Curriculum Vitae
ROCIO DIAZ MARTIN

E-mail: rdiazmartin at fsu.edu
Personal Web Page: https://rociodm.github.io/

EDUCATION		
Ph.D. in Mathematics		2014 – 2018

Facultad de Matemática, Astronomía, Física y Computación (FaMAF)
Universidad Nacional de Córdoba (UNC) – Argentina
Advisor: Prof. Linda Saal
Dissertation: *Matrix spherical analysis on nilpotent groups*

Licenciada en Matemática (M.Sc. in Math. equivalent) — 2009 – 2014
Facultad de Matemática, Astronomía, Física y Computación (FaMAF)
Universidad Nacional de Córdoba (UNC) – Argentina
With honors: University Prize (**Top of class**)

CURRENT POSITION

Assistant Professor — Aug 2025 –
Department of Mathematics, **Florida State University** (FSU). Tallahassee, Florida, USA.

POSITIONS

Postdoctoral Associate — Aug 2024 – July 2025
Department of Mathematics, **Tufts University**. Medford, MA, USA.

Postdoctoral Researcher — Aug 2021 – Aug 2024
Department of Mathematics, **Vanderbilt University**. Nashville, TN, USA.

Postdoctoral Fellowship — Apr 2019 – Mar 2021
National Council of Science and Technology (CONICET). Buenos Aires, Argentina.

Teaching positions at **Universidad Nacional de Córdoba** (UNC) — Mar 2012 – Jul 2021
Córdoba, Argentina.

Teaching position at **Universidad de Buenos Aires** (UBA) — Apr 2021 – Jul 2021
Buenos Aires, Argentina.

PUBLICATIONS

In Mathematics the order of authors is alphabetically, in Computer Science authors are listed in order of their contribution, and the faculty advisor is typically listed at the end.

PAPERS IN MATHEMATICS

1. **Dynamical sampling for the recovery of spatially constant source terms in dynamical systems** — 2024
   Journal of Linear Algebra and Applications, **696**:148–185
   DOI: 10.1016/j.laa.2024.04.011
   With Akram Aldroubi, and Ivan Medri.

2. **Dynamical dual frames, annihilating polynomials, and spectral radius** — 2023
   Poincare Journal of Analysis and Applications, **10**(2): 27–53
   DOI: 10.46753/pjaa.2023.v010i03.003
   With Jonathan Ashbrock, Brody Johnson, Ivan Medri, and Alexander Powell.

3. **Error analysis on the initial state reconstruction problem**   2023
With Ivan Medri, and Juliana Osorio.

4. **The Signed Cumulative Distribution Transform for 1-D signal analysis and classification**   2022
With Akram Aldroubi, Ivan Medri, Gustavo K. Rohde, and Sumati Thareja.

5. **Continuous and discrete dynamical sampling**   2021
With Ivan Medri, and Ursula Molter.

6. **On commutative homogeneous vector bundles attached to nilmanifolds**   2021
With Linda Saal.

7. **Mehler-Heine formula: a generalization in the context of matrix spherical functions**   2020
With Ines Pacharoni.

8. **Matrix Spherical Analysis on Nilmanifolds**   2019
With Linda Saal.

9. **Spherical analysis on homogeneous vector bundles of the 3-dimensional Euclidean Motion Group**   2018
With Fernando Levstein.

BOOK CHAPTERS

10. **Dynamical sampling: a view from control theory**   2021
With Ivan Medri, and Ursula Molter.

11. **Data representation with optimal transport**   2024
With Ivan Medri, and Gustavo K. Rohde. (arXiv.2406.15503v1)

CONFERENCE ARTICLES

12. **Frames for Source Recovery in Dynamical Systems**   2025
Authors: Akram Aldroubi, Le Gong, Javad Mashreghi, and Ivan Medri.

13. **Multi-Stage Optimal Transport**   2025
Authors: A. Kothapalli, **Rocío Díaz Martín**, A. Aldroubi.
Presenting Author: A. Kothapalli.

14. **Linear Spherical Sliced Optimal Transport:** 2025
A Fast Metric for Comparing Spherical Data
International Conference on Learning Representations (ICLR)
(Top 10 venue - Google Scholar Metrics) (Acceptance rate: 32.08%)
Spotlight-designated paper: Top 5.1%
Average rating: 7.50 - top 1.40% of submitted papers.
Authors: Xinran Liu, Yikun Bai, **Rocío Díaz Martín**, Kaiwen Shi, Ashkan Shahbazi, Bennett A. Landman, Catie Chang, and Soheil Kolouri.

