Semana de la Ciencia (UAM) Organizer of a session “Matemátic@s”	<i>2018</i>
MatEsElla-MathIsShe (RSME - EJE&CON) Mentor	<i>2018</i>
Matemática contemporánea por matemáticas contemporáneas Participation	<i>2018</i>
Las matemáticas invitan a pensar en los enigmas del interior de la Tierra Interview SINC	<i>(30/10/2015)</i>
El boom de las Matemáticas (Collaboration in national newspaper ABC) ABC	<i>(15/11/2015)</i>
Mathematics for animation in films and the fight against crime. (Author) Profile of Standley Osher, Gauss 2014 Prize winner. ICMAT Newsletter - Seventh Number (English version). BBVA OPEN MIND (Spanish version)	<i>(2014)</i>
Mujeres Matemáticas en primera línea. (Author) Press release on the national newspaper " El Mundo " about the International Congress of Mathematicians, ICM 2014 Seoul.	<i>(15/08/2014)</i>
Volunteer: The 10th AIMS Conference on Dynamical Systems, Differential Equations and Applications Organizers: The American Institute of Mathematical Sciences, Instituto de Ciencias Matemáticas, Universidad Autónoma de Madrid and University of North Carolina at Wilmington	<i>July, 2014</i>
Meeting with Young Mathematicians (Participation in the activity) 21st edition Exhibition of International Student and Educational offer Madrid, Spain.	<i>AULA 2013</i>
Graffiti and math 2013: Fluid Mathematics (Participation as collaborator) Madrid, Spain.	<i>2013</i>

Operating systems: Windows and Linux.
Programming languages: Fortran, Python, OpenMP, MPI
Office softwares: LaTeX, Open Office, Microsoft Office.
Scientific softwares Matlab, OpenFoam, Dedalus, Maple, Mathematica, R.
Languages: Spanish (mother tongue), English and French.