Wilfredo O. Urbina-Romero

Department of Mathematics and Actuarial Science
Roosevelt University 430 S Michigan Ave
Chicago, IL 60605 Office (312) 3227149
e-mail: wurbinaromero@roosevelt.edu
Home: 1101 Grove St Apt 4A Evanston Il 60201 Cell (312) 9250280

EDUCATION

Ph.D	University of Minnesota (Mathematics) 1988. Thesis title: *Singular Integrals with respect to the Gaussian measure*. Advisor: Eugene Fabes.
MASTER	Universidad Central de Venezuela (Mathematics) 1983. Graduate with honors. Thesis title: *Ley funcional del Logaritmo Iterado para el Movimiento Browniano biparamétrico con valores en un espacio de Banach* Advisor: Alejandro de Acosta.
LICENCIADO	Universidad Central de Venezuela (Mathematics) 1978. *Magna Cum laude*. Thesis title: *Versiones maximales y sandwich del Teorema de Hahn - Banach*. Advisor: Mischa Cotlar.

RESEARCH INTEREST

Harmonic analysis, singular integrals, special functions, orthogonal polynomials, operator semigroups, functional inequalities, hypercontractivity, wavelets, stochastic process, martingales, stochastic integration, stochastic differential equations.

ACADEMIC EXPERIENCE

2013 -	**Associate Professor**. Roosevelt University. Chicago, IL.
2010 - 2013	**Assistant Professor**. Roosevelt University. Chicago, IL.
2007 - 2010	**Visiting Professor**. DePaul University. Chicago, IL.
2005 - 2007	**Visiting Associate Professor**. University of New México. Albuquerque, NM.
2004 - 2005	**Visiting Professor**. University of Kansas. Lawrence, KS.
1998 - 2004	**Profesor Titular (Full Professor)**. Universidad Central de Venezuela. Caracas.
02-08/ 1996	**Visiting Associate Professor**. Universidad de la Rioja. Logroño. Spain.
09-12/1995	**Visiting Associate Professor**. University of Minnesota.

Minneapolis. MN.

1992 - 1998 **Profesor Asociado**. Universidad Central de Venezuela. Caracas.

1989 - 1992 **Profesor Agregado**. Universidad Central de Venezuela. Caracas.

1988 - 1989 **Assistant Professor (Lawton Lecture)**. Temple University. Philadelphia. PA.

1982 - 1989 **Profesor Asistente**. Universidad Central de Venezuela. Caracas.

1984 - 1988 **Teaching Assistant**. University of Minnesota. Minneapolis.

1978 - 1982 **Instructor**. Universidad Central de Venezuela. Caracas.

1975 - 1978 **Auxiliar Docente**. Universidad Central de Venezuela. Caracas.

1973 - 1975 **Preparador**. Universidad Central de Venezuela. Caracas.

REFEREED PAPERS AND PUBLICATIONS

Refereed Papers

1. *Excursiones a los conjuntos similares al conjunto de Cantor.* (with R. DiMartino) accepted for publication in the Gaceta Sociedad Matemática Española (2018). arXiv:1025026

2. *A transference result of the L^p continuity of the Jacobi Littlewood-Paley g function to the Gaussian and Laguerre Littlewood-Paley g function.* (with Eduard Navas). Accepted for publication in Journal of Functional Spaces. (2018) arXiv:1612.05301

3. *Using Calculus to Model Income Inequality* (wtih Bárbara González-Arévalo) To appear in Mathematics and Social Justice: Modules for the Classroom, MAA. Vol 1. (2018)

4. *On Cantor-like sets and Cantor-Lebesgue singular functions* (with R. DiMartino) Submitted for publication (2017) arXiv: 1403.6554

5. *Potential Operators with mixed homogeneity.* (with Calixto P. Calderón). Harmonic Analysis, Partial Differential Equations, Complex Analysis, Banach Spaces, and Operator Theory (Volume 2) Celebrating Cora Sadosky's life. Association for Women in Mathematics. (2017) Springer-Verlag.

6. *New real variable methods in H summability of Fourier series.* (with Calixto P. Calderón and A. Susana Coré). Submitted for publication. (2017).

7. *Riesz Potentials, Bessel Potentials and Fractional Derivatives on Triebel-Lizorkin spaces for the Gaussian Measure.* (with A. Eduardo Gatto and Ebner Pineda). J. Math. Anal. Appl. 422 (2015), no. 2, 798–818. arXiv:1209.6133

8. *On Gaussian Lipschitz spaces and the boundedness of Fractional Integrals and Fractional Derivatives on them.* (with A. Eduardo Gatto). Quaest. Math. 38 (2015), no. 1, 1–25 arXiv:0911.3962

9. *Some Non Standard Applications on the Laplace Method.* (with Calixto P. Calderón) in Recent advances in harmonic analysis and applications. Special Functions, Partial Differential Equations and Harmonic Analysis, in honor of Calixto P. Calderón. Springer-Verlag (2014).

