

Pablo Raúl Stinga, PhD

CONTACT INFORMATION	Department of Mathematics Iowa State University 396 Carver Hall Ames, IA 50011, USA	<i>Phone:</i> +1-515-294-6420 <i>Fax:</i> +1-515-294-5454 <i>E-mail:</i> stinga@iastate.edu https://stinga.public.iastate.edu/
DEGREES HELD	Universidad Autónoma de Madrid , Madrid, Spain PhD in Mathematics with European Mention – Summa Cum Laude, Jun 2010 <ul style="list-style-type: none">• Thesis Title: <i>Fractional Powers of Second Order Partial Differential Operators: Extension Problem and Regularity Theory</i>• Thesis Advisor: José L. Torrea M.Sc. in Mathematics and Applications, Oct 2006 to Nov 2007 Universidad Nacional de San Luis , San Luis, Argentina B.S., Licenciado en Ciencias Matemáticas, Mar 2000 to Dec 2005 <ul style="list-style-type: none">• GPA: 9.90/10.00, with the Highest College and University Honors	
CURRENT POSITION	Assistant Professor Iowa State University Department of Mathematics	Apr 2016 to present
PREVIOUS POSITIONS	Adjunct Assistant Professor Iowa State University Department of Mathematics (under J1 Research Scholar Visa until new H1B Visa was approved) R.H. Bing Fellow in Mathematics No.1 Instructor The University of Texas at Austin Department of Mathematics (under J1 Research Scholar Visa) <ul style="list-style-type: none">• Supervisor: Luis A. Caffarelli Researcher Universidad de La Rioja, Spain Department of Mathematics and Computation Honorary Professor Universidad Autónoma de Madrid, Spain Department of Mathematics Researcher Universidad de Zaragoza, Spain Department of Mathematics, Area of Mathematical Analysis PhD Candidate Universidad Autónoma de Madrid, Spain Department of Mathematics <ul style="list-style-type: none">• Supervisor: José L. Torrea PhD Candidate Universidad Nacional del Litoral, Argentina Department of Mathematics	Aug 2015 to Mar 2016 Aug 2012 to 2015 May 2011 to Aug 2012 Spring 2011 Fall 2010 Oct 2006 to Jun 2010 Mar to Sep 2006

RESEARCH
 INTERESTS

Partial Differential Equations and Harmonic Analysis. Nonlocal equations, fractional Laplacians, regularity estimates, nonlocal Monge–Ampère equations, free boundary problems, discrete nonlocal equations, parabolic equations, orthogonal expansions, Schrödinger operators, analysis on Riemannian manifolds, semigroups, stochastic PDEs. Logic.

REFEREED
 PUBLICATIONS

- [1] Y. Jhaveri and P. R. Stinga, The obstacle problem for a fractional Monge–Ampère equation, *Comm. Partial Differential Equations* (2019) to appear.
- [2] P. R. Stinga and J. L. Torrea, Hölder, Sobolev, weak-type and *BMO* estimates in mixed-norm with weights for parabolic equations, *Sci. China Math.* (2019) to appear.
- [3] P. R. Stinga and M. Vaughan, One-sided fractional derivatives, fractional Laplacians and weighted Sobolev spaces, *Nonlinear Anal.* (2019) to appear.
- [4] P. R. Stinga, User’s guide to the fractional Laplacian and the method of semigroups, *Handbook of Fractional Calculus with Applications* **2**, 235–265, De Gruyter, Berlin, 2019.
- [5] P. L. De Nápoli and P. R. Stinga, Fractional Laplacians on the sphere, the Minakshisundaram zeta function and semigroups, *New Developments in the Analysis of Nonlocal Operators*, 167–189, *Contemp. Math.* **723**, Amer. Math. Soc., Providence, RI, 2019.
- [6] F. Feo, P. R. Stinga and B. Volzone, The fractional nonlocal Ornstein–Uhlenbeck equation, Gaussian symmetrization and regularity, *Discrete Contin. Dyn. Syst.* **38** (2018), 3269–3298.
- [7] Ó. Ciaurri, L. Roncal, P. R. Stinga, J. L. Torrea and J. L. Varona, Nonlocal discrete diffusion equations and the fractional discrete Laplacian, regularity and applications, *Adv. Math.* **330** (2018), 688–738.
- [8] P. R. Stinga and J. L. Torrea, Regularity theory and extension problem for fractional nonlocal parabolic equations and the master equation, *SIAM J. Math. Anal.* **49** (2017), 3893–3924.
- [9] D. Maldonado and P. R. Stinga, Harnack inequality for the fractional nonlocal linearized Monge–Ampère equation, *Calc. Var. Partial Differential Equations* **56** (2017), 56:103.
- [10] L. Ping, P. R. Stinga and J. L. Torrea, On weighted mixed-norm Sobolev estimates for some basic parabolic equations, *Commun. Pure Appl. Anal.* **16** (2017), 855–882.
- [11] L. A. Caffarelli and P. R. Stinga, Fractional elliptic equations, Caccioppoli estimates and regularity, *Ann. Inst. H. Poincaré Anal. Non Linéaire* **33** (2016), 767–807.
- [12] J. Dziubański, M. Preisner, L. Roncal and P. R. Stinga, Hardy spaces for Fourier–Bessel expansions, *J. Anal. Math.* **128** (2016), 261–287.
- [13] L. Roncal and P. R. Stinga, Fractional Laplacian on the torus, *Commun. Contemp. Math.* **18** (2016), 1550033, 26pp.

- [14] A. Bernardis, F. J. Martín-Reyes, P. R. Stinga and J. L. Torrea, Maximum principles, extension problem and inversion for nonlocal one-sided equations, *J. Differential Equations* **260** (2016), 6333–6362.
- [15] Ó. Ciaurri, L. Roncal and P. R. Stinga, Riesz transforms on compact Riemannian symmetric spaces of rank one, *Milan J. Math.* **83** (2015), 345–370.
- [16] P. R. Stinga and B. Volzone, Fractional semilinear Neumann problems arising from a fractional Keller–Segel model, *Calc. Var. Partial Differential Equations* **54** (2015), 1009–1042.
- [17] L. Roncal and P. R. Stinga, Transference of fractional Laplacian regularity, *Special Functions, Partial Differential Equations and Harmonic Analysis. In honor of Calixto P. Calderón*, in: Springer Proceedings in Mathematics and Statistics **108**, A. M. Stokolos, C. Georgakis and W. Urbina (Eds.) (2014), 203–212.
- [18] J. J. Betancor, A. J. Castro and P. R. Stinga, The fractional Bessel equation in Hölder spaces, *J. Approx. Theory* **184** (2014), 55–99.
- [19] T. Ma, P. R. Stinga, J. L. Torrea and C. Zhang, Regularity estimates in Hölder spaces for Schrödinger operators via a $T1$ theorem, *Ann. Mat. Pura Appl.* **193** (2014), 561–589.
- [20] I. Abu-Falahah, P. R. Stinga and J. L. Torrea, A note on the almost everywhere convergence to initial data for some evolution equations, *Potential Anal.* **40** (2014), 195–202.
- [21] I. Gyöngy and P. R. Stinga, The rate of convergence of Wong–Zakai approximations for stochastic partial differential equations, *Proceedings of the Seventh Seminar on Stochastic Analysis, Random Fields and Applications, Ascona 2011*, in: Progress in Probability **67**, R. Dalang, M. Dozzi and F. Russo (Eds), 95–130, Birkhäuser Basel, 2014.
- [22] J. J. Betancor, R. Crescimbeni, J. C. Fariña, P. R. Stinga and J. L. Torrea, A $T1$ criterion for Hermite–Calderón–Zygmund operators on the $BMO_H(\mathbb{R}^n)$ space and applications, *Ann. Sc. Norm. Super. Pisa Cl. Sci. (5)* **XII** (2013), 157–187.
- [23] J. E. Galé, P. J. Miana and P. R. Stinga, Extension problem for fractional operators: semigroups and wave equations, *J. Evol. Equ.* **13** (2013), 343–368.
- [24] Ó. Ciaurri, L. Roncal and P. R. Stinga, Fractional integrals on compact Riemannian symmetric spaces of rank one, *Adv. Math.* **235** (2013), 627–647.
- [25] P. R. Stinga and C. Zhang, Harnack’s inequalities for fractional nonlocal equations, *Discrete Contin. Dyn. Syst.* **33** (2013), 3153–3170.
- [26] T. Ma, P. R. Stinga, J. L. Torrea and C. Zhang, Regularity properties of Schrödinger operators, *J. Math. Anal. Appl.* **388** (2012), 817–837.
- [27] I. Abu-Falahah, P. R. Stinga and J. L. Torrea, Square functions associated to Schrödinger operators, *Studia Math.* **203** (2011), 171–194.
- [28] P. R. Stinga and J. L. Torrea, Regularity theory for the fractional harmonic oscillator, *J. Funct. Anal.* **260** (2011), 3097–3131.
- [29] P. R. Stinga and J. L. Torrea, Extension problem and Harnack’s inequality for some fractional operators, *Comm. Partial Differential Equations* **35** (2010), 2092–2122.

