

Curriculum Vitæ

Joan Torregrosa

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Date and place of birth: February 6, 1968 in Ripollet (Barcelona), Spain

Citizenship: Spanish

CURRENT POSITION

- Associated Professor at the Departament de Matemàtiques, Universitat Autònoma de Barcelona (UAB), Catalonia. (From 11/10/2002).
- Researcher at Centre de Recerca Matemàtica, Campus de Bellaterra, Catalonia. (From 01/09/2020).

PROFESSIONAL EXPERIENCE

- 16/09/1991–15/09/1996: Univ. Autònoma de Barcelona, *Teaching assistant. Third class.*
- 16/09/1996–15/09/1998: Univ. Autònoma de Barcelona, *Teaching assistant. Second class.*
- 16/09/1998–15/09/2001: Univ. Autònoma de Barcelona, *Teaching assistant. First class.*
- 16/09/2001–10/10/2002: Univ. Autònoma de Barcelona, *Teaching assistant.*

EDUCATION

- Jul 1991: 5 year degree in Mathematics, Universitat Autònoma de Barcelona.
- Jul 1993: Master in Mathematics, Universitat Autònoma de Barcelona.
- Jul 1998: Ph.D. in Mathematics, Universitat Autònoma de Barcelona. Advisor: Armengol Gasull.

PRIZES

- Competitive (University) Sabbatical semester for young researchers. 2006-2007.
- Intensification Research Program for young researchers. Three years grant. 2009-2011.
- Advanced Research Accreditation by AQU (Catalan Agency of University Quality). 2015.
- Full professor Accreditation by ANECA (Spanish Agency of Evaluation). 2021. Research qualification A.
- Positive Spanish Government research evaluation obtained in a continuous way from the starting moment: 1993-1999, 2000-2005, 2006-2011, 2012-2017.

FIELDS OF INTEREST (KEYWORDS)

Continuous dynamical systems. Qualitative theory of in continuous and discontinuous differential equations. 16th Hilbert problem. Periodic orbits of polynomial differential equations. Averaging theory. Bifurcation diagrams and classification of phase portraits. Bifurcations of periodic orbits in Biological models.

EDITORIAL BOARD

- Extracta Mathematica (<https://www.eweb.unex.es/eweb/extracta/>)
- Brazilian Electronic Journal of Mathematics (BEJOM) (<http://www.seer.ufu.br/index.php/BEJOM>)

THESIS SUPERVISION

- *On the number of limit cycles for some families of planar differential equations.* Grant BES-2006-13511, Sét Pérez González (UAB, 26 September 2012).
- *Bifurcation of limit cycles in planar differential and piecewise differential systems.* Grant CAPES BEX 13473/13-1, Leonardo Pereira da Costa Cruz (UAB, October 11th, 2018).
- *Limit cycles of small amplitude in polynomial and piecewise polynomial planar vector fields.* Grant CNPq 200484/2015-0, Luiz Fernando da Silva Gouveia (UAB, 14 January 2020).
- *Limit cycles and critical periods for some polynomial differential equations.* Grant FPU16/04317, Iván Sánchez Sánchez (UAB, 21 September 2021).
- *Structural stability, centers and limit cycles for smooth and nonsmooth tridimensional vector fields with invariant bidimensional spheres,* Ana Livia Rodero (UNESP, 03 February 2022. Coadvisor Claudio A. Buzzi (UNESP)).
- *The period function in planar piecewise vector fields,* Mirianne A. S. Santos (UFSCAR, 27 April 2023. Coadvisor Alex C. Rezende (UFSCAR)).
- *TBA,* Carles Trullas (UAB. Starting September 2023).

POSTDOCTORAL SUPERVISION

- Salomon Rebollo-Perdomo (UAB) Currently at Universidad del Bío-Bío, Chile. 4 years. Academic Year: 2009/2010-2012/2013.
- Haihua Liang (Guangdong Polytechnic Normal University), Guangzhou (P. R. China) 6 months. Academic Year 2014/2015.
- Jianfeng Huang (Jinan University) Guangzhou (P.R. China) 1 year. Academic Year 2016/2017.
- Antoni Ferragut (Universitat Jaume I) Castelló (Spain) 1.5 years. Academic Years 2015/2018.

MASTER AND DEGREE SUPERVISION

- Final Degree Work. Iván Sánchez (MH, July 2016).
- Final Master Work. Oscar Saleta (September 2016).
- Final Master Work. Iván Sánchez (July 2017).
- Final Degree Work. Berta Jofra (July 2022).
- Final Degree Work. Marc Gabernet Rodríguez (July 2023).

PUBLICATIONS

1. J. Torregrosa, *Multiplicitat i índex. aplicacions a l'estudi qualitatiu d'equacions diferencials al pla*, Bel-laterra, 1–62, 1993.
2. A. Guillamon, X. Jarque, J. Llibre, J. Ortega, and J. Torregrosa, *Periods for transversal maps via Lefschetz numbers for periodic points*, Trans. Amer. Math. Soc. (ISSN:0002-9947), 347(12), 4779–4806, 1995.
3. A. Cima, A. Gasull, and J. Torregrosa, *Índice y multiplicidad*, Proceedings Electrònics del IV Congrés de Matemàtica aplicada, , –, 1995.
4. A. Gasull, R. Kooij, and J. Torregrosa, *Limit cycles in the Holling–Tanner model*, Publ. Mat. (ISSN:0214-1493), 41, 149–167, 1997.
5. A. Cima, A. Gasull, and J. Torregrosa, *On the relation between index and multiplicity*, J. London Math. Soc. (2) (ISSN:0024-6107), 57(2), 757–768, 1998.
6. A. Gasull and J. Torregrosa, *Center problem for several differential equations via Cherkas' method*, J. Math. Anal. Appl. (ISSN:0022-247X), 228, 322–343, 1998.