10. *A transference result of the L^p continuity of the Jacobi Riesz transform to the Gaussian and Laguerre Riesz transforms.* (with Eduard Navas). J. Fourier Anal. Appl. 19 (2013), no. 5, 910942. arXiv:1202.5728

11. *Riesz Potentials, Bessel Potentials and Fractional Derivatives on Besov-Lipchitz spaces for the Gaussian Measure.* (with A. Eduardo Gatto and Ebner Pineda). Recent advances in harmonic analysis and applications, dedicate to Konstantin Oskolkov for his 65 birthday, 105–130, Springer Proc. Math. Stat., 25, Springer, New York, (2013). arXiv:1108.0238

12. *On Abel summability of Jacobi polynomials series, the Watson Kernel and applications.* (with Calixto P. Calderón). Illinois J. Math. Volume 57, Number 2 (2013), 343-371.arXiv: 1207.4524

13. *On the Theta semigroup.* (with Ahmed Zayed). Complex Anal. Oper. Theory 6 (2012), no. 3, 565–583. arXiv:1108.0244

14. *Sobolev-Gegenbauer type orthogonality and a hydrodynamical interpretation.* (with José Y. Bello, Charo Márquez and Héctor Pijeira). Integral Transform and Special functions. (2011) 1–12.

15. *On Polar Legendre Polynomials.* (with José Y. Bello and Héctor Pijeira). Rocky Mountain Journal of Mathematics. Vol 40, Number 6

(2010) 2025–2036. arXiv:0709.4537

16. *Some results on Gaussian Besov-Lipschitz spaces and Gaussian Triebel-Lizorkin spaces.* (with Ebner Pineda). Journal of Approximation Theory, Volume 161, Issue 2, December (2009), 529–564. arXiv:0709.4533

17. *Semigroups associated to generalized polynomials and some classical formulas.* (with Cristina Balderrama and Piotr Graczyk). J. Math. Pures Appl. 92 (2009) 375–395.

18. *Fractional Integration and Fractional Differentiation for d-dimensional Jacobi Expansions.* (with Cristina Balderrama). Contemporary Mathematics. AMS #471 (2008) 1–14.

19. *Controllability of Laguerre and Jacobi Equations.* (with Diomedes Bárcenas, Hugo Leiva and Yamilet Quintana). International Journal of Control. 80:8 (2007) 1307–1315.

20. *Non Tangential convergence for the Ornstein-Uhlenbeck semigroup.* (with Ebner Pineda) Divulgaciones Matemáticas 16, no. 1 (2007), 107–124. http://-www.emis.de/journals/DM/v16-1/art7.pdf

21. *Sobre la propiedad hipercontractiva.* Divulgaciones Matemáticas 15, no. 2 (2007) 235–252. http://www.emis.de/journals/DM/v15-2/art12.pdf

22. *Fractional Integration and Fractional Differentiation for Jacobi Expansions.* (with Cristina Balderrama) Divulgaciones Matemáticas 15, no. 2 (2007) 93–113. http://www.emis.de/journals/DM/v15-2/art2.pdf

23. *On the maximal function of the generalized Ornstein-Uhlembeck semigroup.* (with Jorge Betencort, Liliana Forzani, and Roberto Scotto) Quaestiones Mathematicae 30 (2007). 1–12. arXiv: math. CA/0610011

24. *Controllability of the Ornstein Uhlenbeck Equation.* (with Diomedes Bárcenas and Hugo Leiva) IMA Journal of Mathematical Control and Information. 22 (2005), no. 3, 310–320.

25. *A formula for polynomials with Hermitian matrix argument.* (with Cristina Balderrama and Piotr Graczyk). Bull. Sci. Math. 129 (2005) no. 6, 486–500.

26. *Higher order Riesz transforms, Fractional differentiation and Sobolev spaces for Laguerre expansions.* (with Adam Novak, Piotr Graczyk,

Jean-J. Loeb and Iris López). J. Math. Pures Appl. (9). 84 (2005), no. 3, 375–405

27. *On some functions of the Littlewood Paley theory the Gaussian measure and applications* (with Iris López). Revista de la Unión Matemática Argentina (UMA). Vol 45 (2004), no. 2 , 41–53.

28. *Fractional differentiation for the Gaussian measure and applications.* (with Iris López). Bull. Sci. Math. 128 (2004), no. 7, 587–603

29. *On the L^p boundedness of the non-centered Gaussian Hardy-Littlewood maximal function .* (with Liliana Forzani, Roberto Scotto and Peter Sjögren). Proc. Amer. Math Soc. vol 130 (1) (2002) 73–79.

30. *Zero localization and asymptotic behavior of orthogonal polynomials of Jacobi-Sobolev.* (with Héctor Pijeira and Yamilet Quintana). Revista Colombiana de Matemáticas. vol 35 #2 (2001). 77–97.

31. *Asymptotic behaviour of orthogonal polynomials Primitives* (with Alfredo Fundora and Héctor Pijeira). Margarita Mathematica. Volume dedicated to José Javier Guadalupe Hernández (Chicho). Universidad de la Rioja (2001) 627–633.

32. *Local properties of martingales: some new proofs.* (with Miguel Narváez.) Acta Científica Venezolana. Suplemento 2 vol 52. (2001) 39–44.

33. *Poisson-Hermite representation of solutions of the equation* $\frac{\partial^2}{\partial t^2}u(x,t)+\Delta_x u(x,t) - 2x \cdot \bigtriangledown_x u(x,t) = 0$. (with Liliana Forzani). Proceedings 5th International Conference on Approximation and Optimization in the Caribbean. Approximation, Optimization and Mathematical Economics (2001). 109–115. Springer Verlag.

34. *A simpler proof of the L^p continuity of the higher order Riesz Transform with respect to the Gaussian measure γ_d.* (with Liliana Forzani and Roberto Scotto). Seminaire de Probabilites Lecture Notes in Math 1755. (2001). Springer-Verlag.

35. *Riesz and Bessel Potentials, the g_k functions and an Area function, for the Gaussian measure γ_d.* (with Liliana Forzani and Roberto Scotto). Revista de la Unión Matemática Argentina (UMA) vol 42 (1) (2000) 17–37.