PREPRINTS

- [30] Ó. Ciaurri, L. Roncal, P. R. Stinga, J. L. Torrea and J. L. Varona, Fractional discrete Laplacian versus discretized fractional Laplacian, (2015) preprint.
- [31] J. J. Colomina-Almiñana and P. R. Stinga, Boolos' Hardest Logic Puzzle Ever in its purest form, (2018) submitted.
- [32] A. Biswas, M. De León-Contreras and P. R. Stinga, Harnack inequalities and Hölder estimates for master equations, (2018) submitted.
- [33] A. Biswas and P. R. Stinga, Regularity estimates for nonlocal space-time master equations in bounded domains, (2019) submitted.

CONFERENCE
PRESENTATIONS

1. *13th AIMS Conference on Dynamical Systems, Differential Equations and Application*, Atlanta (USA), Jun 2020 (upcoming).
2. **Main speaker** at the *50th Barret Lectures*, The University of Tennessee-Knoxville (USA), May 2020 (upcoming).
3. *Texas Differential Equations Conference* at The University of Texas at Austin, TX (USA), Mar 2020 (upcoming).
4. *Joint Mathematics Meeting* in Denver, CO (USA), Jan 2019 (upcoming).
5. *AMS Fall Southeastern Sectional Meeting* at University of Florida, Gainesville, FL (USA), Nov 2019.
6. *SIAM Central States Section 5th Annual Meeting* at Iowa State University (USA), Oct 2019.
7. *Local and Nonlocal Trends in Analysis and Geometry* at University of Pittsburgh (USA), Oct 2019.
8. *3rd Fractional Calculus Meeting* at Universidad de Zaragoza (Spain), Sep 2019.
9. *AMS Fall Central Sectional Meeting* at University of Wisconsin-Madison (USA), Sep 2019.
10. *International Conference on Elliptic and Parabolic Problems*, Gaeta (Italy), May 2019.
11. *Nonlinear Analysis and Applications, In honor of Luis A. Caffarelli*, Mar del Plata (Argentina), Mar 2019.
12. *Workshop on Dynamics, Control and Numerics for fractional PDEs*, Isla Verde, Puerto Rico (USA), Dec 2018.
13. *AMS Fall Western Sectional Meeting* at San Francisco State University, San Francisco (USA), Oct 2018.
14. *Fractional PDEs: Theory, Algorithms and Applications* at ICERM, Providence (USA), Jun 2018.
15. *American Philosophical Association 2018 Pacific Division Meeting, Invited Colloquium: Philosophy of Logic*, San Diego (USA), Mar 2018.
16. *Texas Differential Equations Conference 2018* at University of Texas-San Antonio (USA), Mar 2018.
17. *Joint Mathematics Meetings*, invited speaker at AMS Special Session, San Diego (USA), Jan 2018.

18. **Plenary Speaker** invited by the Real Sociedad Matemática Española RSME (Spain) to deliver a plenary lecture at the *Primer Encuentro Conjunto RSME-UMA, Reunión Anual de la UMA*, Buenos Aires (Argentina), Dec 2017.
19. *Nonlocal Dynamics: Theory, Computation and Applications* – NSF/CBMS Regional Conference in the Mathematical Sciences, Illinois Institute of Technology, Chicago, Illinois (USA), Jun 4–9, 2017.
20. *SIAM Southeastern Atlantic Section Conference SIAM-SEAS*, Florida State University, Tallahassee, Florida (USA), Mar 18–19, 2017.
21. *AMS Fall Central Sectional Meeting*, University of St. Thomas (Minneapolis campus), Minneapolis, Minnesota (USA), Oct 28–30, 2016.
22. *2nd Annual Meeting of SIAM Central States Section*, University of Arkansas at Little Rock, Little Rock, Arkansas (USA), Sep 30–Oct 2, 2016.
23. *3rd Conference on Nonlocal Operators and Partial Differential Equations*, Conference Centre of the Polish Academy of Sciences, Bedlewo (Poland), Jun 27–Jul 1, 2016.
24. *39th Annual Texas Partial Differential Equations Conference*, San Marcos, Texas (USA), Apr 9, 2016.
25. *15th New Mexico Analysis Seminar*, University of New Mexico, Albuquerque, Arizona (USA), Feb 19–21, 2016.
26. *2015 SIAM Conference on Analysis of Partial Differential Equations*, Scottsdale, Arizona (USA), Dec 7–10, 2015.
27. *Thirteenth Prairie Analysis Seminar*, Kansas State University, (USA), Sep 25–26, 2015.
28. *38th Annual Texas Partial Differential Equations Conference*, Houston (USA), Mar 28–29, 2015.
29. *10th AIMS International Conference on Dynamical Systems, Differential Equations and Applications*, Session 43 *Harmonic Analysis tools for fluid mechanics*, Madrid (Spain), Jul 7–11, 2014.
30. *Harmonic Analysis to celebrate Michael Cowling's 65th birthday*, Segovia (Spain), Jul 1–5, 2014.
31. *International Conference on Free Boundary Problems: Theory and Applications*, Isaac Newton Institute of Mathematical Sciences, University of Cambridge (United Kingdom), Jun 23–27, 2014.
32. *XV Real and Complex Analysis Meetings 2014 – XV EARCO*, Girona (Spain), May 22–24, 2014.
33. *Kinetics, non standard diffusions and stochastics: emerging challenges in the sciences*, FRG – Ki-Net – Colab Joint Workshop, The University of Texas at Austin (USA), May 8–18, 2014.
34. *Distance and measure in analysis and partial differential equations: a meeting in honor of Hugo Aimar's 60th birthday*, Santa Fe (Argentina), Jun 13–14, 2013.
35. *Special Functions, Partial Differential Equations and Harmonic Analysis, a conference in honor of Calixto P. Calderón*, Roosevelt University, Chicago (USA), Nov 16–18, 2012.

