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Felipe W. Chaves-Silva

Present Position

- Assistant Professor 2016 –
Department of Mathematics
Federal University of Pernambuco – UFPE
Recife - Pernambuco - Brazil

Education

- Postdoc 2014 – 2016
Supervisor: Gilles Lebeau
Université de Nice Sophia-Antipolis, Nice, France
- Ph.D. in Mathematics 2010 – 2014
Advisor: Enrique Zuazua
University of the Basque Country & Basque Center for Applied Mathematics - BCAM, Bilbao, Spain
Thesis: *About the Controlability of Some Equations in Cardiology, Biology, Fluid Mechanics, and Viscoelasticity*
- M.Sc. in Mathematics 2007- 2009
Advisor: Fágner Dias Araruna
Federal University of Paraíba - UFPB, Brazil
Master Thesis: *Controlabilidade para o Sistema de Navier-Stokes* (Controllability for the Navier-Stokes equation),
- B.Sc. in Mathematics 2004 - 2007
Advisor: Marcondes Rodrigues Clark
Federal University of Piauí - UFPI, Brazil

Publications

1. F. W. Chaves-Silva, S. Guerrero, *A Controllability Result for a Chemotaxis-Fluid Model*, accepted in Journal of Differential Equations.
2. F. W. Chaves-Silva, G. Lebeau, *Spectral inequality and optimal cost of controllability for the Stokes system*, ESAIM: COCV, Special Issue in honor of Jean-Michel Coron for his 60th birthday, **22** (4)(2016), 1137-1162.
3. M. Bendahmane, F. W. Chaves-Silva, *Uniform Null Controllability for a Degenerating Reaction-Diffusion System Approximating a Simplified Cardiac Model*, SIAM Journal on Control and Optimization, **53** (6)(2015), 3483–3502.
4. F. W. Chaves-Silva, S. Guerrero, *A uniform controllability result for the Keller-Segel system*, Asymptot. Anal., **92** (3-4)(2015), 313–338.
5. F. W. Chaves-Silva, *A hyperbolic system and the cost of the controllability for the Stokes system*, Comput. Appl. Math., **34** (3)(2015), 1057–1074.
6. F. W. Chaves-Silva, L. Rosier, E. Zuazua, *Null controllability of a system of viscoelasticity with a moving control*, J. Math. Pures Appl., **9** 101 (2)(2014), 198–222.
7. F. W. Chaves-Silva, S. Guerrero, J.-P. Puel, *Controllability of fast diffusion coupled parabolic systems*, Math. Control Relat. Fields, **4** (4)(2014), 465–479.
8. M. Bendahmane, F. W. Chaves-Silva, *Null Controllability of a Degenerate reaction-diffusion system in cardiac electro-physiology*, C. R. Math. Acad. Sci. Paris, **350** (11-12) (2012), 587–590.
9. F. D. Araruna, F. W. Chaves-Silva, M. A. Rojas-Medar, *Exact Controllability of Galerkin's Approximations of Micropolar Fluids*, Proc. Amer. Math. Soc., **138** (2010), 1361–1370.

Research Stays

- Departamento de Matemáticas, Universidad Federico Santa Maria, Chile, 09/01/2016 to 23/09/2016 (2 weeks).
- Laboratoire de Mathématiques et Dynamique de Populations, Université Cadi Ayyad, Marrakech, Marrocos, 07/12/2015 to 20/12/2015 (2 weeks).
- Laboratoire Jacques-Louis Lions, Université Pierre et Marrie Curie (Paris 6), 07/ 07/2015 to 09/07/2015 (1 week).
- Laboratoire Jacques-Louis Lions, Université Pierre et Marrie Curie (Paris 6), 27/ 05/2015 to 05/06/2015 (2 weeks).

- Laboratoire Jacques-Louis Lions, Université Pierre et Marrie Curie (Paris 6), 14/ 04/2015 to 21/04/2015 (1 week).
- Yangtze Center of Mathematics, Sichuan University, Chengdu, China, 04/26/2014 to 06/01/2014 (5 weeks).
- Laboratoire J.A. Dieudonné, Université de Nice Sophia-Antipolis, Nice, 03/19/2014 to 03/21/2014 (1 week).
- Laboratoire Jacques-Louis Lions, Université Pierre et Marrie Curie (Paris 6), 01/ 28/2014 to 02/28/2014 (1 month).
- Laboratoire Jacques-Louis Lions, Université Pierre et Marrie Curie (Paris 6), 09/ 15/2013 to 12/15/2013 (3 months).
- Laboratoire Jacques-Louis Lions, Université Pierre et Marrie Curie (Paris 6), 11/ 12/2012 to 11/16/2012 (1 week).
- Departamento de Ecuaciones Diferenciales y Análisis Numérico, Universidad de Sevilla, 11/ 26/2012 to 11/30/2012 (1 week).
- Laboratoire Jacques-Louis Lions, Université Pierre et Marrie Curie (Paris 6), 11/ 28/2011 to 12/02/2011 (1 week).

