

María Alejandra Rodríguez Hertz - CV

- Date of birth: February 11, 1970

Educational experience

- Universidad Nacional de Rosario (Argentina), BSc, 1994
- Universidad de la Republica (Uruguay), PhD, 1999

Professional experience

- 2016-: Full Professor (tenured), SUSTC (China)
- 2011-: Full Professor, IMERL, Universidad de la Republica (Uruguay)
- 2008-2011: Associate Professor, IMERL, Universidad de la Republica (Uruguay)
- 2000-2008: Assistant Professor, IMERL, Universidad de Republica (Uruguay)
- 1999: Assistant Professor, School of Economics, Universidad de la Republica (Uruguay)
- 1994-2000: Teaching Assistant, IMERL, Universidad de la Republica (Uruguay)
- 1994-1995: Teaching Assistant, CMAT, Universidad de la Republica (Uruguay)
- 1992-1994: Teaching Assistant, Universidad Nacional de Rosario (Argentina)
- 1991-1994: Professor, Instituto Politecnico Superior - Universidad Nacional de Rosario (Argentina)

Positions in academic organizations and editorial services

- 2016-2020 Vice-president for Latin-America and the Caribbean of the Organization for Women in Science for the Developing World (OWSD), depending from UNESCO
- 2014-2019: Simons Associate of the International Center of Theoretical Physics - ICTP (Trieste, Italy)
- 2009-: Member of the Uruguayan National System of Researchers (SNI)
- Member of the Editorial Board of Publicaciones Matematicas del Uruguay.

Academic papers

- (with P. Carrasco, F. Rodriguez Hertz and R. Ures) Partially hyperbolic dynamics in dimensión 3, to appear in Ergodic Theory and Dynamical Systems.
- (with F. Rodriguez Hertz and R. Ures) Center-unstable foliations do not have compact leaves, Mathematical Research Letters, 23, 6, (2016) 1819-1832
- (with F. Rodriguez Hertz and R. Ures) A non-dynamically coherent example on T^3 , Annales de l'Institut Henri Poincaré. Analyse Non Linéaire , 33,4,(2016) 1023-1032
- Some advances on generic properties of the Oseledets splitting, Disc. Cont. Dyn. Sys. A , (2013) 33 , 9
- Genericity of non-uniform hyperbolicity in dimension 3, Journal of Modern Dynamics , 6 , 1 (2012) 121-138.
- (with F. Rodriguez Hertz, A. Tahzibi and R. Ures), Maximizing measures for partially hyperbolic systems with compact leaves, Ergodic Theory & Dynamical Systems , 32 ,2 (2012) 825-839.
- (with F. Rodriguez Hertz, A. Tahzibi and R. Ures), New criteria for ergodicity and non-uniform hyperbolicity, Duke Math. Journal , 160 , 3, (2011) 599-629.