7. J. Torregrosa, *Punts singulars i òrbites periòdiques per a camps vectorials*, Bellaterra, 1–196, 1998.
8. A. Gasull and J. Torregrosa, *Euler-Jacobi formula for double points and applications to quadratic and cubic systems*, Bull. Belg. Math. Soc. Simon Stevin (ISSN:1370-1444), 6, 337–346, 1999.
9. A. Gasull and J. Torregrosa, *Small-amplitude limit cycles in Liénard systems via multiplicity*, J. Differential Equations (ISSN:0022-0396), 159, 186–211, 1999.
10. A. Gasull and J. Torregrosa, *A new algorithm for the computation of the Lyapunov constants for some degenerated critical points*, Nonlinear Anal. (ISSN:0362-546X), 47(7), 4479–4490, 2001.
11. A. Gasull and J. Torregrosa, *A new approach to the computation of the Lyapunov constants*, Comput. Appl. Math. (ISSN:0101-8205), 20, 149–177, 2001.
12. A. Gasull and J. Torregrosa, *A relation between small amplitude and big limit cycles*, Rocky Mountain J. Math. (ISSN:0035-7596), 31(4), 1277–1303, 2001.
13. A. Gasull and J. Torregrosa, *Center-focus problem for discontinuous planar differential equations*, Internat. J. Bifur. Chaos Appl. Sci. Engrg. (ISSN:0218-1274), 13(7), 1755–1765, 2003.
14. A. Gasull and J. Torregrosa, *Exact number of limit cycles for a family of rigid systems*, Proc. Amer. Math. Soc. (ISSN:0002-9939), 133(3), 751–758, 2005.
15. A. Gasull, R. Prohens, and J. Torregrosa, *Limit cycles for rigid cubid systems*, J. Math. Anal. Appl. (ISSN:0022-247X), 303(2), 391–404, 2005.
16. A. Gasull and J. Torregrosa, *Some results on rigid systems*, Int. Conf. Diff. Eq. Hasselt 2003 (World Sci. Pub. co Pte Ltd), , 340–345, 2005.
17. A. Gasull, H. Giacomini, and J. Torregrosa, *Explicit non-algebraic limit cycles for polynomial systems*, J. Comput. Appl. Math. (ISSN: 0377-0427), 200, 448–457, 2007.
18. J. Llibre, M. A. Teixeira, and J. Torregrosa, *Limit cycles bifurcation from a k -dimensional isochronous center contained in R^n with $k \leq n$* , Math. Phys. Anal. Geom. (ISSN:1385-0172), 10, 237–249, 2007.
19. J. L. Bravo and J. Torregrosa, *Abel-like differential equations with no periodic solutions*, J. Math. Anal. Appl. (ISSN:0022-247X), 342, 931–942, 2008.
20. A. Gasull, R. Prohens, and J. Torregrosa, *Bifurcation of limit cycles from a polynomial non-global center*, J. Dynam. Differential Equations (ISSN:1040-7294), 20, 945–960, 2008.
21. C. Buzzi, J. Llibre, J. Medrado, and J. Torregrosa, *Bifurcation of limit cycles from a center in R^4 in resonance $1:N$* , Dynamical Systems An International Journal (ISSN:1468-9375), 24(1), 123–137, 2009.
22. A. Gasull and J. Torregrosa, *Models de població del món i prediccions*, Materials Matemàtics, 2009(4), 1–20, 2009.
23. A. Gasull, H. Giacomini, and J. Torregrosa, *Some results on homoclinic and heteroclinic connections in planar systems*, Nonlinearity (ISSN:0951-7715), 23, 2977–3001, 2010.
24. J. Llibre, S. Rebollo-Perdomo, and J. Torregrosa, *Limit cycles bifurcating from a 2-dimensional isochronous torus in R^3* , Advanced Nonlinear Studies (ISSN:1536-1365), 11, 377–389, 2011.
25. J. Llibre, S. Rebollo-Perdomo, and J. Torregrosa, *Limit cycles bifurcation from isochronous surfaces of revolution in R^3* , J. Math. Anal. Appl. (ISSN:0022-247X), 381, 414–426, 2011.
26. M. Caubergh, J. Llibre, and J. Torregrosa, *Global classification of a class of cubic vector fields whose canonical regions are period annuli*, Int. J. Bif. Chaos (ISSN:0218-1274), 21(7), 1831–1867, 2011.
27. A. Gasull, C. Li, and J. Torregrosa, *A new Chebyshev family with applications to Abel equations*, J. Differential Equations (ISSN:0022-0396), 252, 1635–1641, 2012.
28. A. Gasull, C. Li, and J. Torregrosa, *Limit cycles appearing from the perturbation of a system with a multiple line of critical points*, Nonlinear Analysis: Theory, Methods & Applications. (ISSN:0362-546X), 75, 278–285, 2012.
29. A. Gasull, J. T. Lázaro, and J. Torregrosa, *On the Chebyshev property for a new family of functions*, J. Math. Anal. Appl. (ISSN:0022-247X), 387, 631–644, 2012.
30. A. Gasull, J. T. Lázaro, and J. Torregrosa, *Upper bounds for the number of zeroes for some Abelian integrals*, Nonlinear Analysis: Theory, Methods & Applications. (ISSN:0362-546X), 75, 5169–5179, 2012.
31. M. Caubergh, J. Llibre, and J. Torregrosa, *Global phase portraits of some reversible cubic centers with collinear or infinitely many singularities*, Int. J. Bif. Chaos (ISSN:0218-1274), 22(11), 1–20, 2012.
32. R. Prohens and J. Torregrosa, *Shape and period of limit cycles bifurcating from a class of Hamiltonian period annulus*, Nonlinear Analysis: Theory, Methods & Applications. (ISSN:0362-546X), 81, 130–148, 2013.