36. *Análisis Armónico Gaussiano: una visión panorámica* Boletín de la AMV Vol V No (1998) 143-184.

37. *Invariant subspaces and commutant for the Gaussian Hilbert Transform.* (with María D. Morán) Acta Científica Venezolana, Vol 49, No 2 (1998) 102–105.

38. *Continuous s-martingales as stochastic integrals with respect to the Brownian sheet* (with Ignacio González). Modelos Estocásticos. Investigación #14. Aportaciones Mat. Investig.,14, Soc. Mat. Mexicana, (1998) 241–259.

39. *Generalized Burkholder - Davis - Gundy inequalities and good λ-inequalities.* (with Miguel Narváez) Acta Científica Venezolana, Vol 48, No 4 (1997) 211–215.

40. *Measurable Multifunctions in non-separable Banach spaces.* (with Diomedes Bárcenas) SIAM J. Math. Anal.Vol.28, No 5 (1997) 1212–1226.

41. *De la desigualdad de Khintchine a las desigualdades del buen-λ.* Notas de Matemáticas #149. Departamento de Matemáticas. Facultad de Ciencias. ULA. (1994).

42. *La Transformada de Riesz con respecto a la medida de Gauss.* Notas de Matematicas #115. Departamento de Matemáticas, Facultad de Ciencias. ULA (1991).

43. *Estimates for the maximal operator of the Ornstein-Uhlenbeck semigroup.* (with Cristián Gutiérrez). Proc. Amer. Math Soc. 113 (1991) 99–104.

44. *Teorema Central del Límite para s-martingalas.* (with Ileana Iribarren), Actas del IV Congreso de Probabilidades y Estadística. Universidad Nacional Autónoma de México. Ciudad de México, México (1990).

45. *Singular Integrals with respect to the Gaussian measure.* Annali della Scuola Normale Superiore (classe di Scienza) Serie IV Vol.XVII.4 Pisa, Italia (1990) 531–567.

46. *Functional Law of the Iterated Logarithm for the Biparametric Brownian motion with values in a Banach space.* Notas de Matemáticas

(85-PE-01). Departamento de Matemáticas. Facultad de Ciencias. UCV. (1985).

Monographs

1. *Operators Semigroups associated to Classical Orthogonal Polynomials and Functional Inequalities.* in *Orthogonal Families and Semigroups in Analysis And Probability - CIMPA Workshop Mérida, Venezuela, 2006*. French Mathematical Society (SMF). Séminaires et Congrès 25 (2012), xv+383 pages.

2. *Semigrupos de Polinomios Clásicos y Desigualdades Funcionales.* Universidad de los Andes. Mérida. Venezuela. February 2006. 108 pag. Course taught in Escuela CIMPA-Venezuela.

3. *Introducción a la Teoría de Ondículas a través del Algebra Lineal.* (with Ventura Echandía) Universidad del Zulia. Maracaibo. Venezuela. July 2004. 162 pag. Course taught in V TForMa.

4. *Integrales singulares y sus aplicaciones* (with Liliana Forzani). Universidad de los Andes, Mérida, Venezuela. September 2001. 142 pag. Course taught in XIV Escuela Venezolana de Matemáticas.

5. *Teoría de Aproximación y Polinomios Ortogonales.* Universidad de Centro-Occidental Lisandro Alvarado. Barquisimeto, Venezuela. July 2001. 56 pag. Course taught in II TForMa.

6. *Análisis Real* (with Neptalí Romero). Universidad de CentroOccidental Lisandro Alvarado. Barquisimeto, Venezuela. October 2000. 103 pag. Course taught in I TForMa.

7. *Análisis Armónico Gaussiano: una visión panorámica.* Monograph to be promoted to Profesor Titular. Facultad de Ciencias UCV (1998).

8. *Harmonic Analysis and Operator Theory.* Editor. Contemporary Mathematics # 189. American Mathematical Society (1995).

8. *Teoría de Martingalas y aplicaciones.* Universidad de los Andes, Mérida, Venezuela. September 1992 . 142 pag. Course taught in V Escuela Venezolana de Matemáticas. (1992).

9. *Tópicos de Análisis Armónico Gaussiano.* Monograph to be promoted to Profesor Asociado. Facultad de Ciencias UCV (1992) and in Actas

del Seminario Avanzado en Teoría de Aproximación. Universidad de Cantabria. Laredo, Spain. September 1992.

10. *La Ecuación de Schrodinger: una introducción a las ecuaciones no lineales de evolución.* (with Gustavo Ponce). Universidad de los Andes, Mérida, Venezuela. September 1990. 92 pag. Course taught in III Escuela Venezolana de Matemáticas. (1990).

11. *La Transformada de Riesz con respecto a la medida de Gauss.* Monograph to be promoted to Profesor Agregado. Facultad de Ciencias UCV (1989).

12. *Ley Funcional del Logaritmo Iterado para el Movimiento Browniano biparamétrico con valores en un espacio de Banach.* Monograph to be promoted to Profesor Asistente. Facultad de Ciencias UCV (1982).

WORK IN PROGRESS

1. *Gaussian Harmonic Analysis.* Book submitted for publication in Springer-Verlag (2018). In revision.

2. *On the asymptotic relations between Jacobi, Hermite and Laguerre settings.* (with Eduard Navas). Article in preparation.

3. *On Gaussian Harmonic Analysis in Variable $L^{p(\cdot)}$ Gaussian Lebesgue Spaces.* (with Ebner Pineda and Jorge Moreno). Article in preparation.