15. **Partial Gromov-Wasserstein Metric** 2025
International Conference on Learning Representations (ICLR)
(Top 10 venue - Google Scholar Metrics) (Acceptance rate: 32.08%)
Average rating: 6.80 - top 8.97% of submitted papers.
Authors: Yikun Bai, **Rocío Díaz Martín**, Abihith Kothapalli, Hengrong Du, Xinran Liu, and Soheil Kolouri.

16. **Linear partial Gromov-Wasserstein Embedding** 2025
International Conference on Learning Representations (ICLR)
(Top 10 venue - Google Scholar Metrics) (Acceptance rate: 32.08%)
Average rating: 6.80 - top 8.97% of submitted papers.
Authors: Yikun Bai, Abihith Kothapalli, Hengrong Du, **Rocío Díaz Martín**, and Soheil Kolouri.

17. **Expected Sliced Transport Plans** 2025
International Conference on Learning Representations (ICLR)
(Top 10 venue - Google Scholar Metrics) (Acceptance rate: 32.08%)
Average rating: 6.67 - top 8.97% of submitted papers.
Authors: Xinran Liu*, **Rocío Díaz Martín***, Yikun Bai, Ashkan Shahbazi, Matthew Thorpe, Akram Aldroubi, and Soheil Kolouri. *(Equal contribution)

18. **Stereographic Spherical Sliced Wasserstein Distances** 2024
International Conference on Machine Learning (ICML).
(Top 17 venue - Google Scholar Metrics) (Acceptance rate: 27.5%)
Spotlight-designated paper: **Top 3.5**% out of 9473 submissions. (Average rating: 7).
Authors: Huy Tran, Yikun Bai, Abihith Kothapalli, Ashkan Shahbazi, Xinran Liu, **Rocío Díaz Martín**, and Soheil Kolouri.
(Main paper: 9 pages - total: 71 pages.)

19. **LCOT: Linear circular optimal transport embedding** 2024
International Conference International Conference on Learning Representations (ICLR).
(Top 10 venue - Google Scholar Metrics) (Acceptance rate: 31%)
Authors: **Rocío Díaz Martín** (**First Author**), Yikun Bai, Ivan Medri, Xinran Liu, Kangbai Yan, Gustavo K. Rohde, and Soheil Kolouri.
(Main paper: 9 pages – total: 24 pages – Average rating: 6.)

20. **Linear Optimal Partial Transport Embedding** 2023
International Conference on Machine Learning (ICML).
(Top 17 venue - Google Scholar Metrics) (Acceptance rate: 28%)
Authors: Yikun Bai, Ivan Medri, **Rocío Díaz Martín**, Rana Muhammad Shahroz Khan, and Soheil Kolouri.
(Main paper: 9 pages - total: 29 pages – Average rating: 6.25 - top 6.92% of submitted papers.)

21. **Gromov-Wasserstein Barycenters: The Analysis Problem**
ArXiv Pre-Print. arXiv:2507.09865
With Ivan Medri, and James M. Murphy.

22. **A novel approach through spherical functions in the characterization of invariant functions**

ArXiv Pre-Print. arXiv:2510.01043
With Linda Saal.

23. **An Efficient Transport-Based Dissimilarity Measure for Time Series Classification under Warping Distortions**
ArXiv Pre-Print. arXiv:2505.05676
With Akram Aldroubi, Ivan Medri, Kristofor E. Pas, Gustavo K. Rohde, and Abu Hasnat Mohammad Rubaiyat.

24. **Characterization of frames for source recovery from dynamical samples**
ArXiv Pre-Print. arXiv:2401.15450
With Akram Aldroubi, Le Gong, Javad Mashreghi, and Ivan Medri.

25. **Mean Value Inequalities and Characterizations of Sobolev spaces on graded groups**
ArXiv Pre-Print. arXiv:2109.05064
With Pablo de Nápoli.