36. *IV Latinamerican Congress of Mathematicians, CLAM 2012*, Córdoba (Argentina), Aug 6–10, 2012.
37. *Nonlocal Operators: Analysis, Probability, Geometry and Applications*, ZiF Bielefeld (Germany), (poster), Jul 9–14, 2012.
38. *9th International Conference on Harmonic Analysis and Partial Differential Equations, El Escorial 2012*, El Escorial (Spain), Jun 11–15, 2012.
39. *VI Research Meeting in Approximation Theory, EITA 2011*, Canfranc (Spain), Oct 21–23, 2011.
40. *Workshop of Young Researchers in Mathematics 2011*, Universidad Complutense de Madrid (Spain), Sep 21–23, 2011.
41. *22nd International Workshop on Operator Theory and its Applications IWOTA 2011*, Sevilla (Spain), Jul 3–9, 2011.
42. *Harmonic Analysis and Orthogonal Systems IV*, Bedlewo (Poland), Sep 19–24, 2010.
43. *XII Real and Complex Analysis Meetings 2010 – XII EARCO*, Haro (Spain), Apr 22–24, 2010.
44. *Annual Meeting of the Argentinean Mathematical Union UMA 2009 – LIX Scientific Communications Meeting*, Mar del Plata (Argentina), Sep 21–26, 2009.

INVITED
MINI COURSES

- “*Fractional Laplacians, semigroups and regularity*”, 4 1/2 hours mini course for undergraduate and graduate students presented at the Annual Meeting of the Argentinean Mathematical Union (UMA) San Luis (Argentina), Sep 15–20, 2014.

INVITED SEMINARS
AND COLLOQUIUMS

1. “*On nonlocal Monge–Ampère equations*” PDE & Analysis Seminar at University of Pittsburgh (USA), Feb 2019.
2. “*What is a fractional derivative?*” Colloquium at Wayne State University (USA), Feb 2019.
3. “*How to approximate the fractional Laplacian by the fractional discrete Laplacian*” Computational and Applied Mathematics Seminar at Oak Ridge National Laboratory (USA), Jan 2019.
4. “*What is a fractional derivative?*” at Graduate Students Seminar, Department of Mathematics, Iowa State University (USA), Apr 2018.
5. “*On nonlocal Monge–Ampère equations*” Analysis Seminar at Universidad Autónoma de Madrid (Spain), Mar 2018
6. “*On some nonlocal elliptic problems*” Analysis Seminar at The University of Texas at Austin (USA), Feb 2018.
7. “*How to approximate the fractional Laplacian by the fractional discrete Laplacian*” Applied Mathematics Seminar at Brigham Young University (USA), Nov 2017.
8. “*What is a fractional derivative?*” Colloquium at University of Nebraska–Lincoln (USA), Nov 2017.

9. “*How to approximate the fractional Laplacian by the fractional discrete Laplacian*” Continuum Mechanics Seminar at University of Nebraska-Lincoln (USA), Nov 2017.
10. “*Extension problem for fractional heat equations and applications*” at Department of Mathematics, The University of Tennessee, Knoxville (USA), Mar 2017.
11. “*Extension problem for fractional heat equations and applications*” at Division of Applied Mathematics, Brown University (USA), Feb 2017.
12. “*Calderón–Zygmund estimates for parabolic equations*” at Computational and Applied Mathematics Seminar, Department of Mathematics, Iowa State University (USA), Feb 2017.
13. “*What is a fractional derivative?*” at Graduate Students Seminar, Department of Mathematics, Iowa State University (USA), Feb 2017.
14. “*Calderón–Zygmund estimates for parabolic equations*” at Department of Mathematics, Kansas State University (USA), Nov 2016.
15. “*Extension problem for fractional powers of parabolic operators and applications*” at Department of Mathematics, George Mason University (USA), Sep 2016.
16. “*Ecuaciones no locales en espacio-tiempo*” at Departamento de Matemáticas, Universidad Autónoma de Madrid (Spain), Jun 2016.
17. “*Fractional nonlocal space-time equations*” at Department of Mathematics, Stanford University (USA), Apr 2016.
18. “*One-sided nonlocal equations*” at Department of Mathematics, The University of Texas at Austin (USA), Apr 2016.
19. “*Regularity of fractional nonlocal equations and the language of semigroups*” at School of Mathematics, University of Minnesota (USA), Feb 2016.
20. “*Discrete and space-time fractional nonlocal equations*” at Department of Mathematics, University of Houston (USA), Feb 2016.
21. “*What is a fractional derivative?*” at Orientation for Mathematics Graduate Students, Iowa State University (USA), Feb 2016.
22. “*The language of semigroups in nonlocal equations*” at the Analysis Seminar, Department of Mathematics, Iowa State University (USA), Nov 2015.
23. “*The language of semigroups in harmonic analysis*” at the Analysis Seminar, Department of Mathematics, Iowa State University (USA), Nov 2015.
24. “*Discrete and space-time fractional nonlocal equations*” at Computational and Applied Mathematics Seminar, Department of Mathematics, Iowa State University (USA), Nov 2015.
25. “*Discrete and space-time fractional nonlocal equations*” at Department of Mathematics, Kansas State University (USA), Oct 2015.
26. “*Discrete and space-time fractional nonlocal equations*” at Department of Mathematics, The University of Texas at Austin (USA), Sep 2015.
27. “*How to understand fractional Laplacians: the language of semigroups and applications*” Colloquium at Department of Mathematics at Pontificia Universidade Católica do Rio de Janeiro PUC-Rio (Brazil), Jul 2015.

28. “*What are the fractional Laplacians? The language of semigroups and some applications*” Colloquium at Department of Mathematics at Universidad Federico Santa María, Valparaíso (Chile), Jul 2015.
29. “*Regularity of fractional nonlocal equations and the language of semigroups*” at Department of Mathematics at Columbia University (USA), Apr 2015.
30. “*Regularity of fractional Laplacians and the language of semigroups*” at Department of Mathematics at Kansas State University (USA), Apr 2015.
31. “*How to understand fractional Laplacians: the language of semigroups. Some applications*” Colloquium at Department of Mathematics at Iowa State University (USA), Mar 2015.
32. “*Fractional Laplacians, the language of semigroups and regularity*” at Department of Mathematics at University of Tennessee, Knoxville (USA), Nov 2014.
33. “*Fractional Laplacians and the language of semigroups*” at Department of Mathematics at Texas A&M University (USA), Oct 2014.
34. “*Ecuaciones fraccionarias no locales: aplicaciones, semigrupos y regularidad*” at Mathematics Department, University Autónoma de Madrid (Spain), Jul 2014.
35. “*Regularity for fractional nonlocal equations*” at School of Mathematics, The University of Edinburgh (United Kingdom), May 2014.
36. “*The (discrete and continuous) fractional Laplacian*” at Department of Mathematics, The University of Texas at Austin (USA), Feb 2014.
37. “*The fractional Laplacian understood with the semigroup language*” at Department of Mathematics, The University of Texas at Austin (USA), Jan 2013.
38. “*Fractional Laplacian on the torus*” at Department of Mathematics and Applications “Renato Caccioppoli”, Università degli Studi di Napoli “Federico II” of Naples (Italy), Jul 2012.
39. “*Semigroups and Hardy and Hölder spaces*” at Mathematical Analysis Department of University of Málaga (Spain), Jun 2012.
40. “*Regularidad para ecuaciones diferenciales locales y fraccionarias*” at José Luis Rubio de Francia Seminar of University of Zaragoza (Spain), Feb 2012.
41. “*Regularity estimates through semigroups and harmonic analysis: The case of the Schrödinger operator*” at Mathematics and Computation Department of University of La Rioja (Spain), Jan 2012.
42. “*Regularity of fractional Schrödinger operators through Harmonic Analysis techniques*” at Mathematical Analysis Department of University of La Laguna (Spain), Nov 2011.
43. “*Square functions for Schrödinger operators*” at Mathematical Analysis Department of University of La Laguna (Spain), Jun 2011.
44. “*Fractional powers of second order partial differential operators: extension problem and regularity theory*” at Institute of Applied Mathematics San Luis (IMASL) of National University of San Luis (Argentina), May 2011.
45. “*Regularity for fractional operators*” at Mathematics and Computation Department of University of La Rioja (Spain), May 2011.