4. *Martingale Theory and Applications.* (with Ricardo Rios). Book in preparation.

CONFERENCE TALKS

1. *On Gaussian Harmonic Analysis in Variable $L^{p(\cdot)}$ Lebesgue Spaces.* Invited speaker 38th International conference on Infinite Dimension Analysis, Quantum Probability and Related Topics QP38 held at Tokyo University of Science October 02–07, 2017.

2. *Gaussian Harmonic Analysis.* Invited speaker International School-Workshop "Orthogonal Polynomials, Interacting Fock Spaces, Quantum Markov Semigroups and related fields". Tunisia, Nabeul, Yassmine Hammamet, October 17–21, 2016.

3. *A transference results of the L^p continuity from Jacobi Riesz transform to the Gaussian and Laguerre Riesz transforms.* Invited speaker at the special session on "Harmonic Analysis and Geometric Measure Theory" at the V Congreso Latinoamericano de Matemticos (V CLAM), Universidad del Norte (UNINORTE), Barranquilla, Colombia, July 11–15, 2016.

4. *On Abel summability of Jacobi polynomials series, the Watson Kernel and applications.* 10th. International Conference on Harmonic Analysis and Partial Differential Equations El Escorial, Madrid (Spain) June 12-17, 2016.

5. *A Brief History of Pi and of its computation.* 2016 ISMAA annual meeting. Illinois College. Jacksonville, IL. April 8–9, 2016.

6. *New real variable methods in H summability of Fourier series.* 15th. New Mexico Analysis Seminar, Albuquerque, New Mexico, February 19–21, 2016.

7. *New real variable methods in H summability of Fourier series.* Meeting in Analysis, celebrating Salvador Pérez-Esteva's 60-th birthday, Unidad Cuernavaca del Instituto de Mateáticas de la Universidad Autónoma de México, Cuernavaca, México, November 18–20, 2015.

8. *A transference results of the L^p continuity from Jacobi Riesz transform to the Gaussian and Laguerre Riesz transforms.* Quantum Markov Semigroups in Analysis, Physics and Probability. Banff International Research Station for Mathematical Innovation and Discovery (BIRS) & Casa Matemática Oaxaca (CMO), Oaxaca, México, August 23–28, 2015.

9. *Random Variables, Independence, and Number Theory: Some Examples* 2015 ISMAA annual meeting. Northern Illinois University in Dekalb, IL. March 27– 28, 2015

10. *A transference results of the L^p continuity from Jacobi Riesz transform to the Gaussian and Laguerre Riesz transforms.* Probability on Algebraic and Geometric Structures Conference. Southern Illinois University, Carbondale IL, June 5–7, 2014

11. *A transference results of the L^p continuity from Jacobi Riesz transform to the Gaussian and Laguerre Riesz transforms.* AMS Western

Spring Sectional Meeting, Special Session on Harmonic Analysis and Its Applications, III. Albuquerque, New Mexico. April 5–6, 2014.

12. *Stacking Cantor Sets.* 2014 ISMAA annual meeting. Southern Illinois University, Edwardsville IL, March 28–29, 2014

13. *On Abel summability of Jacobi polynomials series, the Watson Kernel and applications.* Distancia y Media en Análisis y Ecuaciones Diferenciales, in honor of Hugo Aimar his 60-th birthday. Universidad del Litoral, Santa Fe, Argentina, June 13–14, 2013.

14. *Transference results from the L^p continuity of operators in the Jacobi case to the L^p continuity of operators in the Hermite and Laguerre case.* 9th International Conference on Harmonic Analysis and Partial Differential equations. El Escorial, Spain. June 2012.

15. *Transference method of the L^p continuity of the Jacobi Littlewood-Paley g function to the Gaussian and Laguerre Littlewood-Paley g function.* AMS 2012 Spring Central Section Meeting Lawrence KS, April 2012.

16. *A transference result of the L^p continuity of the Jacobi Riesz transform to the Gaussian and Laguerre Riesz transforms.* III Workshop in Harmonic Analysis and PDE (III WHAPDE). México City, México, October 2011.

17. *Higher Order Riesz and Bessel Fractional Derivatives on Gaussian Lipschitz spaces.* AMS 2011 Spring Southeastern Section Meeting. Statesboro, GA, March 2011.

18. *Riesz Potentials, Bessel Potentials and Fractional Derivatives on Functions spaces for the Gaussian Measure.* AMS Fall Eastern Sectional Meeting Syracuse, NY. USA. September 2010.

19. *Riesz Potentials, Bessel Potentials and Fractional Derivatives on Functions spaces for the Gaussian Measure.* International Congress of Mathematicians (ICM), Hyderabad, India, August, 2010.

20. *Riesz Potentials, Bessel Potentials and Fractional Derivatives on Functions spaces for the Gaussian Measure.* AMS Western Section Meeting. Albuquerque, New Mexico, USA. April 2010.

21. *Lipschitz spaces Fractional Integrals and Fractional Derivatives.* 12th New Mexico Analysis Seminar. University of New Mexico. Albuquerque NM. USA. April 2009.

22. *On Gaussian Besov-Lipchitz and Triebel-Lizorkin spaces.* Eight Prairie Analysis Seminar. University of Kansas. Lawrence, KS. USA. November 2008.

23. *Orthogonal polynomials with Hermitian matrix argument.* International Workshop on Orthogonal Polynomials and Approximation Theory 2008. Universidad Carlos III. Leganés, Spain. September 2008.