33. J. Llibre, M. A. Teixeira, and J. Torregrosa, *Lower bounds for the maximum number of limit cycles of discontinuous piecewise linear differential systems with a straight line of separation*, Int. J. Bif. Chaos (ISSN:0218-1274), 23(4), 1–10, 2013.
34. A. Gasull, H. Giacomini, and J. Torregrosa, *Explicit upper and lower bounds for the traveling wave solutions of Fisher-Kolmogorov type equations*, Discrete Contin. Dyn. Syst. (ISSN:1078-0947), 33(8), 3567–3582, 2013.
35. C. Buzzi, C. Pessoa, and J. Torregrosa, *Piecewise linear perturbations of a linear center*, Discrete Contin. Dyn. Syst. (ISSN:1078-0947), 33(9), 3915–3936, 2013.
36. R. Prohens and J. Torregrosa, *Corrigendum to “Shape and period of limit cycles bifurcating from a class of Hamiltonian period annulus” (Nonlinear Anal. 81 (2013) 130–148)*, Nonlinear Analysis: Theory, Methods & Applications. (ISSN:0362-546X), 93, 1–2, 2013.
37. A. Gasull, H. Giacomini, S. Pérez-González, and J. Torregrosa, *A proof of Perko’s conjectures for the Bogdanov-Takens system*, J. Differential Equations (ISSN:0022-0396), 255, 2655–2671, 2013.
38. M. Caubergh and J. Torregrosa, *Global phase portraits of some reversible cubic centers with noncollinear singularities*, Int. J. Bif. Chaos (ISSN:0218-1274), 23(9), 1–30, 2013.
39. S. Pérez-González and J. Torregrosa, *Simultaneous bifurcation of limit cycles from a linear center with extra singular points*, Bull. Sci. Math. (ISSN: 0007-4497), 138, 124–138, 2014.
40. R. Prohens and J. Torregrosa, *Periodic orbits from second order perturbation via rational trigonometric integrals*, Physica D (ISSN: 0167-2789), 280-281, 59–72, 2014.
41. L. Alsedà, J. M. Cors, and J. Torregrosa, *New trends in dynamical systems. Proceedings of the conference held in Salou, October 2-6, 2012*, Bellaterra, 1–62, 2014.
42. P. Maesschalck, S. Rebollo-Perdomo, and J. Torregrosa, *Cyclicity of a fake saddle inside the quadratic vector fields*, J. Differential Equations (ISSN:0022-0396), 258(2), 588–620, 2015.
43. A. Gasull, C. Li, and J. Torregrosa, *Limit cycles for 3-monomial differential equations*, J. Math. Anal. Appl. (ISSN:0022-247X), 428, 735–749, 2015.
44. J. C. Medrado and J. Torregrosa, *Uniqueness of limit cycles for sewing piecewise linear systems*, J. Math. Anal. Appl. (ISSN:0022-247X), 431, 529–544, 2015.
45. H. Liang and J. Torregrosa, *Parallelization of the Lyapunov constants and cyclicity for centers of planar polynomial vector fields*, J. Differential Equations (ISSN:0022-0396), 259, 6494–6509, 2015.
46. L. A. Roberto, P. R. Silva, and J. Torregrosa, *Asymptotic expansion of the heteroclinic bifurcation for the planar normal form of the 1:2 resonance*, Internat. J. Bifur. Chaos Appl. Sci. Engrg. (ISSN:0218-1274), 26(1), 1650017–(8 pages), 2016.
47. A. Gasull, J. Giné, and J. Torregrosa, *Center problem for systems with two monomial nonlinearities*, Comm. Pure Appl. Math. (ISSN:1097-0312), 15(2), 577–598, 2016.
48. S. Pérez-González, J. Torregrosa, and P. Torres, *Existence and uniqueness of limit cycles for generalized φ -Laplacian Liénard equations*, J. Math. Anal. Appl. (ISSN:0022-247X), 439, 745–765, 2016.
49. H. Liang, J. Llibre, and J. Torregrosa, *Limit cycles coming from some uniform isochronous centers*, Advanced Nonlinear Studies (ISSN:1536-1365), 16(2), 197–220, 2016.
50. A. Gasull, J. Torregrosa, and X. Zhang, *The number of polynomial solutions of polynomial Riccati equations*, J. Differential Equations (ISSN:0022-0396), 261, 5071–5093, 2016.
51. P. T. Cardin and J. Torregrosa, *Limit cycles in planar piecewise linear differential systems with nonregular separation line*, Physica D (ISSN: 0167-2789), 337, 67–82, 2016.
52. H. Liang and J. Torregrosa, *Centers of projective vector fields of spatial quasi-homogeneous systems with weight (m, m, n) and degree 2 on the sphere*, Electron. J. Qual. Theo. (ISSN: 1417-3875), 103, 1–26, 2016.
53. H. Liang and J. Torregrosa, *Weak-foci of high order and cyclicity*, Qual. Theory Dyn. Syst. (ISSN:1575-5460), 16, 235–248, 2017.
54. D. D. Novaes and J. Torregrosa, *On extended chebyshev systems with positive accuracy*, J. Math. Anal. Appl. (ISSN:0022-247X), 448, 171–186, 2017.
55. C. A. Buzzi, A. Gasull, and J. Torregrosa, *Algebraic limit cycles in piecewise linear differential systems*, Internat. J. Bifur. Chaos Appl. Sci. Engrg. (ISSN:0218-1274), 28(3), 1850039–(14 pages), 2018.
56. C. A. Buzzi, M. F. S. Lima, and J. Torregrosa, *Limit cycles via higher order perturbations for some piecewise differential systems*, Physica D (ISSN: 0167-2789), 371, 28–47, 2018.
57. L. P. C. Cruz and J. Torregrosa, *Simultaneous bifurcation of limit cycles from a cubic piecewise center*

- with two period annuli*, J. Math. Anal. Appl. (ISSN:0022-247X), 461, 248–272, 2018.
58. L. P. C. Cruz, D. D. Novaes, and J. Torregrosa, *New lower bound for the Hilbert number in piecewise quadratic differential systems*, J. Differential Equations (ISSN:0022-0396), 266, 4170–4203, 2019.
 59. A. Gasull, J. T. Lázaro, and J. Torregrosa, *Rational parametrisation approach in some dynamical systems problems*, Qual. Theory Dyn. Syst. (ISSN:1575-5460), 18, 583–602, 2019.
 60. R. Prohens and J. Torregrosa, *New lower bounds for the Hilbert numbers using reversible centers*, Nonlinearity (ISSN:0951-7715), 32, 331–355, 2019.
 61. I. Sánchez-Sánchez and J. Torregrosa, *New advances on the Lyapunov constants of some families of planar differential systems*, Research Perspectives CRM Barcelona (ISSN:2509-7407), Summer 2018, 161–167, 2019.
 62. C. A. Buzzi, J. C. Medrado, and J. Torregrosa, *Limit cycles in 4-star-symmetric planar piecewise linear systems*, J. Differential Equations (ISSN:0022-0396), 268(5), 2414–2434, 2020.
 63. L. P. C. Cruz, V. G. Romanovskii, and J. Torregrosa, *The center and cyclicity problems for quadratic linear-like reversible systems*, Nonlinear Anal. (ISSN:0362-546X), 190, 111593:1–19, 2020.
 64. L. P. C. Cruz and J. Torregrosa, *A Bendixson-Dulac theorem for some piecewise systems*, Nonlinearity (ISSN:0951-7715), 33, 2455–2480, 2020.
 65. A. Gasull, J. Torregrosa, and X. Zhang, *Piecewise linear differential systems with an algebraic line of separation*, Electron. J. Differential Equations (ISSN:1072-6691), 2020(19), 1–14, 2020.
 66. L. F. Gouveia and J. Torregrosa, *24 crossing limit cycles in only one nest for piecewise cubic systems*, Applied Mathematical Letters (ISSN:0893-9659), 103, 106189–6 pages, 2020.
 67. J. Huang, J. Torregrosa, and J. Villadelprat, *On the number of limit cycles in generalized Abel equations*, SIAM J. Appl. Dyn. Syst. (ISSN:1536-0040), 19(4), 2343–2370, 2020.
 68. E. Freire, E. Ponce, J. Torregrosa, and F. Torres, *Limit cycles from a monodromic infinity in planar piecewise linear systems*, J. Math. Anal. Appl. (ISSN:0022-247X), 496, 124818–, 2021.
 69. J. Giné, L. F. Gouveia, and J. Torregrosa, *Lower bounds for the local cyclicity for families of centers*, J. Differential Equations (ISSN:0022-0396), 275, 309–331, 2021.
 70. L. F. Gouveia and J. Torregrosa, *Lower bounds for the local cyclicity of centers using high order developments and parallelization*, J. Differential Equations (ISSN:0022-0396), 273, 447–479, 2021.
 71. L. F. Gouveia and J. Torregrosa, *Local cyclicity in low degree planar piecewise polynomial vector fields*, Nonlinear Anal. Real World Appl. (ISSN:1468-1218), 60, 103278–, 2021.
 72. I. Sánchez-Sánchez and J. Torregrosa, *Criticality via first order development of the period constants*, Nonlinear Anal. (ISSN:0362-546X), –, –, .
 73. I. Sánchez-Sánchez and J. Torregrosa, *New lower bounds of the number of critical periods in reversible centers*, J. Differential Equations (ISSN:0022-0396), 292, 427–460, 2021.
 74. J. L. R. Bastos, C. A. Buzzi, and J. Torregrosa, *Orbitally symmetric systems with applications to planar centers*, Commun. Pure Appl. Anal. (ISSN: 1534-0392), 20(10), 3301–3329, 2021.
 75. C. A. Buzzi, A. L. Rodero, and J. Torregrosa, *Centers and limit cycles of vector fields defined on invariant spheres*, J. Nonlinear Sci. (ISSN:0938-8974), 31, 92–, 2021.
 76. I. Sánchez-Sánchez and J. Torregrosa, *Hopf bifurcation in 3-dimensional polynomial vector fields*, Comm. Nonlin. Sci. Numer. Sim. (ISSN:1007-5704), 105, 106068–, 2022.
 77. R. D. S. Oliveira, I. Sánchez-Sánchez, and J. Torregrosa, *Simultaneous bifurcation of limit cycles and critical periods*, Qual. Theory Dyn. Syst. (ISSN:1575-5460), 21, 1–35, 2022.
 78. J. Itikawa, R. D. S. Oliveira, and J. Torregrosa, *First-order perturbation for multi-parameter center families*, J. Differential Equations (ISSN:0022-0396), 309, 291–310, 2022.
 79. L. F. d. S. Gouveia and J. Torregrosa, *The local cyclicity problem. Melnikov method using Lyapunov constants*, Proceedings of Edinburg Mathematical Society, 65(2), 356–375, 2022.
 80. L. P. C. Cruz and J. Torregrosa, *Bifurcation of limit cycles in piecewise quadratic differential systems with an invariant straight line*, J. Math. Anal. Appl. (ISSN:0022-247X), 514(1), –, 2022.
 81. J. L. R. Bastos, C. A. Buzzi and J. Torregrosa, *Cyclicity Near Infinity in Piecewise Linear Vector Fields Having a Nonregular Switching Line*, Qual. Theory Dyn. Syst. (ISSN:1575-5460), 22 Article 125, –, 2023.