46. “*Funciones cuadrado asociadas a operadores de Schrödinger*” at *José Luis Rubio de Francia Seminar* of University of Zaragoza (Spain), Dec 2010.
47. “*Fractional Laplacians: extension problem and regularity theory*” at Mathematics Department of University of Buenos Aires (Argentina), Nov 2010.
48. “*Fractional powers of second order partial differential operators: extension problem and regularity theory*” at TU Delft Applied Mathematics Colloquium (The Netherlands), Sep 2010.
49. “*Fractional powers of second order partial differential operators: extension problem and regularity theory*” at Mathematics Department of Autonomous University of Madrid (Spain), May 2010.
50. “*El rol del semigrupo del calor en problemas que involucran operadores fraccionarios*” at *José Luis Rubio de Francia Seminar* of University of Zaragoza (Spain), May 2010.
51. “*Extension problem and Harnack’s inequality for some fractional operators*” at Mathematics Department of Autonomous University of Madrid (Spain), Feb 2010.
52. “*The extension problem for fractional powers of general second order partial differential operators*” at Institute of Applied Mathematics of Litoral (IMAL) of National University of Litoral (Argentina), Feb 2010.
53. “*The fractional harmonic oscillator: characterization via an extension problem, Harnack’s inequality and regularity theory*” at Mathematical Analysis Department of University of La Laguna (Spain), Dec 2009.
54. “*Sobolev spaces associated to the harmonic oscillator*” at Institute of Applied Mathematics San Luis (IMASL) of National University of San Luis (Argentina), Mar 2009.

TRAINING

PhD in Mathematics Students

Mary Vaughan (2017–present) – Iowa State University. Expected: Spring 2020.
 Animesh Biswas (2016–present) – Iowa State University. Expected: Spring 2020.

Temporary Research Advisor and Mentor of Graduate Students

Gabriela Lara (2019–present) – Iowa State University.
 Max Bacharach (2016–2018) – Iowa State University.
 Stephanie Reinders (2015–2016) – Iowa State University.

ACADEMIC SERVICE

Awards and Honors Committee

Department of Mathematics, Iowa State University.
 Committee member, Aug 2019–present.

ISU-UNL Analysis Graduate Students Seminar Series

This seminar series aims to interchange graduate students in analysis between Iowa State University and The University of Nebraska-Lincoln, to present seminars on their research topics. ISU organizer: Pablo Raúl Stinga. UNL organizers: Petronela Radu, Mikil Foss. The series started running on Jan 2018.

Applied Mathematics I and II Graduate Qualifying Exam Committee

Department of Mathematics, Iowa State University.
 Chair, Aug 2018–Aug 2019.
 Committee member, Apr 2016–present.

Colloquium and Lectures Committee

Chair, Department of Mathematics, Iowa State University, May 2017–present.

Co-Chair, Department of Mathematics, Iowa State University, Aug 2015–May 2017.

PhD in Mathematics Committee

María Soria-Carro – UT Austin (Advisor: Luis A. Caffarelli). Expected: Spring 2021.

Evan Camrud – ISU (Advisor: David Herzog). 2019–present.

Hyoung Ji Kim – ISU (Advisor: Ananda Weerasinghe). 2019–2020.

Anna Aboud – ISU (Advisor: Eric Weber). Graduated on 06/26/2019.

Stephanie Reinders – ISU (Advisor: Jennifer Newman). 2016–2019.

MSc in Mathematics Committee

Jessica Hulzebos – ISU (Advisor: Jue Yan). Graduated on 06/23/2017.

Erica Johnson – ISU (Advisor: James Rossmanith). Graduated on 04/10/2017.

St. Cecilia Catholic School Board

Elected Board Member, St. Cecilia Catholic School, Ames, IA, Jun 2018–present.

School Board Representative to the Finance Council, Jun 2018–Nov 2019.

St. Cecilia School Scholarship Committee, Fall 2019.

External reviewer of Ph.D. thesis

Alberto Arenas Gómez – U. de La Rioja, Spain (Advisor: Óscar Ciaurri). Sep 2019.

Edgar Labarga Varona – U. de La Rioja, Spain (Advisor: Óscar Ciaurri). Sep 2019.

Marta De León-Contreras – Universidad Autónoma de Madrid (Advisor: José L. Torrea). May 2019.

External Ph.D. thesis defense committee

Luis Sánchez Lajusticia – Universidad de Zaragoza, Spain (Advisors: José E. Galé and Pedro J. Miana). Sep 2019.

MENTORING OF DIVERSITY STUDENTS

Al Éxito (Towards Success)

Faculty Speaker

Apr 2019

- On April 19th, 2019, a group of Latino/a high school students from Marshalltown, IA, visited several Departments at ISU to learn about career opportunities and the work Latino/a faculty are doing. I hosted their visit to the Department of Mathematics and presented them a lecture entitled *La matemática moderna (Modern mathematics)* regarding the scientific role of mathematics nowadays and the possible career opportunities for mathematicians.

Lazos (Bonds): Latino Organization for Student Success

Founding Faculty Member – Active Mentor

Aug 2016 to present

- Lazos is a social club formed by a group of Hispanic/Latino professors at Iowa State University, *who identified a gap in their own college experience and decided to do something different for the ISU community*. Monthly reunions are held with Latino students at ISU to develop friendship and encourage success by getting to know their professors and peers.

Lazos webpage: <https://www.diversity.iastate.edu/what-we-do/programming/lazos>

Clock Award (2) from the Services for Students with Disabilities The University of Texas at Austin

- See “Honors and Recognitions” below.

TEACHING
EXPERIENCE

Iowa State University, Ames, IA

Assistant Professor

Apr 2016 to present

- Spring 2020 Real Analysis II MATH 516 (upcoming).
- Fall 2019 Calculus III MATH 265 (two large lectures, 200 students each one).
- Spring 2019 Partial Differential Equations II MATH 656 (Graduate course, 10 students).
- Fall 2018 Partial Differential Equations I MATH 655 (Graduate course, 20 students).
- Fall 2018 Matrices and Linear Algebra MATH 207 (50 students).
- Spring 2018 Advanced Topics in Differential Equations MATH 680E – Regularity theory for elliptic PDEs (Graduate topics course, 10 students).
- Fall 2017 Calculus II MATH 166 (40 students).
- Fall 2017 Regularity theory for elliptic equations MATH 590 (Graduate reading course).
- Spring 2017 Methods of Applied Mathematics II MATH 520 (Graduate core course, 10 students).
- Fall 2016 Methods of Applied Mathematics I MATH 519 (Graduate core course, 15 students).
- Fall 2016 Fourier analysis MATH 590 (Graduate reading course).

Adjunct Assistant Professor (on J1, pending H1B)

Aug 2015 to Mar 2016

- Spring 2016 Introduction to Partial Differential Equations MATH 385 (35 students).
- Fall 2015 Calculus I MATH 165 (two sections, 40 students each section).

The University of Texas at Austin, Austin, TX

R. H. Bing Instructor No.1

Aug 2012 to Aug 2015

- Spring 2015 Topics in Partial Differential Equations M393C (15 students), Graduate Topics Course.
- Fall 2014 Matrices and Matrix Calculations M340L (120 students).
- Spring 2014 Linear Algebra and Matrix Theory M341 (30 students).
- Fall 2013 Integral Calculus for Science M408S and Sequences, Series and Multivariable Calculus M408D (120 students each class). M408S is a “flipped classroom” class.
- Spring 2013 Linear Algebra and Matrix Theory M341 (30 students).
- Fall 2012 Integral Calculus for Science M408S (two sections, 120 students each). M408S is a “flipped classroom” class.

Universidad Autónoma de Madrid, Madrid, Spain

Honorary Professor

Spring 2011

- Spring 2011 Calculus in Several Variables (1st year of Physics Degree).