24. *Markov semigroups associated to families of generalized orthogonal polynomials.* 8th International Conference on Harmonic Analysis and Partial Differential equations. El Escorial, Spain. June 2008.

25. *Markov semigroups associated to families of generalized orthogonal polynomials.* South Florida Analysis seminar-4, Florida Atlantic University, Boca Ratón, Florida, USA. March 2008.

26. *On Gaussian Besov-Lipschitz spaces.* AMS Meeting. DePaul University, Chicago, Illinois. USA. October 2007.

27. *Fractional Integration and Fractional Differentiation for d-dimensional Jacobi Expansions.* Joint Meeting AMS-SMM. Universidad de Zacatecas, Zacatecas, México. May 2007.

28. *Fractional Integrtion and Fractional Differentiation for d-dimensional Jacobi Expansions.* 1027th AMS Meeting. University of Arizona, Tucson, Arizona, USA. April 2007.

29. *On orthogonal polynomials with Hermitian matrix arguments.* Satellite conference of ICM2006: Harmonic and Geometric Analysis with Applications to PDE's. Seville. Spain. August 2006.

30. *On orthogonal polynomials with Hermitian matrix arguments.* Ninth New Mexico Analysis Seminar. University of New México. Albuquerque New México. USA. April 2006

31. *On orthogonal polynomials with Hermitian matrix arguments.* 1015th AMS Meeting. Florida International University, Miami. USA. April 2006.

32. *A formula for polynomials with Hermitian matrix arguments.* MAA Regional Meeting. Lawrence. USA March 2005.

33. *A formula for polynomials with Hermitian matrix arguments.* AMS-MAA-SIAM Joint Mathematics Meetings. Atlanta. USA January 2005.

34. *Higher order Riesz-Laguerre transforms.* 1000th AMS Meeting. University of New México. Albuquerque New México. USA Octuber 2004

35. *Higher order Riesz-Laguerre transforms.* 7th International Conference on Harmonic Analysis and Partial Differential equations. El Escorial, España. July 2004.

36. *Higher order Riesz-Laguerre transforms.* XVII Jornadas Matemáticas Venezolanas. ULA Trujillo, Venezuela. April 2004.

37. *Fractional differentiation for the Gaussian measure and applications.* Workshop in Harmonic Analysis and Partial Differential Equations. Puerto Vallarta, México, June 2003.

38. *Sobolev spaces and Fractional differentiation for the Laguerre semigroup.* XVI Jornadas Matemáticas Venezolanas. USB Caracas, Venezuela. April 2003.

39. *Fractional differentiation for the Gaussian measure and applications.* Probability measure on groups: Recent directions and trends. Mumbai, India. September 2002.

40. *The Laguerre semigroup for the cone of the symmetric positive definite matrices.* XV Jornadas Matemáticas Venezolanas. Maracaibo, Venezuela, March 2002.

41. *Asymptotic behaviour of orthogonal polynomials primitives.* XIV Jornadas Matemáticas Venezolanas. Barquisimeto, Venezuela. April 2001.

42. *A simpler proof of the L^p continuity of the higher order Riesz Transform with respect to the Gaussian measure γ_d.* Advanced Seminar on Approximation Theory. Summer courses. Universidad de Cantabria, Laredo, España. July 2000.

43. *The L^p continuity of the g_k Littewood-Paley function with respect to the Gaussian measure.* 6th International Conference on Harmonic Analysis and Partial Differential Equations. El Escorial, España. July 2000.

44. *The L^p continuity of the g_k Littewood-Paley function with respect to the Gaussian measure.* 3rd International Conference in Africa on Abstract Analysis (ICAA 2000), South Africa. June 2000.

45. *A simpler proof of the L^p continuity of the higher order Riesz Transform with respect to the Gaussian measure γ_d* AMS. Special session in Orthogonal Polynomial. DePAul University. Chicago, USA. September 1998.

46. *A simpler proof of the L^p continuity of the higher order Riesz Transform with respect to the Gaussian measure γ_d* XI Jornadas Matemáticas Venezolanas. Cumaná, Venezuela. March 1998.

47. *Riesz potentials for the Gaussian measure.* 5th International Conference on Harmonic Analysis and Partial Differential Equations. El Escorial, Spain. June 1996.

48. *El lema de Calderón-Zygmund para la medida Gaussiana.* VII Jornadas Matemáticas Venezolanas. Barquisimeto, Venezuela, March 1994.

49. *Estimates for the Maximal operator of the Ornstein-Uhlenbeck semigroup.* 4th International Conference on Harmonic Analysis and Partial Differential Equations. Miraflores de la Sierra, Spain. June 1992.

50. *Las funciones de Rademacher y la Teoría de Martingalas.* IV Jornadas Matemáticas Venezolanas. Caracas, Venezuela. March 1991.

51. *Teorema Central del Límite para s-martingalas.* 40th ASOVAC Annual Conference. Cumaná, Venezuela. November 1990.

52. *Estimates for the Maximal operator of the Ornstein-Uhlenbeck semigroup.* 40th ASOVAC Annual Conference. Cumaná, Venezuela. November 1990.

53. *Estimates for the Maximal operator of the Ornstein-Uhlenbeck semigroup.* I Coloquio Bolivariano de Matemáticas. Universidad Central de Ecuador. Quito, Ecuador. July 1990.

54. *Ley Funcional del Logaritmo Iterado para el Movimiento Browniano biparamétrico con valores en un espacio de Banach.* Fifth Probability and Statistics National Symposium (V SINAPE), Universidad de Sao Paulo, Brasil. July 1982.