PREPRINTS

1. C. A. Buzzi, A. L. Rodero, and J. Torregrosa, *3-dimensional piecewise linear and quadratic vector fields with invariant spheres*, Preprint, , –, .
2. A. C. Rezende, M. A. S. Santos, and J. Torregrosa, *The period function for a family of piecewise planar hamiltonian systems*, Preprint, , –, .
3. A. C. Rezende, M. A. S. Santos, and J. Torregrosa, *The period function of piecewise planar reversible quadratic systems*, Preprint, , –, .
4. P. D. Maesschalck and J. Torregrosa, *Critical periods in planar polynomial centers near a maximum number of cusps.*, Preprint, , –, .
5. J. Giné, V. G. Romanovskii, and J. Torregrosa., *Time-reversibility and integrability of $p:-q$ resonant vector fields*, Preprint, , –, .
6. F. Braun, L. P. C. Cruz and J. Torregrosa, *On the number of limit cycles in piecewise planar quadratic differential systems*, Preprint, , –, .

RESEARCH STAYS

1. Universitat de les Illes Balears, Palma de Mallorca, Spain. 10/2000-09/2002. 2 years.
2. Peking University, Beijing, China. 11/2003 Weeks: 2.
3. Universidade Estadual de Campinas, Campinas, Brazil. 09/2006 Weeks: 4.
4. Peking University, Beijing, China. 11/2006-12/2006 Weeks: 7.
5. Université de Tours, Tours, France. 06/2008 Weeks: 1.
6. Universidad de Granada, Granada, Spain. 05/2009-06/2009 Weeks: 2.
7. Université de Tours, Tours, France. 05/2010 Weeks: 2.
8. Universidade Federal de Goiás, Goiania, Brazil. 04/2011 Weeks: 4.
9. Universidade Estadual Paulista, Sao Jose do Rio Preto, Brazil. 05/2011 Weeks: 4.
10. Universidade Estadual de Campinas, Campinas, Brazil. 06/2011 Weeks: 5.
11. Universidad de Sevilla, Sevilla, Spain. 22/03/2012-30/03/2012 Weeks: 2.
12. Universitat de les Illes Balears, Palma de Mallorca, Spain. 05/2012 Weeks: 2.
13. Universitat de les Illes Balears, Palma de Mallorca, Spain. 02/2013 Weeks: 1.
14. Universidade Estadual de Campinas, Campinas, Brazil. 11/03/2013-11/05/2013 Weeks: 9.
15. Universitat de les Illes Balears, Palma, Spain. 07/2013 Weeks: 2.
16. Xian Jiao Tong University and Shangai Jiao Tong University, Xian-Shangai, P. R. China. 10/13 Weeks: 3.
17. Universidade Estadual de Campinas - Universidade Estadual Paulista, Campinas- Sao Jose do Rio Preto, Brazil. 05-06/14 Weeks: 4.
18. Universitat de les Illes Balears, Palma, Spain. May 11-25/2015 Weeks: 2.
19. Universitat de Lleida, Lleida, Spain. June 1-6/2015 Weeks: 1.
20. Universidade Federal de Goiás, Goiania, Brazil. June 15-27/15 Weeks: 2.
21. Universidade Federal de Itajubá, Itajubá, Brazil. June 27-July 10/15 Weeks: 2.
22. Universidade Estadual Paulista, Sao Jose do Rio Preto, Brazil. July 10-31/15 Weeks: 3.
23. Universitat de les Illes Balears, Palma, Spain. March 09-27/2016 Weeks: 2.
24. Universitat de les Illes Balears, Palma, Spain. May 30/2016 Weeks: 1.
25. Universidade Federal de Goiás, Goiania, Brazil. 06-07/2016 Weeks: 2.
26. Universidade Estadual Paulista (UNESP), Sao Jose do Rio Preto, Brazil. 21-06/2016 Weeks: 3.
27. Shangai Jiao Tong University, Shangai, P. R. China. 10/2016 Weeks: 2.
28. Universidade Estadual Paulista (UNESP), Sao Jose do Rio Preto, Brazil. 05/2017 Weeks: 6.
29. Hasselt University, Hasselt, Belgica. 10/2017 Weeks: 1.
30. Universitat de les Illes Balears, Palma, Spain. 03/2018 Weeks: 2.
31. Universitat de Lleida, Lleida, Spain. 03/2018 Weeks: 1.
32. Universidade Estadual Paulista (UNESP), Sao Jose do Rio Preto, Brazil. 04/2018 Weeks: 3.
33. Universidade de Sao Paulo (USP), Sao Carlos, Brazil. 05/2018 Weeks: 1.