Universidad Nacional de San Luis, San Luis, Argentina

Undergraduate Teaching Assistant

Jun 2002 to Dec 2005

- Discrete Mathematics (1st year of Mathematics Degree); Probability and Statistics (2nd year of Mathematics Degree).

Undergraduate Tutor for Freshmen

Mar 2004 to Dec 2005

- Orientation for new students in the University.

San Luis, Argentina

High School Teacher Assistant of Mathematics

2001

Conferences Organization

- Organizer of the special session *Local and Nonlocal Fully Nonlinear Partial Differential Equations of Elliptic and Parabolic Type* at the 13th AIMS Conference on Dynamical Systems, Differential Equations and Applications 2020, Atlanta, GA (USA), Jun 5–9, 2020 (joint with Fernando Charro).
- Organizer of the *Midwest Geometry Conference* at the Department of Mathematics, Iowa State University, Ames, IA (USA), Sep 2019 (joint with X. Hien Nguyen).
Conference webpage: <https://stinga.public.iastate.edu/MGC2019.html>
- Organizer of the special session *Recent Trends on Local, Nonlocal and Fractional Partial Differential Equations* at the AMS Fall Central Sectional Meeting 2018, University of Michigan, Ann Arbor, Ann Arbor, MI (USA), Oct 20–21, 2018 (joint with Jiuyi Zhu and Pei-Yong Wang).
- Organizer of the *Midwest Mathematics Inclusion and Diversity Workshop for Undergraduates MMIDWU* at the Department of Mathematics, Iowa State University, Ames, IA (USA), Oct 20–21, 2018 (joint with a team of ISU mathematics graduate students).
Workshop webpage: <https://sites.google.com/iastate.edu/mmdu18/home>
- **Lead organizer** of the *Nonlocal School on Fractional Equations – NSFE 2017*, held at Iowa State University, Ames, IA (USA), Aug 17–19, 2017 (joint with H. Antil and P. Sacks).
NSFE 2017 held the “in Cooperation with the Association for Women in Mathematics (AWM)” status: <https://sites.google.com/site/awmmath/info/in-cooperation-with/approved-meetings>
School webpage: <https://stinga.public.iastate.edu/NSFE2017.html>

Referee for peer-reviewed journals

- Abstract and Applied Analysis
- Advanced Nonlinear Studies
- Advances in Calculus of Variations
- Advances in Mathematics (2)
- Analysis & PDE
- Annales de l’Institut Henri Poincaré (C) Analyse Non Linéaire (2)
- Annali di Matematica Pura ed Applicata
- Annals of PDE
- Calculus of Variations and Partial Differential Equations (7)
- Communications in Contemporary Mathematics (2)
- Communications in Mathematical Physics
- Communications in Mathematical Sciences
- Communications in Partial Differential Equations (3)
- Communications in Pure and Applied Analysis
- Comptes rendus Mathématique (2) (**Recognized reviewer status – Apr 2019**)
- Contemporary Mathematics
- DeGruyter volumes
- Discrete and Continuous Dynamical Systems (3)
- Electronic Journal of Differential Equations (2)
- ESAIM: Mathematical Modelling and Numerical Analysis (M2AN)
- Forum Mathematicum
- Integral Equations and Applications
- International Mathematics Research Notices (2)
- Journal de Mathématiques Pures et Appliquées (3)
- Journal of Applied Mathematics
- Journal of Evolution Equations (2)

- Journal of Fourier Analysis and Applications
- Journal of Functional Analysis (**Recognized reviewer status – Apr 2019**)
- Journal of Mathematical Analysis and Applications (7) (**Outstanding Reviewer Status – Feb 2016**)
- Journal of Pseudo-Differential Operators and Applications
- Mathematical Models and Methods in Applied Sciences (M3AS) (2)
- Mathematics
- Mathematische Nachrichten
- Nonlinear Analysis (**Recognized reviewer status – Apr 2019**)
- Positivity (2)
- Proceedings of the International Workshop on Operator Theory and its Applications IWOTA
- Proceedings of the London Mathematical Society
- Proceedings of the Royal Society of Edinburgh Section A: Mathematics
- Revista Matemática Iberoamericana (2)
- Science China Mathematics
- SIAM Journal of Mathematical Analysis (3)
- Springer Books (2)
- Symmetry, Integrability and Geometry: Methods and Applications (SIGMA)
- Transactions of the American Mathematical Society (3)

Reviewer for abstract indexes

- American Mathematical Society Mathematical Reviews (total: 45, 2011–2017).
- Zentralblatt MATH (Mar 2013–Feb 2016).

Invited visitors to ISU

- 2019–2020: Armin Schikorra (Pittsburgh, upcoming).
- 2018–2019: María Soria-Carro (UT Austin), Fernando Charro (Wayne State), Matthew Novack (UT Austin), Niles Armstrong (Kansas State), Maja Taskovic (U. Penn).
- 2017–2018: Dennis Kriventsov (Courant), Luis Duque (UT Austin), Filippo Cagnetti (U. of Sussex, UK), Russell Schwab (Michigan State), María Soria-Carro (UT Austin).
- Summer 2017: Luis A. Caffarelli (UT Austin), Ricardo H. Nochetto (Maryland, College Park), Alexis F. Vasseur (UT Austin), Marta D’Elia (Sandia), Marta De León-Contreras (UAM, Spain), Pablo Seleson (Oak Ridge), Abner Salgado (Tennessee, Knoxville), Mahamadi Warma (Puerto Rico).
- 2016–2017: Hongjie Dong (Brown), Harbir Antil (George Mason), Yash Jhaveri (ETH Zurich), Mark Allen (BYU), Giles Auchmuty (Houston), Tadele Mengesha (Tennessee, Knoxville), Diego Maldonado (Kansas State), Filomena Feo (Napoli Parthenope), Juan J. Colomina-Almiñana (UT Austin).
- 2015–2016: Nikolai V. Krylov (Minnesota), Camelia A. Pop (Minnesota), Ovidiu Savin (Columbia), Raul Curto (Iowa), Harbir Antil (George Mason), Yash Jhaveri (UT Austin).

PROFESSIONAL MEMBERSHIPS

Association for Women in Mathematics (AWM)

- Regular Member (2016–present).

Society for Industrial and Applied Mathematics (SIAM)

- Member of SIAM (2017–present).
- Member of SIAM Activity Group (SIAG) on Analysis of Partial Differential Equations (2017–present).

American Philosophical Association (APA)

- Member (2017–2019).

American Mathematical Society (AMS)

- Member (2019–present).

HONORS AND RECOGNITIONS

FUEL Story County

- Elected to the Board of Directors (Nov 2019–present).
- Social Committee Member (2019).
- Regular Member (2018–present).