55. *Ley Funcional del Logaritmo Iterado para el Movimiento Browniano biparamétrico con valores en un espacio de Banach.* 31st ASOVAC Annual Conference. Maracaibo, Venezuela. November 1981.

COURSES AND SEMINARS

Courses

1. *Elements of Gaussian Harmonic Analysis.* (mini-course of 3 talks). Conferencia León. Caracas, Venezuela, November 2011.

2. *Introducción a la Teoría de Ondículas.* (course of 6 talks). CIMAT. Guanajuato, México. Mayo-Junio 2007.

3. *Semigrupos de Polinomios Clásicos y Desigualdades Funcionales.* (course of 4 talks). Universidad de los Andes. Mérida, Venezuela. February 2006. 108 pag. Escuela CIMPA-Venezuela.

4. *Introducción a la Teoría de Ondículas a través del Algebra Lineal.* (course of 12 talks). Universidad del Zulia. Maracaibo, Venezuela. July 2004. 157 pag. V TForMa.

5. *Integrales singulares y sus aplicaciones* (course of 10 talks) XIV Escuela Venezolana de Matemáticas. Universidad de los Andes. Mérida, Venezuela. September 2001.

6. *Teoría de Aproximación y Polinomios ortogonales* (course of 12 talks). Universidad Centro-Occidental Lisandro Alvarado. Barquisimeto, Venezuela. July 2001. 53 pag. II TForMa.

7. *Análisis Armónico Gaussiano* (4 talks) SAMOS. University of Paris 1. Paris, France. June 2001.

8. *Análisis Real* (course of 12 talks with Neptalí Romero). Universidad Centro-Occidental Lisandro Alvarado. Barquisimeto, Venezuela. October 2000. 103 pag. I TForMa.

9. *Teoría de Martingalas y aplicaciones al Análisis* (course of 10 talks). Universidad Nacional de la Plata. Argentina. March 1993.

10. *Teoría de Martingalas y aplicaciones* (course of 10 talks). V Escuela Venezolana de Matemáticas. Universidad de los Andes, Mérida, Venezuela. September 1992.

11. *Tópicos de Análisis Armónico Gaussiano* (3 talks). Advanced Seminar on Approximation Theory. Summer courses. Universidad de Cantabria. Laredo, Spain. September 1992.

12. *Tópicos de Análisis Armónico Gaussiano* (5 talks). INTEC-Universidad Nacional del Litoral, Santa Fé, Argentina. February - March 1992.

13. *La Ecuación de Schrodinger: una introducción a las ecuaciones no lineales de evolución* (course of 10 talks) III Escuela Venezolana de Matemáticas. Universidad de los Andes, Mérida, Venezuela. September 1990.

Seminars

- Roosevelt University (Chicago, Illinois, USA), October 2010, January 2011, September 2011, February 2015, February 2016.
- Universidad Central de Venezuela. Seminario de Análisis (Caracas, Venezuela), March 1982, February 1989, September 1992, June 1994, November 1996, June 1998, September 2000, February 2003, July 2008, June 2009.
- Universite d'Angers. (Angers, Francia), June 2001, January 2002, October 2002, October 2003, July 2009.
- Universidad de los Andes. (Mérida, Venezuela), March 1991, February 2001, May 2003, June 2009.
- Universidad Centro-Occidental Lisandro Alvarado. (Barquisimeto, Venezuela), February 2000, April 2004, July 2008.
- Universidad Simón Bolivar. Coloquia (Caracas, Venezuela), July 2008.
- Universidad de Texas. (El Paso, Texas USA), May 2007.
- CIMAT (Guanajuato, México), June 2007.

- DePaul University (Chicago, Illinois, USA), October 2007, October 2008, April 2010, February 2011.
- Northwestern University (Evanston, Illinois, USA), November 2007.
- New Mexico State University (Las Cruces, USA), February 2007.
- University of New Mexico (Albuquerque, New Mexico, USA), November 2005, March 2006, January 2007.
- University of Missouri. (Columbia, Missouri, USA), December 2004, April 2007.
- University of California (Santa Bárbara, California, USA), May 2006.
- Universidad de la Laguna. (Tenerife, Spain), November 2002, June 2004, June 2006.
- University of Kansas. (Lawrence, Kansas, USA), September 2004, April 2005.
- Universidad Autónoma de Madrid. (Madrid, Spain), October 1994, July 2000, November 2002, October 2003.
- Instituto Venezolano de Investigaciones Científicas (IVIC) (Caracas, Venezuela), November 1989, May 2003.
- Tata Institute for the Fundamental Research and Mathematics. (Mumbai, India), September 2002.
- Universidad Carlos III. (Madrid, Spain), June 1996, July 2000.
- UNEXPO. (Barquisimeto, Venezuela), November 1999.
- INTEC-Universidad Nacional del Litoral (Santa Fé, Argentina), March 1993, November 1997, August 1999.
- University of Texas. (San Antonio, USA), September 1998.
- University of Texas. (Austin, USA), September 1998.
- Universidad de la Plata. (La Plata, Argentina), March 1992, December 1997.
- Rutgers University (New Brunswick, USA), April 1989, October 1996.