34. Universidad del Bio Bio, Concepción, Chile. 05/2018 Weeks: 2.
35. Universitat de les Illes Balears, Palma, Spain. 09/2018 Weeks: 1.
36. Universidade Estadual Paulista (UNESP), Sao Jose do Rio Preto, Brasil. 03/2019 Weeks: 6.
37. Universidade de Sao Paulo (USP), Sao Carlos, Brasil. 04/2019 Weeks: 6.
38. Peking University, Beijing, China. 01/2020 Weeks: 1.
39. Universitat de les Illes Balears, Palma, Spain. 04/2022 Weeks: 9.
40. Universidade Estadual Paulista (UNESP), Sao Jose do Rio Preto, Brasil. 03/2023 Weeks: 5.
41. Universidade de Sao Paulo (USP), Sao Carlos, Brasil. 04/2023 Weeks: 4.
42. Universitat de les Illes Balears, Palma, Spain. 05/2023 Weeks: 2.

EUROPEAN PROJECTS

1. European Commission, Marie Curie Fellowship Contract N° HPMT-CT-2001-00247, Periodic orbits and dynamical systems, Universidad Autónoma de Barcelona, 2002-2004. Main Researcher at UAB: Jaume Llibre. European Coordinador: Jaume Llibre (Budget UAB: 158.400,00 Euros, Total Budget: 158.400,00 Euros)
2. European Commission (PIRSES-GA-2012-318999), Brazilian-European partnership in Dynamical Systems, Universidad Autónoma de Barcelona, 2013-2016. Main Researcher at UAB: Jaume Llibre. European Coordinador: Jeroen Lamb (Budget UAB: 54.264,00 Euros, Total Budget: 707.700,00 Euros)
3. European Commission (FP7-PEOPLE-2012-IRSES-316338), Dynamical systems and their applications , Universidad Autónoma de Barcelona, 2013-2016. Main Researcher at UAB: Jaume Llibre. European Coordinador: George Moza (Budget UAB: 71.400,00 Euros, Total Budget: 500.000,00 Euros)
4. European Commission (H2020-MSCA-RISE-2017-777911), Contributions to codimension k bifurcations in dynamical systems theory - Dynamics, Universidad Autónoma de Barcelona, 2018-2023. Main Researcher at UAB: Jaume Llibre & Joan Torregrosa. European Coordinador: Gheorghe Moza (Budget UAB: 216.000,00 Euros, Total Budget: 1.012.500,00 Euros)

BRAZIL-SPAIN COLLABORATION PROJECTS

1. PHB2009-0025-PC, Teoria cualitativa de las ecuaciones diferenciales II, Universidad Autónoma de Barcelona, 2010-2013. Main Researcher: Jaume Llibre. (Budget: 44.000,00 Euros)
2. FAPESP 2017/03352-6, Professor Visitante do Exterior, Universidade Estadual Paulista (UNESP), 2017-2017. Main Researcher: Claudio Buzzi & **Joan Torregrosa**. (Budget: 6.000,00 Euros)

SPANISH PROJECTS

1. DGICYT No. PB93-0860, Teoría cualitativa de los Sistemas Dinámicos, Universidad Autónoma de Barcelona, 1994-1997. Main Researcher: Jaume Llibre. (Budget: 70.318,40 Euros)
2. DGICYT No.PB96-1153, Teoría cualitativa de los sistemas dinámicos con énfasis en las órbitas periódicas, Universidad Autónoma de Barcelona, 1997-2002. Main Researcher: Jaume Llibre. (Budget: 96.161,90 Euros)
3. MCyt No.BFM2002-04236-C02-2, Teoría cualitativa de los sistemas dinámicos con énfasis en sus bifurcaciones, Universidad Autónoma de Barcelona, 2002-2005. Main Researcher: Jaume Llibre. (Budget: 252.840,00 Euros)
4. MEC MTM2005-06098-C02-1, Estudio cualitativo de los sistemas dinámicos con énfasis en sus órbitas periódicas y sus bifurcaciones, Universidad Autónoma de Barcelona, 2006-2008. Main Researcher: Jaume Llibre. (Budget: 245.140,00 Euros)
5. Contrato de Investigación, Programa Intensificación I3-UAB: Contratación investigador postdoctoral, Universitat Autònoma de Barcelona, 2009-2012. Main Researcher: **Joan Torregrosa**. (Budget: 76.701,00 Euros)
6. MEC MTM2008-03437, Órbitas periódicas, bifurcaciones e integrabilidad de los sistemas dinámicos, Universidad Autónoma de Barcelona, 2009-2013. Main Researcher: Jaume Llibre. (Budget: 375.342,00 Euros)

7. MTM2010-11993-E, Advances in Qualitative Theory of Differential Equations, Universidad Autónoma de Barcelona, 01/01/2011–31/12/2011. Main Researcher: Armengol Gasull. (Budget: 4.000,00 Euros)
8. CIEM, Advances in Qualitative Theory of Differential Equations, Universidad de Cantabria, 01/01/2011–31/12/2011. Main Researcher: **Joan Torregrosa**. (Budget: 3.000,00 Euros)
9. SARE-C6-0416, Advances in Qualitative Theory of Differential Equations, Universidad de Cantabria, 01/01/2011–31/12/2011. Main Researcher: **Joan Torregrosa**. (Budget: 6.000,00 Euros)
10. MTM2011-14618-E, New Trends in Dynamical Systems, Universidad Autónoma de Barcelona, 01/01/2012–31/12/2012. Main Researcher: Armengol Gasull. (Budget: 15.000,00 Euros)
11. MINECO UNAB13-4E-1604, Computation server for Mathematical Departament of UAB, Universidad Autónoma de Barcelona, 2013–2015. Main Researcher: **Joan Torregrosa**. (Budget: 20.265,59 Euros)
12. MINECO MTM2013-40998-P, Algunos aspectos de la dinámica global de los sistemas diferenciales: Integrabilidad, Soluciones periódicas y Bifurcaciones, Universidad Autónoma de Barcelona, 2014–2016. Main Researcher: Jaume Llibre, **Joan Torregrosa**. (Budget: 102.212,33 Euros)
13. MINECO PEJ-2014-A-87999, Technicians incorporation for computer science and bioinformatics, Universidad Autónoma de Barcelona, 2016–2017. Main Researcher: **Joan Torregrosa**. (Budget: 42.659,00 Euros)
14. MINECO MTM2016-77278-P FEDER, Algunos aspectos de la dinamica local y global de los sistemas dinamicos continuos y discretos: integrabilidad, periodicidad y bifurcaciones, Universidad Autónoma de Barcelona, 30-12-2016–29-12-2019. Main Researcher: Jaume Llibre, **Joan Torregrosa**. (Budget: 140.118,00 Euros)
15. CIEM AQTDE, Advances in Qualitative Theory of Differential Equations, Universidad de Cantabria, 01/01/2019–31/12/2019. Main Researcher: **Joan Torregrosa**. (Budget: 4.000,00 Euros)
16. RED2018-102324-T, Dinámica, atractores y no linealidad: caos y estabilidad, Universitat Autònoma de Barcelona, 01/01/2020–31/12/2022. Main Researcher: **Joan Torregrosa**. (Budget: 21.000,00 Euros)
17. MICIN PID2019-104658GB-I00, Estudio de los sistemas dinámicos continuos y discretos con énfasis en sus bifurcaciones, órbitas periódicas e integrabilidad, Universidad Autónoma de Barcelona, 01/06/2020–28/02/2023. Main Researcher: Jaume Llibre, **Joan Torregrosa**. (Budget: 111.320,00 Euros)
18. RED2022-134273-T, Dinámica, atractores y no linealidad: caos y estabilidad, Universitat Autònoma de Barcelona, 01/06/2023–31/05/2025. Main Researcher: **Joan Torregrosa**. (Budget: 24.000,00 Euros)
19. MICIN PID2022-136613NB-I00, Sistemas dinamicos continuos y discretos: bifurcaciones, órbitas periódicas, integrabilidad y aplicaciones, Universidad Autónoma de Barcelona, 01/09/2023–31/08/2026. Main Researcher: **Joan Torregrosa**. (Budget: 200.000,00 Euros)