Latinxs and Hispanics in the Mathematical Sciences (Lathisms) Project

- On Sunday October 14, 2018, and as part of Hispanic Heritage Month, I was honored as *Mathematician of the Day* by Lathisms (<http://www.lathisms.org/index.html>).
For the article: <http://www.lathisms.org/sunday-october-14th-2018.html>
The Iowa State Daily published an article about it in:
http://www.iowastatedaily.com/news/assistant-professor-earns-mathematics-honors/article_ae409ea4-d8a6-11e8-95db-3336ca66d521.html

Iowa State University

- Oct 2020. My PhD student Mary Vaughan was awarded the Spring 2020 Lambert Assistantship from the Department of Mathematics. *“The purpose of this assistantship is to improve the quantity and quality of research produced by the fellow, by allowing her to focus on research during the spring semester with no teaching duties. The pay will be the same as she receives as a TA, and a tuition scholarship will be provided”.*
- May 2019. I received the Iowa State University College of Liberal Arts and Science **Award for Inclusive Excellence**.
- Feb 2019. My PhD student Mary Vaughan was awarded the 2019–2020 Brown Graduate Fellowship from Iowa State University: *“Her outstanding credentials have positioned her as one of twelve outstanding students from across the university receiving this award”.*
- Oct 2018. My PhD student Mary Vaughan has been recognized by the Graduate Committee of the Department of Mathematics for her research work, awarding her the *2018-2019 Robert J. Lambert Research Award*.
- Aug 2018. My PhD student Mary Vaughan was selected to present a research poster at the Association for Women in Mathematics Workshop in the 2019 SIAM Conference on Computational Science and Engineering at Spokane, Washington.
- Mar 2018. My PhD student Mary Vaughan received the National Science Foundation (NSF) Mathematical Sciences Graduate Internship (MSGI) Program scholarship to participate in a 2 months internship at Oak Ridge National Laboratory.
- Oct 2017. My PhD student Animesh Biswas has been recognized by the Graduate Committee of the Department of Mathematics for his research work, awarding him the *2017-2018 Robert J. Lambert Applied Mathematics Research Award*.

Journal of Mathematical Analysis and Applications

- Feb 2016. I was awarded the *Outstanding Reviewer Status* for being “in the top 10th percentile in terms of the number of reviews completed for *Journal of Mathematical Analysis and Applications* in the past two years”.

The University of Texas at Austin

- Dec 2013. I was awarded the *Clock Award* from the Services for Students with Disabilities, for “going above and beyond the call of duty to help students with disabilities”.
- May 2013. I was awarded the *Clock Award* from the Services for Students with Disabilities, for “being someone who offered support and guidance to students with disabilities”.

Universidad Nacional de San Luis

- Dec 2005. I received the University Honors Prize for best GPA among all undergraduate students across campus: 9.90/10.00

- Dec 2005. I received the College Honors Prize for best GPA among all students in College: 9.90/10.00

GRANTS,
CONTRACTS AND
AWARDS

National Science Foundation (NSF)

- Nov 2018 (co-PI) – DMS - Geometric Analysis Program NSF 16-550. Award for *Midwest Geometry Conference 2019* at ISU campus. Amount: 20,000 USD

Simons Foundation

- Sep 2018 to Aug 2023 (PI) – Collaboration Grants for Mathematicians. Project title: *Regularity theory for fractional nonlocal equations*. Amount: 42,000 USD.

Institute for Mathematics and its Applications (IMA)

- Feb 2017 (PI) – IMA Participating Institutions Conferences Award for the *Nonlocal School on Fractional Equations – NSFE 2017*. Amount: 5,000 USD.

Big XII Conference

- Jun 2018 – Big XII Faculty Fellowship for research in Philosophy of Logic at ISU with visiting faculty J. J. Colomina-Alminana (UT Austin). Amount: 1,800 USD.
- Jun 2016 – Big XII Faculty Fellowship for research in Philosophy of Logic at ISU with visiting faculty J. J. Colomina-Alminana (UT Austin). Amount: 1,800 USD.

Iowa State University

- Feb 2019 (PI) – Foreign Travel Grant (FTG). Second Round 2018–2019. To deliver invited presentation at *Nonlinear Analysis and its Applications – In Honor of Luis A. Caffarelli 2019* in Mar del Plata, Argentina. Amount: 1,261 USD.
- Sep 2018 (PI) – Office of the Vice President for Diversity and Inclusion Award for *Midwest Geometry Conference 2019*. Amount: 500 USD.
- May 2018 (PI) – Office of the Vice President for Diversity and Inclusion, Inclusion Initiatives Grant (IIG) Program Award for *Midwest Mathematics Inclusion and Diversity Workshop for Undergraduates MMIDWU 2018*. Amount: 1,580 USD.
- Jul 2017 (PI) – Office of the Vice President for Diversity and Inclusion Award for *Nonlocal School on Fractional Equations – NSFE 2017*. Amount: 500 USD.
- Jul 2016 (PI) – Department of Mathematics Award for *Nonlocal School on Fractional Equations – NSFE 2017*. Amount: 5,000 USD.
- Feb 2017 (PI) – College of Liberal Arts and Sciences Award for the *Nonlocal School on Fractional Equations – NSFE 2017*. Amount: 2,000 USD.

Government of Spain

- Jan 2016 – Dec 2019 (Research member) “Fractional Laplacians. Spectral Theory. Semigroups” funded by Spanish Ministry of Economy and Competitiveness. PI: J. L. Torrea.
- Oct 2012 – Dec 2015 (Research member) “Spectral theory. Semigroups and applications to PDEs” funded by Spanish Ministry of Economy and Competitiveness. PI: J. L. Torrea.
- Oct 2010 – Dec 2010 (Researcher) “Mathematical analysis and applications” funded by Aragón’s Government Direction, Spain. PI: J. Bastero.
- Jan 2009 – Dec 2011 (Research member) “Spectral theory of semigroups and its impact in harmonic analysis” funded by Spanish Ministry of Science and Innovation. PI: J. L. Torrea.
- Dec 2005 – Dec 2008 (Research member) “Vector and spectral methods in harmonic analysis” funded by Spanish Ministry of Education and Science. PI: J. L. Torrea.
- Oct 2006 – Sep 2010 (PI) Grant for graduate studies “Formation of Research Staff” (FPI) funded by Spanish Ministry of Education and Science.

The University of Texas at Austin

- Nov 2012 (PI) – Rom Rhome International Professional Development Fund from the College of Natural Sciences.

YPF Foundation

- Graduate grant “José A. Estenssoro” for PhD studies, Argentina (2006).
- Undergraduate grant for Mathematics Degree, Argentina (Mar 2002 to Mar 2006).

CONICET

- Graduate grant for PhD studies from National Council of Scientific and Technological Research CONICET, Argentina (2005).

Universidad Nacional de San Luis

- Undergraduate grant for Mathematics Degree from UNSL for best GPA in high school (Mar 2001 to Dec 2001).

Other travel grants

- Grant to participate at the Third Mathematical Engineering Summer School at University of Concepción, Chile (Jan 2006).
- Grant to participate at IMPA Mathematical Summer School at Instituto de Matemática Pura e Aplicada (IMPA), Rio de Janeiro, Brazil (Jan–Feb 2005).

CONTINUED
PROFESSIONAL
TRAINING

Iowa State University

- Oct 2018 – College of Liberal Arts and Sciences *Workshop on the Preliminary 3rd Year Review Process* (2 hr).
- Aug 2018 – Graduate College *Inclusion Workshop for Graduate Faculty* (2 hr).
- Oct 2017 – College of Liberal Arts and Sciences *Workshop on the Preliminary 3rd Year Review Process* (2 hr).
- Oct 2017 – Graduate College *Mentoring Graduate Students Workshop* (2 hr).
- Aug 2015 – Center for Excellence in Learning and Teaching *CELT Teaching Symposium* (1/2 day).
- Aug 2015 – Office of the Senior Vice President and Provost *New Faculty Orientation* (1 day).

FUEL of Story County

- Feb 2019 – *How to Live out your Passion and Achieve your Goals*, presented by Kevin Dresser, Head Coach of Iowa State University Wrestling Team (1 hr).
- Jan 2019 – *Grow Your Influence*, presented by Jim Summers, Associate Professor of Management at Iowa State University (1 hr).
- Oct 2018 – *Ames Chamber of Commerce Leadership Series Capstone*, presented by Dr. Simon Estes (1 hr).
- Feb 2018 – *Getting the Most Out of Your Team*, presented by Jon Heacock, Defensive Coordinator and Safeties Coach of Iowa State University Football Team (1 hr).

The University of Texas at Austin

- Aug 2012 – *New Faculty Orientation* (2 days) including: workshops on *Becoming an Effective Teacher*, *How to Help Students Success in your Classes* and *The Flipped Classroom Teaching Method*.