- Universidad de la Rioja. (Logroño, Spain), October 1994, June 1996.
- Universidad del País Vasco. (Bilbao, Spain), October 1994, March 1996.
- Universidad de Sevilla. (Seville, Spain), May 1996.
- Universidad de Valencia. (Valencia, Spain), May 1996.
- Universidad de Málaga. (Málaga, Spain), April 1996.
- Universidad Zaragoza. (Zaragoza, Spain), October 1994, March 1996.
- University of Minnesota (Minneapolis, USA), April 1988, June 1988, November 1995.
- Universidad de la Habana. (La Habana, Cuba), April 1994.
- Université Paris Sud (Orsay, France), June 1992.
- Politécnico de Milano. (Milan, Italy), June 1992.
- Temple University (Philadelphia, USA), November 1988, March 1989.

GRANTS, AWARDS AND DISTINTIONS

Research Projects

- Group Project: #C.D.C.H Nro. 03-11-3880-99 *Teoría de Ondículas y sus aplicaciones.*

  Researcher in charge: Ventura Echanda

  Participants: Ileana Iribarren, Wilfredo Urbina.

  Sponsor: CDCH.

- Individual Project: # 03-14-4438-99 *Polinomios Ortogonales y Análisis Armónico.*

  Researcher in charge: Wilfredo Urbina

  Sponsor: CDCH.

- Direct support for research group: # G-97000668. *Contribución a la teoría de levantamiento y representación integral de formas invariantes y problemas de interpolación.*

Researcher in charge : Wilfredo Urbina

Participants: Ramón Bruzual, Marisela Domnguez, Mischa Cotlar, A. Octavio, S. Marcantognini, María Morán and Vladimir Straus.

Sponsor: FONACIT.

- International Project FONACIT-EcosNord: #PI-2000000860(V00M03 french code).*Análisis Armónico para la medida Gaussianas, Problemas de caracterización e Integrales Singulares.*

  Venezuelan Researcher in charge: Wilfredo Urbina.

  Sponsor: FONACIT.

- International Project FONACIT-CONICET:#PI-2000000002 *Análisis Armónico Gaussiano.*

  Venezuelan Researcher in charge: Wilfredo Urbina.

  Sponsor: FONACIT.

Awards and Distintions.

- 2003- 2009 PPI Level II. Fundación Venezolana de Promoción del Investigador.
- June 2003 José María Vargas award, first class. Highest honorary award given by Universidad Central de Venezuela.
- 2001-2003 PPI Level I. Fundación Venezolana de Promoción del Investigador.
- November 2000 José María Vargas award, second class. Honorary award given by Universidad Central de Venezuela.
- 1990-1992 PPI Level I. Fundación Venezolana de Promoción del Investigador-CONICIT.
- Sept 1983-Aug 1988 CDCH-UCV Scholarship for Doctoral Studies at University of Minnesota.

COURSES TAUGHT AT ROOSEVELT UNIVERSITY

MATH 116: Finite Mathematics. Online course (Summer 2012, Spring 2016).

MATH 121: College Algebra (Fall 2011, Summer 2015)
MATH 122: Pre Calculus (Fall 2010, Spring 2011, Fall 2016)
MATH 217: Elementary Statistics (Fall 2016, Spring 2017)
MATH 231: Calculus I (Spring 2011, Fall 2014, Spring 2015, Spring 2016)
MATH 232: Calculus II (Fall 2011, Spring 2012, Spring 2013, Fall 2013, Spring 2014, Spring 2017)
MATH 233: Calculus III (Fall 2012)
MATH 245: Discrete Structures (Spring 2012, Fall 2012)
MATH 307: Differential Equations/Modeling. (Fall 2010, Fall 2012)
MATH/CST 328: Linear Programming and Optimization (Summer 2013, Summer 2014, Summer 2016)
MATH 330/430: Numerical Analysis (Spring 2010, Fall 2013)
MATH/ACS 347 Mathematical Statistics (Fall 2015)
MATH 352: Analysis (Spring 2012, Spring 2013, Spring 2014, Spring 2015, Spring 2016, Spring 2017)
MATH 389/489: Top: Introduction to Wavelets Theory. (Spring 2013)
MATH 389: Top: Discrete Modeling. (Summer 2014)
MATH/ACS 348/448: Probability and Statistics II (Fall 2009, Spring 2015)
MATH 395: Independent Study: PDE (Spring 2011, Spring 2013).
MATH 395: Independent Study: Measure Theory (Spring 2013).
MATH 446: Stochastic Processes (Spring 2011, Fall 2013, Fall 2015).
MATH 447: Advanced Probability (Fall 2014, Spring 2016).
MATH 495: Independent Study: Stochastic Integration (Spring 2013).
MATH 495: Independent Study: Wavelet Theory (Fall 2016).

OTHER PROFESSIONAL ACTIVITIES

- Member of the Asociación Venezolana para el avance de la Ciencia (ASOVAC)

  - Member of the Board of Directors of the Caracas' chapter ASOVAC 1995 -1998.

- Member of the Asociación Matemática Venezolana (AMV).

  - Member of the Board of Directors of the Caracas' chapter AMV 1990 - 2004

  - President 2002 - 2004.

- Member of the Asociación para el avance de la investigación universitaria de la UCV(APIU-UCV)

- Member of the Board of Directors 1998 - 2000.

- Member of the Board of Directors 2004 - 2005.

- Member of the American Mathematical Society (AMS).

- Member of the Mathematical Association of America (MAA).

- Member of the Editorial Board of the volume *Harmonic Analysis, Partial Differential Equations, Complex Analysis, Banch Spaces, and Operator Theory* (Volume 1 & 2). Celebrating Cora Sadosky's life. Association for Women in Mathematics Series. Springer-Verlag 2016.

- Member of the Editorial Board of the volume *Special Functions, Partial Differential Equations and Harmonic Analysis. Proceedings from the conference in honor to Calixto P. Calderón* Springer-Verlag 2014.