Talks

- “*Controllability for some pseudo-parabolic equations*”, X ENAMA, Fluminense Federal University, Rio de Janeiro, November - 2016.
- “*Controllability results for some chemotaxis models*”, Nonlinear Partial Differential Equations and Applications, A conference in the honor of Jean-Michel Coron for his 60th birthday, Paris, June - 2016.
- “*A spectral Inequality and the cost of null controllability for the Stokes system*”, Centre International de Rencontres Mathématiques, Marseille - France, March -2016.
- “*Controllability for a pseudoparabolic equation*”, VI Benasque Workshop on Partial differential equations, optimal design and numerics, Benasque - Spain, August - 2015.
- “*A uniform controllability result for the Keller-Segel system*”, Université de Nice Sophia-Antipolis, Nice, March - 2015.
- “*Null Controllability of a system of viscoelasticity with a moving control*”, Universidade Federal da Paraíba, João Pessoa - Brazil, August - 2014.

- “*A hyperbolic system and the cost of the controllability for the Stokes system*”, XV International Conference on Hyperbolic Problems: Theory, Numerics, Applications, Rio de Janeiro, Julho/Agosto - 2014. (Poster)
- “*A uniform controllability result for the Keller-Segel system*”, Workshop MTM2011-29306, BCAM, Bilbao, Junho - 2014.
- “*Null controllability of a system of viscoelasticity with a moving control*”, Université de Nice Sophia-Antipolis, Nice, March - 2014.
- “*The cost of controlling the Stokes system*”, Benasque Workshop on Partial differential equations, optimal design and numerics, Benasque, September - 2013.
- “*Controllability results for some coupled parabolic systems*”, Workshop MTM2011-29306, Bilbao, February - 2013.
- “*Null controllability for a degenerating reaction-diffusion system in electrocardiology*”, Universidad de Sevilla, Sevilla, November - 2012.
- “*Uniform Null Controllability for a Degenerating Reaction-Diffusion System Approximating a Simplified Cardiac Model*”, Laboratoire Jacques-Louis Lions, Université Pierre et Marie Curie (Paris 6), Paris, November - 2012.
- “*Controllability for Degenerate parabolic equations*”, Benasque Workshop on Partial differential equations, optimal design and numerics, Benasque, September - 2011.
- “*Remarks about the cost of the controllability for the Stokes System*”, Laboratoire Jacques-Louis Lions, Université Pierre et Marie Curie (Paris 6), Paris, December - 2011.
- “*Null Controllability of a Degenerate Reaction-Diffusion system*”, OPTPDE - Summer School - Challenges in Applied Control and Optimal Design, Bilbao - 2011.
- “*A hyperbolic system and the cost of the controllability for the Stokes system*”, MTM2008-03541 Workshop, Bilbao, July - 2010.

Attended Conferences, Workshops and other Scientific events

- X ENAMA, Fluminense Federal University, Rio de Janeiro, November, 2016.
- Nonlinear Partial Differential Equations and Applications, A conference in the honor of Jean-Michel Coron for his 60th birthday, Paris, June, 2016.
- Contrôle des EDP et Applications, Marseille - France, November, 2015.

- VI Benasque Workshop on Partial differential equations, optimal design and numerics, Benasque - Spain, August/September, 2015.
- Theoretical and Numerical Topics in Control and Inverse Problems for PDEs, Besançon - France, March, 2015.
- Conca 60, 60th Anniversary of prof. Carlos Conca, Bilbao, December, 2014.
- Numerivawes Workshop Euskadi - Chile, Bilbao, December, 2014.
- XV International Conference on Hyperbolic Problems: Theory, Numerics, Applications, Rio de Janeiro, July/Agugust, 2014.
- Workshop MTM2011-29306, BCAM, Bilbao, June, 2014.
- Workshop MTM2011-29306, BCAM, Bilbao, 2013.
- VI Benasque Workshop on Partial differential equations, optimal design and numerics, Benasque, 2013.
- OPTPDE - Summer School - Challenges in Applied Control and Optimal Design, Bilbao, 2011.
- V Benasque Workshop on Partial differential equations, optimal design and numerics, Benasque, 2011.
- Trimestre sur le Contrôle des Equations aux Dérivées Partielles et Applications, Institute Henri Poincaré, October-December, 2010.
- Control of Partial Differential Equations, CIME - Fondazione Roberto Conti, Cetraro-Italia, 2010.
- MTM2008-03541 Workshp, BCAM, Bilbao, 2010.

Honors and Awards

- Grant from Basque Government (Ref. BFI-2011-424) for Ph.D. studies 2010 – 2014
 - Scientific Initiation Scholarship. Conselho Nacional de Desenvolvimento Científico e Tecnológico - CNPq. 2005 – 2007
 - Scholarship for Master studies., Coordenação de Aperfeiçoamento de Pessoal de Nível Superior - CAPES 2007 – 2009.
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Languages

- **Native:** Portuguese.
- **Others:** Spanish (fluent), English (fluent), French (Intermediate) .

References

- Available upon request.