- (with F. Rodriguez Hertz and R. Ures), Accessibility and abundance of ergodicity in dimension 3: a survey, *Publicaciones Matematicas del Uruguay*, 12 (2011) 177-198.
- (with F. Rodriguez Hertz, A. Tahzibi and R. Ures), Uniqueness of SRB measures for transitive diffeomorphisms of surfaces, *Comm. Math. Phys.*, 306, 1, (2011) 35-49.
- (with F. Rodriguez Hertz and R. Ures), Tori with hyperbolic dynamics in 3-manifolds, *J. Modern Dyn.*, 5, 1 (2011) 185-202.
- (with F. Rodriguez Hertz, A. Tahzibi and R. Ures), Creation of blenders in the conservative setting *Nonlinearity*, 23, 2, (2010) 211-223.
- (with T. Fisher), Quasi-Anosov diffeomorphisms of 3-manifolds, *Transactions of the AMS*, 361, 7, (2009) 3707-3720.
- (with K. Burns, F. Rodriguez Hertz, A. Talitskaya and R. Ures), Density of accessibility for partially hyperbolic diffeomorphisms with one-dimensional center, *Disc. Cont. Dyn. Sys. A volume dedicated to Ya. Pesin*, 22 1/2 (2008) 75-88
- (with F. Rodriguez Hertz and R. Ures) Partial hyperbolicity and ergodicity in dimension three, *J. Modern Dynamics*, 2, 2 (2008) 187-208.
- (with F. Rodriguez Hertz and R. Ures), On the existence and uniqueness of weak foliations in dimension 3, *Contemp. Math*, volume dedicated to M. Brin, 469 (2008) 303-316.
- (with F. Rodriguez Hertz and R. Ures), Accessibility and stable ergodicity for partially hyperbolic diffeomorphisms with 1D-center bundle, *Inventiones Math.*, 172, 2 (2008) 187-208.
- (with F. Rodriguez Hertz, A. Tahzibi and R. Ures), A criterion for ergodicity of non-uniformly hyperbolic diffeomorphisms, *ERA*, 14 (2007).
- (with F. Rodriguez Hertz and R. Ures), A survey of partially hyperbolic dynamics, "Partially Hyperbolic Dynamics, Laminations, and Teichmuller Flow," (eds G. Forni, M. Lyubich, C. Pugh and M. Shub), *Fields Inst. Comm.*, AMS, (2007), 35-88.
- (with F. Rodriguez Hertz and R. Ures), Some results on the integrability of the center bundle for partially hyperbolic diffeomorphisms, "Partially Hyperbolic Dynamics, Laminations, and Teichmuller Flow," (eds G. Forni, M. Lyubich, C. Pugh and M. Shub), *Fields Inst. Comm.*, AMS, (2007), 103-112.

- (with F. Rodriguez Hertz), Cohomology free actions and the first Betti number, *Disc. Cont. Dyn. Sys.*, 15 , 1 (2006) 193-196.
- (with F. Rodriguez Hertz), Expansive attractors on surfaces, *Erg. Th. & Dyn. Sys.*, 26 , 1 (2006) 291-302 .
- (with R. Ures and J. Vieitez), On manifolds supporting quasi-Anosov diffeomorphisms, *C.R. Math. Acad. Sci. Paris* , 334 , 4 (2002) 321-323.
- C0 generic properties of stable and unstable sets of diffeomorphisms, *Nonlinearity*, 15 , 1 (2002) 89-114.

Academic books

- (with F. Rodriguez Hertz and R. Ures), Partially hyperbolic dynamics , 280 *Coloquio Brasileiro de Matematica*, 2011. (Sold out)

Research grants

起止时间 Time	项目性质和来源 Nature and Source of the Project	经费总额 Total Amount of Budget	参与人数 Number of Participants	申报人的具体职位和任务 Position and Responsibilities of the Applicant
2004 - 2006	National Direction of Science and Technology, Uruguay (DINACYT)	8500	2	Principal Investigator
2006 - 2008	National Direction of Science and Technology (DINACYT), Uruguay	19000	3	Researcher

2007	-	2010	National Direction of Science and Technology (DINACYT), Uruguay	20500	3	Researcher
2011	-	2014	National Agency of Research and Innovation (ANII), Uruguay	26300	3	Principal Investigator
2014	-	2015	NSF #1415154 (USA)	34600	3	Senior Personnel
2016	-	2019	NSF #1600486 (USA)	60000	3	Senior Personnel

Research talks

- Invited talk at Pontificia Universidad Catolica de Santiago, Chile, October 2016
- Invited talk at Mathematical School, Pontificia Universidad Catolica de Valparaiso, Chile, October 2016
- Invited talk at Semester Program on Dimension and Dynamics, ICERM, Brown University, February, 2016
- Invited talk at Penn State University, USA, January 2016
- Invited talk at Midwest Conference, Ohio State University, USA, November 2015
- Invited talk at Penn State University, USA, October 2015
- Invited talk at School and Conference on Dynamical Systems, ICTP, Trieste, July 2015
- Minicourse on Partially hyperbolic dynamics, ICTP, Trieste, Jly 2014