GENERALITAT DE CATALONIA PROJECTS

1. Generalitat de Catalunya CONACIT 1999SGR-00349, Grup de Sistemes Dinàmics i Teoria Qualitativa de la UAB, Universidad Autónoma de Barcelona, 2000–2001. Main Researcher: Jaume Llibre. (Budget: 24.040,48 Euros)
2. Generalitat de Catalunya CIRIT 2001SGR-00173, Grup de Sistemes Dinàmics i Teoria Qualitativa de la UAB, Universidad Autónoma de Barcelona, 2002–2005. Main Researcher: Jaume Llibre. (Budget: 51.687 Euros)
3. Generalitat de Catalunya CONACIT Exp. 00550, Grup de Sistemes Dinàmics de la UAB, Universidad Autónoma de Barcelona, 2006–2008. Main Researcher: Jaume Llibre. (Budget: 42.200,00 Euros)
4. Generalitat de Catalunya 2006BE00631, Centres i Cicles límit a les equacions d'Abel, , 2006–2006. Main Researcher: **Joan Torregrosa**. (Budget: 5.175,00 Euros)
5. Generalitat de Catalunya 2009SGR410, Grup de Sistemes Dinàmics de la UAB, Universidad Autónoma de Barcelona, 2009–2013. Main Researcher: Jaume Llibre. (Budget: 76.960,00 Euros)
6. Generalitat de Catalunya 2014SGR568, Grup de Sistemes Dinàmics de la UAB, Universidad Autónoma de Barcelona, 2014–2016. Main Researcher: Jaume Llibre. (Budget: 38.400,00 Euros)
7. Generalitat de Catalunya 2017SGR1617, Grup de Sistemes Dinàmics de la UAB, Universidad Autónoma de Barcelona, 2018–2020. Main Researcher: Jaume Llibre. (Budget: 44.480,00 Euros)
8. Generalitat de Catalunya 2021SGR00113, Grup de Sistemes Dinàmics de la UAB, Universidad Autónoma de Barcelona, 2022–2024. Main Researcher: **Joan Torregrosa**. (Budget: 40.000,00 Euros)

INNOVATION TEACHING PROJECTS

1. Universidad Autònoma de Barcelona, Aula matemàtica, Universidad Autònoma de Barcelona, 01/09/06–31/08/07. Main Researcher: **Joan Torregrosa**. (3.000,00 Euros)
2. Generalitat de Catalunya 2009 MQD 00145, Aula matemàtica, un projecte per a la millora de l'aprenentatge de les Matemàtiques a la UAB, Universidad Autònoma de Barcelona, 01/09/09–30/09/11. Main Researcher: **Joan Torregrosa**. (6.500,00 Euros)
3. Universidad Autònoma de Barcelona, Grup de Millora de la Qualitat Docent ACME-UAB, Universidad Autònoma de Barcelona, 01/12/16–31/12/18. Main Researcher: **Joan Torregrosa**. (1.500,00 Euros)
4. Universidad Autònoma de Barcelona, Grup de Millora de la Qualitat Docent ACME-UAB, Universidad Autònoma de Barcelona, 01/09/21–31/07/22. Main Researcher: **Joan Torregrosa**. (1.000,00 Euros)

TALKS IN CONFERENCES

1. Euler-Jacobi's formula for double points and applications to quadratic and cubic systems, Workshop on Dynamics of Vector Fields, Barcelona, Spain, 1992.
2. Índice y multiplicidad, IV Congrés de Matemàtica Aplicada, Vic, Spain, 1995.
3. Perturbación de sistemas Hamiltonianos del problema centro-foco., V Conference de Matemática Aplicada, Vigo, Spain, 1997.
4. A new algorithm for the computation of the Lyapunov constants for some degenerated critical points, 3rd World Congress of Nonlinear Analysts, Catania, Sicilia, Italia, 2000.
5. Ciclicidad para sistemas planos no diferenciables, VII Conference de Matemática Aplicada, Salamanca, Spain, 2001.
6. Ciclos limite en ecuaciones de Abel cúbicas, No Lineal 2002, Toledo, Spain, 2002.
7. Limit cycles for cubic rigid systems, International Conference on Differential Equations 2003, Hasselt, Belgica, 2003.
8. Sobre la forma de las soluciones de sistemas hamiltonianos perturbados, VIII Conference de Matemática Aplicada, Tarragona, Spain, 2003.
9. Ciclos Límite explícitos no algebraicos para sistemas polinomiales, IX Conference de Matemática Aplicada, Leganés, Madrid, Spain, 2005.
10. Algebraic and non-algebraic limit cycles for polynomial systems, II Reunião Regional de Sistemas Dinâmicos da UNESP, São José do Rio Preto, Brazil, 2006.
11. Limit cycles bifurcation from a k -dimensional isochronous center contained in R^n with $k \leq n$, International Workshop on Bifurcations of Planar Vector Fields, Beijing, China, 2006.
12. Chebyshev systems and the zeros of some Abelian integrals, Singularités des champs de vecteurs du plan, Luminy, France, 2009.
13. Resultados globales de la curva de bifurcación de Bogdanov-Takens, Third symposium on planar vector fields, Lleida, Spain, 2010.
14. The limit cycle bifurcation curve for the Bogdanov-Takens system, Symbolic Computation and its Applications, Aachen, Germany, 2012.
15. A new Chebyshev family with applications to Abel equations, Dynamical Systems: 100 years after Poincaré, Gijón, Spain, 2012.
16. Lower bounds for the maximum number of limit cycles of discontinuous piecewise linear differential systems with a straight line of separation, VI Workshop on Dynamical Systems - MAT 70 An International Conference on Dynamical Systems celebrating the 70th birthday of Marco Antonio Teixeira, Campinas, Brazil, 2014.
17. Polynomial solutions of Riccati equations, The 10th AIMS Conference on Dynamical Systems, Differential Equations and Applications, Madrid, España, 2014.
18. The center-focus problem in piecewise systems, Ddays 2014, Badajoz, España, 2014.
19. Center, weak-focus and cyclicity problems for planar systems with few monomials, Conference RSME 2015, Granada, España, 2015.
20. Center, weak-focus and cyclicity problems for planar systems, Theoretical and computational methods in dynamical systems and fractal geometry, Maribor, Slovenia, 2015.