RESEARCH VISITS

- May 2020. Okinawa Institute of Science and Technology (Japan) (upcoming).
- Mar 2019. The University of Texas at Austin (USA) (upcoming).
- Nov 2019. The University of Texas at Austin (USA).
- May 2019. Stanford University (USA).
- Mar–Apr 2019. The University of Texas at Austin (USA).
- Jan 2019. Oak Ridge National Laboratory (USA).
- Jan 2019. George Mason University (USA).
- Sep 2018. The University of Texas at Austin (USA).
- Aug 2018. Universidad de Puerto Rico, Río Piedras (Puerto Rico).
- Jul 2018. Universitat de Barcelona (Spain).

- Jul 2018. Università degli Studi di Napoli “Parthenope” (Italy).
- Jul 2018. Universidad Autónoma de Madrid (Spain).
- Mar 2018. Universidad Autónoma de Madrid (Spain).
- Jan–Feb 2018. The University of Texas at Austin (USA).
- Nov 2017. FIM-ETH Zürich (Switzerland).
- Jul–Aug 2017. Universidad Autónoma de Madrid (Spain).
- Mar 2017. University of Tennessee, Knoxville (USA).
- Feb 2017. Division of Applied Mathematics, Brown University (USA).
- Nov 2016. Kansas State University (USA).
- Sep 2016. George Mason University (USA).
- Aug 2016. The University of Texas at Austin (USA).
- Jun 2016. Universidad Autónoma de Madrid (Spain).
- Apr 2016. The University of Texas at Austin (USA).
- Oct 2015. University of Tennessee, Knoxville (USA).
- Oct 2015. Kansas State University (USA).
- Sep 2015. The University of Texas at Austin (USA).
- Jul 2015. Pontificia Universidade Católica do Rio de Janeiro PUC-Rio (Brazil).
- Jul 2015. Universidad Técnica Federico Santa María (Chile).
- Apr 2015. Columbia University, New York (USA).
- Nov 2014. University of Tennessee, Knoxville (USA).
- Jul 2014. Universidad de La Rioja (Spain).
- Jul 2014. Università degli Studi di Napoli “Parthenope” (Italy).
- Jul 2014. Universidad Autónoma de Madrid (Spain).
- May–Jun 2014 **6 weeks** at Isaac Newton Institute of Mathematical Sciences, University of Cambridge (United Kingdom).
- May 2014. University of Edinburgh (United Kingdom).
- Jul 2013. Universidad Autónoma de Madrid (Spain).
- Jul 2013. Universidad de La Rioja (Spain).
- Jun 2013. Università degli Studi di Napoli “Parthenope” (Italy).
- Jan 2013. Universidad Autónoma de Madrid (Spain).
- Dec 2012. Universidad de La Rioja (Spain).
- Jun 2012. Università degli Studi di Napoli “Federico II” and Università degli Studi di Napoli “Parthenope” (Italy).
- Jun 2012. Universidad de Málaga (Spain).
- Feb 2012. Universidad de Zaragoza (Spain).
- Nov 2011. Universidad Autónoma de Madrid (Spain).
- Nov 2011. Universidad de La Laguna (Spain).
- Jun 2011. Universidad de La Laguna (Spain).
- Jun 2011. Universidad de Buenos Aires (Argentina).
- Nov 2010. Universidad de Buenos Aires (Argentina).
- Sep 2010. Delft Institute of Applied Mathematics, TU Delft (The Netherlands).
- Jul 2010. University of Edinburgh (United Kingdom).
- May 2010. Universidad de Zaragoza (Spain).
- Apr 2010 **One month** at Isaac Newton Institute of Mathematical Sciences, University of Cambridge (United Kingdom).
- Mar 2010 **One month** at University of Edinburgh (United Kingdom).
- Feb 2010 **Two weeks** at Applied Mathematics Institute of Litoral (IMAL), Universidad Nacional del Litoral (Argentina).
- Dec 2009. Universidad de La Laguna (Spain).
- Sep 2009. Applied Mathematics Institute of Litoral (IMAL), Universidad Nacional del Litoral (Argentina).
- Feb–Mar 2008 **Two months** at University of Edinburgh (United Kingdom).

- Annual Meeting of Argentinean Mathematical Union of 2003, Argentina.

- Annual Meeting of Argentinean Mathematical Union of 2004, Argentina.
- Annual Meeting of Argentinean Mathematical Union of 2005, Argentina.
- IMPA Summer School 2005, at Rio de Janeiro, Brazil.
- Second Meeting of Differential Geometry 2005, at La Falda, Argentina.
- Second International Meeting of nonlinear PDEs 2005, at Buenos Aires, Argentina.
- Numerical Methods for PDE 2005, at Buenos Aires, Argentina.
- First School of Mathematical Models and Economical Behavior 2005, at Merlo, San Luis, Argentina.
- Recent developments in Real and Harmonic Analysis – Meeting in Honor of Carlos Segovia 2005, at Buenos Aires, Argentina.
- Third Summer School of PhD Program in Applied Sciences and Mathematical Engineering 2006, at University of Concepción, Chile.
- Harmonic Analysis and Applications – 8th National Meeting of Analysts “A.P. Calderón” 2006, at Merlo, San Luis, Argentina.
- Harmonic Analysis and Applications 2007, at University of Seville, Spain.
- X Real and Complex Analysis Meetings EARCO 2007, at Palma de Mallorca, Spain.
- SMI Summer School 2007, at Perugia, Italy.
- SIMUMAT Summer School 2007, at Castro Urdiales, Spain.
- International Multidisciplinary Workshop on Stochastic Modeling 2007, University of Seville, Spain.
- III International Course of Mathematical Analysis in Andalucía 2007, at La Rábida, Spain.
- Harmonic Analysis and Orthogonal Systems 2007, at Miraflores de la Sierra, Spain.
- Topics in PDEs and Applications 2008, at Granada, Spain.
- CIMPA School “Real analysis and applications” 2008, at La Falda, Argentina.
- 8th International Conference on Harmonic Analysis and PDE 2008, at El Escorial, Spain.
- Bio–Math Summer School and Workshop 2008 – Stochastic Differential Equation Models with Applications to the Insulin–Glucose System and Neuronal Modeling, at Middelfart, Denmark.
- SPDEs: Computations and Applications 2008, at ICMS, Edinburgh, UK.
- IV International Symposium on Nonlinear PDEs and Free Boundary Problems 2009, at Mar del Plata, Argentina.
- XI Real and Complex Analysis Meetings – XI EARCO 2009, at Chinchón, Spain.
- INdAM Intensive Period “Geometric properties of nonlinear local and nonlocal problems” 2009, at Pavia, Italy.
- Phase Variations 2009, at Pavia, Italy.
- C.I.M.E. Summer Course “Regularity estimates for nonlinear elliptic and parabolic problems” 2009, at Cetraro, Italy.
- Annual Meeting of Argentinean Mathematical Union of 2009, Argentina.
- XII Real and Complex Analysis Meetings – XII EARCO 2010, at Haro, Spain.
- Harmonic Analysis and Orthogonal Systems IV 2010, at Bedlewo, Poland.
- V Research Meeting on Approximation Theory 2010, at Benasque, Spain.
- XIII Real and Complex Analysis Meetings – XIII EARCO 2011, at Zarautz, Spain.
- Fabes Lectures 2011 – Conference on Real Analysis and PDEs, at Buenos Aires, Argentina.
- 22nd International Workshop on Operator Theory and its Applications – IWOTA 2011, at Sevilla, Spain.
- Workshop of Young Researchers in Mathematics 2011, at Universidad Complutense de Madrid, Spain.
- VI Research Meeting on Approximation Theory 2011, at Canfranc, Spain.
- 9th International Conference on Harmonic Analysis and Partial Differential Equations El Escorial 2012, at El Escorial, Spain.
- Summer School 2012 on Nonlocal Operators, at Bielefeld University, Germany.