- Invited talk at Ergodic theory Workshop, University of North Carolina at Chapel Hill, april 2013
- Invited talk at Beyond Uniform Hyperbolicity, IPAN Bedlewo, Poland, June 2013
- Balzan Symposium, Institut Henri Poincare, Paris, June 2013
- Invited talk at Shanghai Jiao Tong University, Shanghai, July 2012
- Minicourse at Peking University, July 2012
- From Dynamics to Complexity: A conference celebrating the work of Mike Shub, Fields Institute, Toronto, May 2012
- Dynamical Systems Seminar, organized by A. Katok, Penn State University, February 2012
- Mini-course at Mathematics Colloquium, IMPA, Rio de Janeiro, July 2011
- EDAI Seminar, Rio de Janeiro, July 2011
- Mini-course at Intl. Workshop on Global Dynamics beyond Uniform Hyperbolicity, Luminy, 2011
- Mini-course at Conference on Dynamical Systems, UFRJ, Rio de Janeiro, January 2011
- Mini-course at School on Dynamical Systems, Alfateh University, Tripoli, 2010
- Mini-course at Rencontre DynNonHyp, Dijon, 2010
- International Conference on Dynamical Systems (70th anniversary of Jacob Palis)
- Dynamical Systems Seminar, Universite de Orsay, Paris XIII, 2009
- International Workshop on Global Dynamics beyond Uniform Hyperbolicity, University of Peking, 2009
- Dynamical Systems Seminar, Courant Institute, Organized by Lai-Sang Young, 2009
- Dynamical Systems Seminar, Brigham Young University, 2009
- Dynamical Systems Seminar, Penn State University, 2009
- Dynamical Systems Seminar, University of Maryland, 2009
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- Dynamical Systems Seminar, IME, USP-Sao Paulo, Brasil 2008
- Mini-course on Quasi-Anosov diffeomorphisms, ICMC, USP-Sao Carlos, Brasil, 2008
- Dynamical Systems Seminar, Northwestern University, 2008
- Dynamical Systems Seminar, Brigham Young University, USA, 2008

- Jornada Internacional de Sistemas Dinamicos, UCN, Antofagasta, Chile, 2007
- International Symposium on Dynamical Systems, IMPA, Salvador, Bahia, 2007
- International Workshop on Dynamical Systems, IMPA, Angra dos Reis, 2005
- Dynamical Systems Seminar, University of Toronto 2004
- Seminar, Universidad Nacional de Rosario 2002
- School and Workshop on Dynamical Systems, Trieste 2001
- Dynamical Systems Seminar, Universidade de Porto 2001
- Dynamical Systems Seminar, Universite de la Bourgogne, Dijon 2000
- ELAM (Latin American School of Mathematics), IMCA, Lima 1999
- Escuela de Sistemas dinamicos, IAM, Buenos Aires 1999
- Congreso Internacional de Sistemas Dinamicos, UNAM, Cuernavaca 1997
- 20o Coloquio Brasileiro de Matematica, IMPA, Rio de Janeiro 1995

Supervised graduate students

- Gabriel Nunez, PhD. Studies, 2014-
- Gabriel Nunez, MSc Studies, 2010-2013
- Elisa Grin, MSc Studies, 2008-2010
- Sebastien Alvarez, Ecole Normale Superieure-Lyon, Stage de recherche, 2008

Other merits

- Evaluator for
 - Natural Sciences and Engineering Research Council of Canada, 2016
 - The Chilean government research funding agency ,2009, 2012, 2013 and 2015
 - Prize "For Women in Science"-Uruguay, L'Oreal-Unesco, 2011.
 - Prize "Thesis of the Year", IMPA, Brazil, 2008

- Organization of scientific conferences
 - Member of the Organizing Committee of the Ergodic Theory Workshop, Univ of North Carolina at Chapel Hill, 2014, and 2016-2019
 - Local organizer and Member of the Scientific Committee of the FoCM Conference , Montevideo, December 2014 (500 participants)
 - Scientific Committee of the 3rd Uruguayan Colloquium of Mathematics, Montevideo, 2011
 - Scientific Committee of the Workshop on Dynamical Systems, Bahia, Brazil, 2011.
 - School and Workshop on Dynamics with a special Session on Complexity, Montevideo, may 2008.
- Referee of international journals
 - Transactions of the AMS
 - Proceedings of the AMS
 - Journal of Modern Dynamics
 - Mathematical Research Letters
 - Ergodic Theory and Dynamical Systems
 - Journal of the London Mathematical Society
 - Discrete and Continuous Dynamical Systems