- Co-organizer of the Special Session Harmonic Analysis and Operator Theory, in memory of Cora Sadosky AMS Western Spring Sectional Meeting Albuquerque, New Mexico. April 5-6, 2014.

- Co-organizer of the "An Afternoon in Honor of Cora Sadosky". 13 New Mexico Analysis Seminar, New Mexico. April 3-4, 2014.

- Co-organizer of the "An Afternoon in Honor to Micha Cotalr". 10 New Mexico Analysis Seminar, New Mexico. October 11-12, 2007.

- Co-organizer of the "International Conference on Harmonic Analysis and Operator Theory" in honor of Mischa Cotlar 80th birthday held at Caracas Venezuela from January 3nd to 7th of 1994.

- Member of the Editorial Board of the volume *Harmonic Analysis and Operator Theory. Papers from the conference in honor to Mischa Cotlar*. Contemporary Mathematics, 189. American Mathematical Society, RI (1995).

- Editor of Memorias de las XII Jornadas Matemáticas Venezolanas. Acta Científica Venezolana 52 (2001), Suplemento 2.

- Member of the Advisory Editorial committee of Divulgaciones Matemáticas. Universidad del Zulia. Maracaibo. Venezuela.

- Associated Editor of the Journal of Functional Spaces and Applications. Delhi. India.

- Reviewer for Mathematical Reviews, AMS since 2006.

UNIVERSITY SERVICE

- September 2016 - Present. Member of the Senate at Roosevelt University
- September 2016 - Present. Member of the CAS Curriculum Committee. Roosevelt University.
- September 2015 - March 2016 Member of the hiring committee, math department. Roosevelt University.
- September 2011 - Spring 2016. Graduate Coordinator. Department of Mathematics and Actuarial Sciences. Roosevelt University.
- September 2011 - Spring 2016. Member of the Graduate Council. Roosevelt University.
- September 2011- Present. Organizer of the Math Colloquium. Department of Mathematics and Actuarial Sciences. Roosevelt University.
- September 2013 - May 2016 Member of the Executive Committee, CAS. Roosevelt University.
- April 2014. Co-organizer of the Roosevelt Lectures in Mathematics: Richard Askey. Roosevelt University. April 18 & 19, 2014.
- September 2012 - March 2013 Member and coordinator of the hiring committee, math department.
- November 2012. Co-organizer of Special Functions, Partial Differential Equations and Harmonic Analysis, a conference in honor of Calixto P. Calderón. Roosevelt University. November, 16, 17 & 18, 2012.
- Spring 2012. Member of the Master in Mathematics Redesign Committee, math department. Roosevelt University.
- December 2011. Co-organizer of the Math X-Position. Department of Mathematics and Actuarial Sciences. Roosevelt University.
- September 2011 - December 2012. Member of the Senate at Roosevelt University

- September 2011. Participation in New Graduate Student Orientation. Roosevelt University.
- April 2011. Co-organizer of the Math & Science Research Symposium. Roosevelt University.
- Spring 2011. Retreat Committee. Department of Mathematics and Actua-rial Sciences. Roosevelt University.
- 2002 - 2004. Coordinator of the Analysis Center. School of Mathematics. UCV.
- 1997 - 2004. Member of the Mathematical Graduate Studies and Research Committee. School of Mathematics. UCV.
- 1999 - 2003. Coordinator of Graduate Studies in Mathematics. School of Mathematics. UCV.
- 1999 - 2002. Coordinator of the Technical Committee for Physics and Ma-thematics. FONACIT.
- 1999 - 2002. Coordinator of the project *Postgrados Integrados de Matemáticas.* FONACIT.
- 1999 - 2001. Coordinator of Graduate Studies in Stochastic Models. School of Mathematics. UCV.
- 1992 - 2000. Professors' representative to Consejo de la Facultad de Ciencias. UCV.
- 1992 - 1994. Coordinator of Graduate Studies in Mathematics. School of Mathematics. UCV.
- 1990 - 1994. Member of the Mathematical Graduate Studies and Research Committee. School of Mathematics. UCV.

RESEARCH SUPERVISED

- Adrian Infante (Master UCV-Caracas Venezuela 1996).
- Ignacio González (Master UCV-Caracas Venezuela-1996).
- Iris López (Master UCV-Caracas Venezuela-1998).
- Miguel Narváez (Master ULA-1999).

- Guissepe Lanza (Master UCV-Caracas Venezuela-2000).
- Lisandro Fermín (Master UCV-Caracas Venezuela-2000).
- Yamilet Quintana (Master UCV-Caracas Venezuela-2001).
- Abelardo Monsalve (Master IVIC-Altos de Pipe Venezuela 2002).
- Eduard Navas (Master IVIC-Altos de Pipe Venezuela 2005).
- Cristina Balderrama (Master UCV-Caracas Venezuela-Caracas Venezuela-2006).
- Iris López (Doctor UCV-Caracas Venezuela-2006).
- Cristina Balderrama (Doctor UCV-Caracas Venezuela-2008/Doctor Université d'Angers 2009).
- Ebner Pineda (Doctor UCV-Caracas Venezuela-2009).
- Eduard Navas (Doctor UCV-Caracas Venezuela-2014)
- Jorge Moreno (Doctor UCLA-Barquisimeto Venezuela -2014)

HONOR THESIS PROJECTS AT ROOSEVELT UNIVERSITY

- Tyrone Palmer (Spring 2014)
- Cuong Pham (Fall 2016)