- Nonlocal Operators: Analysis, Probability, Geometry and Applications 2012, at ZiF Bielefeld, Germany.
- IV Congreso Latinoamericano de Matemáticos CLAM 2012, at National University of Córdoba, Argentina.
- Special Functions, Partial Differential Equations and Harmonic Analysis, a conference in honor of Calixto P. Calderón 2012, at Roosevelt University, Chicago, USA.
- Distance and measure in analysis and partial differential equations: a meeting in honor of Hugo Aimar's 60th birthday, at Universidad Nacional del Litoral, Santa Fe, Argentina.
- Kinetics, non standard diffusions and stochastics: emerging challenges in the sciences, FRG – Ki-Net – Colab Joint Workshop 2014, at The University of Texas at Austin, USA.
- XV Real and Complex Analysis Meetings – XV EARCO 2014, at Girona, Spain.
- Recent Advances in Non-local and Non-linear Analysis: Theory and Applications 2014, at ETH Zürich, Switzerland.
- International Conference on Free Boundary Problems: Theory and Applications 2014, at Isaac Newton Institute of Mathematical Sciences, University of Cambridge, United Kingdom.
- Harmonic Analysis to celebrate Michael Cowling's 65th birthday 2014, at Segovia, Spain.
- 10th AIMS International Conference on Dynamical Systems, Differential Equations and Applications 2014, at Madrid, Spain.
- Annual Meeting of Argentinean Mathematical Union of 2014, Argentina.
- 38th Annual Texas Partial Differential Equations Conference 2015, at Houston, USA.
- Geometric Partial Differential Equations Special Day 2015, at Columbia University, USA.
- Calculus of Variations and Nonlinear Partial Differential Equations 2015, at Austin, Texas, USA.
- 6th Symposium on Analysis and PDEs 2015, at Purdue University, USA.
- Escola de Altos Estudos de Capes 2015, Curso: Free Boundary Problems: Common Aspects and Methods, by Luis Caffarelli, at IMPA, Brazil.
- Thirteenth Prairie Analysis Seminar 2015, at Kansas State University, USA.
- Nonlocal Models in Mathematics, Computation, Science, and Engineering 2015, at Oak Ridge, Tennessee, USA.
- 2015 SIAM Conference on Analysis of Partial Differential Equations, at Scottsdale, Arizona, USA.
- 15th New Mexico Analysis Seminar 2016, at Albuquerque, New Mexico, USA.
- 39th Annual Texas Partial Differential Equations Conference 2016, at San Marcos, Texas, USA.
- The Nineteenth Rivière–Fabes Symposium on Analysis and PDE 2016, at University of Minnesota, USA.
- Calculus of Variations and Partial Differential Equations 2016, at Columbia University, New York, USA.
- 10th International Conference in Harmonic Analysis and Partial Differential Equations 2016, at El Escorial, Madrid, Spain.
- 3rd Conference on Nonlocal Operators and Partial Differential Equations 2016, at Conference Centre of the Polish Academy of Sciences, Bedlewo, Poland.
- 2nd Annual Meeting of SIAM Central States Section 2016, at University of Arkansas at Little Rock, Little Rock, Arkansas, USA.
- AMS Fall Central Sectional Meeting 2016, at University of St. Thomas (Minneapolis campus), Minneapolis, Minnesota, USA.
- SIAM-SEAS Southeastern Atlantic Section Conference 2017, at Florida State University, Tallahassee, Florida, USA.
- KUMUNU Conference in PDE, Dynamical Systems and Applications 2017, at Uni-

versity of Nebraska-Lincoln, Nebraska, USA.

- Nonlocal Dynamics: Theory, Computation and Applications – NSF/CBMS Regional Conference in the Mathematical Sciences 2017, at Illinois Institute of Technology, Chicago, Illinois, USA.
- Nonlocal School on Fractional Equations – NSF 2017, at Iowa State University, Ames, Iowa, USA.
- Primer Encuentro Conjunto RSME–UMA, Reunión Anual de la UMA 2017, at Universidad de Buenos Aires, Argentina.
- Joint Mathematics Meetings 2018, at San Diego, California, USA.
- Texas Differential Equations Conference 2018, at The University of Texas at San Antonio, Texas, USA.
- American Philosophical Association 2018 Pacific Division Meeting, at San Diego, California, USA.
- Fractional PDEs: Theory, Algorithms and Applications 2018, at ICERM – Brown University, Providence, Rhode Island, USA.
- AMS Fall Central Sectional Meeting 2018, at University of Michigan, USA.
- AMS Fall Western Sectional Meeting 2018, at San Francisco State University, USA.
- Workshop on Dynamics, Control and Numerics for fractional PDEs 2018, at Puerto Rico, USA.
- Nonlinear Analysis and its Applications – In Honor of Luis A. Caffarelli 2019, in Mar del Plata, Argentina.
- International Conference on Elliptic and Parabolic Problems 2019, in Gaeta, Italy.
- Midwest Geometry Conference 2019, at Iowa State University, Ames, Iowa, USA.
- AMS Fall Central Sectional Meeting 2019, at University of Wisconsin-Madison, USA.
- 3rd Fractional Calculus Meeting 2019, at Universidad de Zaragoza, Spain.
- Local and Nonlocal Trends in Analysis and Geometry 2019, at University of Pittsburgh, USA.
- SIAM Central States Section 5th Annual Meeting 2019, at Iowa State U., USA.
- AMS Fall Southeastern Sectional Meeting 2019, at U. of Florida, Gainesville, USA.

CITIZENSHIPS Argentina – Italy

LANGUAGES

- English: fluent speaking, reading and writing.
- Italian: perfect speaking, reading and writing. Certified by *Certificazione Internazionale PLIDA* from Università della Tuscia di Viterbo and Società Dante Alighieri (Italy).
- Spanish: mother tongue.

REFERENCES **Giles Auchmuty** (e-mail: auchmuty@uh.edu; phone: +1-713-743-3475)

- Professor of Mathematics
- ◊ University of Houston, Department of Mathematics, 4800 Calhoun Ave, Houston, TX 77204-3008 (USA)

Luis A. Caffarelli (e-mail: caffarel@math.utexas.edu; phone: +1-512-471-3160)

- Sid W. Richardson Foundation Regents Chair in Mathematics No. 1 Professor of Mathematics
- ◊ The University of Texas at Austin, Department of Mathematics, RLM 8.100, 2515 Speedway Stop C1200, Austin, TX 78712-1202 (USA)

Paul Sacks (e-mail: psacks@iastate.edu; phone: +1-515-294-8143)

- Professor of Mathematics
- ◊ Iowa State University, Department of Mathematics, 396 Carver Hall, 411 Morill Road, Ames, IA 50011 (USA)

Alexis F. Vasseur (e-mail: vasseur@math.utexas.edu; phone: +1-512-471-2363)

- John T. Stuart III Centennial Professor of Mathematics
- ◊ The University of Texas at Austin, Department of Mathematics, RLM 8.100, 2515 Speedway Stop C1200, Austin, TX 78712-1202 (USA)

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- Professor of Mathematics
- ◊ University of Puerto Rico (Rio Piedras Campus), Department of Mathematics, 17 University Ave. Ste 1701, San Juan, PR 00925-2537 (USA)

MORE
INFORMATION

More information and auxiliary documents can be found at
<https://stinga.public.iastate.edu/>

Google Scholar profile

<https://scholar.google.com/citations?user=gT-jYVwAAAAJ&hl=en&oi=ao>

Google Scholar Citations: 843 – H-index: 15

Mathscinet Citations: 366 by 347 authors.