21. Center, weak focus and cyclicity problems for planar systems, VII Oficina de Sistemas Dinâmicos, Itajubá, Brazil, 2015.
22. Center, weak-focus and cyclicity problems for planar systems with few monomials, 1st Joint Meeting Brazil-Spain in Mathematics, Fortaleza, Brazil, 2015.
23. Limit cycles in piecewise planar systems via ET-systems with accuracy, Open Problems in Nonsmooth Dynamics, Bellaterra, Spain, 2016.
24. Limit cycles in planar polynomial systems, 22nd Conference on Applications of Computer Algebra, Kassel, Germany, 2016.
25. New lower bounds for $M(n)$ and $H(n)$ for small values of n , 4th Symposium on Planar Vector Fields, Lleida, Spain, 2016.
26. Hilbert numbers using reversible centers, Symmetry and Perturbation Theory, Pula, Sardinia, Italy, 2018.
27. Limit cycles bifurcating from isochronous centers, Working day on the qualitative study of Dynamical Systems and their applications, Palma, Spain, 2018.
28. Hilbert numbers for low degree systems, Workshop on New Trends in Polynomial Differential Systems, Montreal, Canada, 2019.
29. Limit cycles in piecewise linear systems with nonregular separation line, ICIAM, Valencia, Spain, 2019.
30. Lower bounds for the local cyclicity for low degree polynomial families of centers, Bifurcations and finiteness problems in Ordinary Differential, Bellaterra, Spain, 2020.
31. Factor Reversible Systems with Applications to Planar Centers, 2020 International Conference on Dynamical Systems and Applications, Shanghai, China, 2020.
32. Factor Reversible Systems with Applications to Planar Centers, Oficina Virtual de Sistemas Dinâmicos 2020, Ribeirão Preto/SP, Brazil, 2020.
33. Centers in some piecewise quadratic differential systems with an invariant straight line, Second Virtual Workshop on Dynamical Systems, Ribeirão Preto/SP, Brazil, 2021.
34. Limit cycles and critical periods using higher-order Taylor developments, Dynamical Systems and Singularities Meeting, Mallorca, Spain, 2022.
35. Oscillations of the period function in some reversible centers, Dynamical Systems: Qualitative and Bifurcation Theory (Online), Shanghai, China, 2022.
36. Limit cycles near a heteroclinic connection in planar piecewise linear differential systems, Sistemas Dinámicos y no regularidad, GDM2022, Sevilla, Spain, 2022.
37. Best lower bound for the number of critical periods in planar centers, Advances in Qualitative Theory of Differential Equations, Port de Soller, Spain, 2023.
38. Local cyclicity for low degree families of centers, Fractal properties of bifurcations of dynamical systems, Zagreb, Croatia, 2023.

ADVANCED COURSES

1. Center-focus and cyclicity problems, VIII Oficina de Sistemas Dinamicos, Pirenopolis, Brazil, 2016.
2. Center-focus and cyclicity problems, Summer School on Qualitative Theory of Piecewise Ordinary Differential Equations, Bellaterra, Spain, 2021.

RESEARCH TALKS AT UNIVERSITIES

1. "Exact number of limit cycles for a family of rigid systems". Peking University. 2003.
2. "Explicit Non-Algebraic limit cycles for polynomial systems". Universitat de les Illes Balears. 2005.
3. "Localization of limit cycles for some rotated vector fields". Universidade Federal de Goiás. 2006.
4. "Limit cycles bifurcating from a k -dimensional isochronous centers contained in R^n with $k \leq n$ ". Universitat de les Illes Balears. 2006.
5. "Localization of limit cycles for some rotated vector fields". Peking University. 2006
6. "Sistemes de Chebyshev i cotes del número de zeros de funcions d'una variable real". Universitat de les Illes Balears. 2008
7. "A new Chebyshev family with applications to Abel equations". Universitat de les Illes Balears. 2011. Universidade de Campinas (UNICAMP), 2011. Universidade Estadual Paulista, Sao Jose do Rio Preto, 2011.

8. "Resultados globales de la curva de bifurcación de Bogdanov-Takens". Universidade Federal de Goiás, 2011.
9. "A proof of Perko's conjectures for the Bogdanov-Takens system". Universidade Estadual Paulista (UNESP-IBILCE), Sao José do Rio Preto (Brazil), 2013.
10. "Explicit Abelian integrals and Chebyshev systems" at Shangai Normal University, Shangai (P.R. China), October, 2013.
11. "Upper bounds for the number of zeroes for some Abelian integrals" at Xian Jiao Tong University (Xian) and Shangai Jiao Tong University (Shangai) (P. R. China), October, 2013.
12. "Limit cycles in piecewise linear differential equations in two zones" at Xian Jiao Tong University (Xian) and Shangai Jiao Tong University (Shangai) (P. R. China), October, 2013.
13. "The number of polynomial solutions of polynomial Riccati equations" at Universidade Estadual Paulista (UNESP), Sao Jose do Rio Preto (Brazil), June, 2014.
14. "Center, weak focus and cyclicity problems for planar systems" at Universitat de les Illes Balears, Palma de Mallorca, May, 2015.
15. "Extended Chebyshev Systems with accuracy and applications" at Universidade Federal de Goiás, Goiania, June, 2015.
16. "Limit cycles in piecewise linear differential equations in two zones: The regular versus the nonregular case" at Shanghai Jiao-Tong University, Shanghai (P.R. China), October, 2016.
17. "Limit cycles in planar polynomial systems with few monomials" at Shanghai Jiao-Tong University, Shanghai (P.R. China), October, 2016.
18. "Rational parametrisation approach in some dynamical systems problems" at Universidad del Bio-Bio, Concepción, Chile, May, 2018.
19. "New lower bounds for the Hilbert numbers using reversible centers" at Universidad del Bio-Bio, Concepción, Chile, May, 2018.
20. "New lower bounds for the Hilbert numbers using reversible centers" at Universidade de Sao Paulo, Sao Carlos, Brazil, May, 2018.
21. "Rational parametrisation approach in some dynamical systems problems" at Universidade Estadual Paulista, Sao Jose do Rio Preto, Brazil, April, 2018.
22. "Hilbert numbers for low degree systems" at Peking University, Peking (China), January, 2020.
23. "Cicles límit petits en camps polinomials definits a trossos" at Universitat de les Illes Balears, Palma (Spain), 8 November, 2019.
24. "Limit cycles in piecewise systems defined in two zones" at Program of the Mid-term meeting Project Dynamics, Horizon2020-RISE-777911, Wiener Neustadt (Austria), 23 July, 2019.
25. "Lower bounds for the Hilbert numbers in low degree polynomial vector fields" at Universidade Estadual de Campinas, Campinas (Brazil), 12 March, 2019.
26. "Solving equations coming from some dynamical systems" at Universidade Estadual de Sao Paulo, Sao Jose do Rio Preto (Brazil), 4 April, 2019.
27. "Limit cycles in piecewise linear systems" at Universidade Sao Paulo, Sao Carlos (Brazil), May, 2019.
28. "Solving equations coming from some dynamical systems" at Universidade Federal de Sao Carlos, Sao Carlos (Brazil), 22 May, 2019.
29. "Hilbert numbers for low degree systems" at Peking University, Beijing (China), 21 January, 2020.
30. "Oscil·lacions de la funció de període per a centres al pla" at Universitat de les Illes Balears, Mallorca (Spain), May, 2022.
31. "Critical periods in planar polynomial centers near a maximum number of cusps" at Universidade de Sao Paulo, Sao Carlos (Brasil), May 3, 2023.
32. "Critical periods in planar polynomial centers near a maximum number of cusps" at UNESP, São José do Rio Preto-SP, Brazil, March 22, 2023.

ORGANIZED CONFERENCES AND WORKSHOPS

1. DDays 2003 (Reunión de inicio de la Red Temática: Dinámica no lineal en dimensión baja y atractores extraños) [<http://www.dance-net.org>] (Salou, Spain), March 13-15, 2003 [National].
2. Recent Trends in Nonlinear Science, 2004 [<http://www.dance-net.org>] (Palma, Spain), February 2-6, 2004 [International].

3. Workshop sobre ecuaciones en diferencias [<http://www.gsd.uab.cat>] (Cardona, Spain), December 14-16, 2005 [National].
4. Workshop sobre Órbitas Periódicas de Ecuaciones Diferenciales (Tossa, Spain) [<http://www.gsd.uab.cat/op2008>], October 06-10, 2008 [National].
5. Advances in Qualitative Theory of Differential Equations (Castro Urdiales, Spain) [<http://www.gsd.uab.cat/aqtde2011>], September 12-16, 2011 [International].
6. New Trends in Dynamical Systems [<http://www.gsd.uab.cat/ntds2012>] (Salou, Spain), October 1-5, 2012 [International].
7. Advances in Qualitative Theory of Differential Equations (Tarragona, Spain) [<http://www.gsd.uab.cat/aqtde2015>], April 20-24, 2015 [International].
8. First international meeting SBM-SBMAC-RSME. (Fortaleza, Brazil) Special Session: Piecewise Smooth Differential Systems [www.sbm.org.br/jointmeeting-spain/], December 7-10, 2015 [International].
9. 22nd Conference on Applications of Computer Algebra (Kassel, Germany) Special Session: Computer Algebra for Dynamical Systems and Celestial Mechanics [<http://www.gsd.uab.cat/aca2016ds/>], August 1-4, 2016 [International].
10. 1era Jornada de Sistemes Dinàmics a Catalunya (Bellaterra, Spain) [www.sistemesdinamics.cat], October 5, 2016 [National].
11. Ddays 2016 (Salou, Spain) [www.dance-net.org/dd2016], November 9-11, 2016 [National].
12. Qualitative Theory of Ordinary Differential Equations in “II encuentro Conjunto España-Brasil de Matemáticas” (Cádiz, Spain) (Sesión Especial), December 11-14, 2018 [International].
13. Advances in Qualitative Theory of Differential Equations [<http://www.gsd.uab.cat/aqtde2019>] (Castro Urdiales, Spain), June 17-21, 2019 [International].
14. Recent Trends in Nonlinear Science [<http://www.dance-net.org/rtns2020>] (Bellaterra, Spain), February 3-7, 2020 [International].
15. Bifurcations and finiteness problems in Ordinary Differential Equations (Bellaterra, Spain), February 17-21, 2020 [International].
16. Intensive Research Program (Bellaterra, Spain), February 1 - April 31, 2020 [International].
17. Summer School on Qualitative Theory of Piecewise Ordinary Differential Equations (Bellaterra, Spain), July 12-16, 2021 [International].
18. Ddays 2021 (Lleida, Spain), September 8-10, 2021 [National].
19. New Trends on bifurcations in ordinary differential equations (Bellaterra, Spain), September 06-09, 2022 [International].
20. Advances in Qualitative Theory of Differential Equations (Port de Soller, Spain) [<http://www.gsd.uab.cat/aqtde2023>], February 6-10, 2023 [International].

DISSEMINATION TALKS AT UNIVERSITIES

1. “Iterated maps and chaos”, Talks for undergraduated students, UAB, 2000. (In Catalan)
2. “Self-similarity and Fractals”, Talks for undergraduated students, UAB, 2003. (In Catalan)
3. “Self-similarity and Fractals”, Talks for undergraduated students, UAB, 2004. (In Catalan)
4. “Fractals in nature”, Maths’ Saturdays, UAB, 2005. (In Catalan)
5. “Fractals in nature”, Maths’ Saturdays, UAB, 2006. (In Catalan)
6. “Fractals in nature”, Maths’ Saturdays, UAB, 2007. (In Catalan)
7. “A particular vision of Catalonia”, April, 2013. (Extension Project “Spanish for specific public”. Sao José do Rio Preto (Brazil))
8. “Educational system and Math degrees in Spain”, April, 2013. (Extension Project “Spanish for specific public”. Sao José do Rio Preto (Brazil))
9. “Fractals in nature”, Universitat a l’Abast (UAB). December, 2016. (In Catalan)
10. “Fractals in nature”, Maths’ Saturdays, UAB, 2017. (In Catalan)
11. “The Superior Educational System in Spain”, 16 April, 2019. (Universidade Estadual de Sao Paulo (Brazil))
12. “Catalonia: History, Politics and Culture”, 16 April, 2019. (Universidade Estadual de Sao Paulo (Brazil))

OTHER

1. Coordinator of the Spanish Dynamical Systems network DANCE (from October 5th, 2018)
2. Web manager of the Dynamical Systems Resarch Group of UAB (<http://www.gsd.uab.cat>).
3. Web manager of the Dynamical Systems Spanish Network (<http://www.dance-net.org>) from 2004 to 2018.
4. Web manager of Catalonia Dynamical Systems (<http://www.sistemasdinamics.cat>).
5. Six positive Spanish Goverment teaching evaluation for the periods: 1991-1997, 1998-2002, 2003-2007, 2008-2012, 2013-2017, 2018-2022.
6. 1636 Cites in Google Scholar (917 from 2018). Index H:23. Index I10:43.
7. 46 coauthors from Belgium (1), Brazil (17), Chile (1), China (4), France (1), Netherlands (1), Slovenia (1), and Spain (20).