MATH EDUCATION ARTICLES

26. **Un camino hacia la derivada: Secuencia de actividades para construir el concepto de velocidad instantánea empleando la velocidad media**   2017
Revista de Educación Matemática (ISSN: 0326-8780 – ISSN: 1852-2890 on-line), **32** (2): 5–18
DOI: 10.33044/revem.18371
With Martin Moroni, and Fredy Restrepo.

GRADUATE AND UNDERGRADUATE THESES

Matrix spherical analysis on nilpotent groups (PhD Thesis)   Dec 2018
Facultad de Matemática, Astronomía, Física y Computación (FaMAF),
Universidad Nacional de Córdoba (UNC)
Advisor: Linda V. Saal

Examples of strong Gelfand pairs (Undergradraduate Final Work)   Mar 2014
Facultad de Matemática, Astronomía, Física y Computación (FaMAF),
Universidad Nacional de Córdoba (UNC)
Advisor: Linda V. Saal

OTHER PUBLICATIONS

Toda solución trae problemas, son los problemas los que nos llevan a la CIMA   2024
UMA News: "Noticiero de la Unión Matemática Argentina".
Vol. 59, Num. 1, ISSN 1514-9595 (web)
Article about the Argentine Interuniversity Mathematics Competition:
"Competencia Interuniversitaria de Matemática Argentina" (CIMA).

Planificación y programación de tareas en una acería   2015
Article from the Workshop "Taller de Matemática Industrial–TAMI III".
Cursos y seminarios de matemática, Serie B, Fascículo 10, Universidad de Buenos Aires (UBA).
ISSN 1851-149X and ISSN 1851-1481
With Adrián Allende, Yamila Alen, Julieta Campos, Alejandro Ladreyt, Nicolás Murrone, Ignacio Ojea, Lorena Stockdale, Sofía Ruiz Suárez, Mariano Vázquez, and Quimey Vivas.

ARTICLES IN PREPARATION

Gabor duals with minimal L1-norm. With Alexander Powell.

Scalability of frames in shift-invariant spaces With Alexander Powell, and Kasso Okoudjou.

TALKS	**XVIII Congreso Dr. Antonio Monteiro**. Bahía Blanca, Argentina. (Invited Plenary Speaker).	Aug 2025
	Brazilian Math Colloquium. IMPA, Rio de Janeiro, Brazil. Invitation to give a talk in the Special Session on Harmonic Analysis and Applications. *(Unable to attend.)*	Jul 2025
	Mathematical Congress of the Americas - MCA 2025. Miami, FL, USA. Invited talk. Special Session: *Optimization and Control.*	Jul 2025
	SIAM Conference on Mathematics of Data Science. Atlanta, GA, USA. Invited talk. Mini-symposium *Incorporating Optimal Transport in Machine Learning: Theory and Applications.*	Oct 2024
	Frame Theory Days Conference. (Invited talk) Saint Louis University, Sain Louis, MO, USA.	Oct 2024
	Acoustic Research Institute (ARI). Vienna, Austria. Hosted by Prof. José Luis Romero	May 2024
	2024 Shanks Workshop on Dynamical Sampling, Frame Theory, Harmonic Analysis, and Applications. Vanderbilt University, Nashville, TN, USA.	Mar 2024
	Encuentro de Matemática (Math Meeting) IMCA 2023. Instituto de Matemática y Ciencias Afines (IMCA), Lima, Peru.	Dec 2023
	Frame Theory Day. (Invited talk) Saint Louis University, Saint Louis, MO, USA.	Oct 2023
	International Conference on Approximation Theory and Beyond. (Invited talk) Nashville, TN, USA.	May 2023
	PRIMA CONGRESS 2022. (Invited 20-minute talk) Vancouver, Canada.	Dec 2022
	SIAM Conference on Mathematics of Data Science. San Diego, CA, USA. Invited speaker at the mini-symposium "Geometric distances and robust data analysis".	Sep 2022
	Focus Program on data science, approximation theory, and harmonic analysis (Invited speaker). Fields Institute for Research in Mathematical Science, Toronto, Canada.	May 2022
	Latin American Congress of Mathematicians (VI CLAM). (Invited speaker) Montevideo, Uruguay – Virtual.	Sep 2021
	Congress Dr. Antonio Monteiro. Bahía Blanca, Argentina (Virtual).	May 2021
	Annual meeting of the Unión Matemática Argentina. (Virtual).	Sep 2020
	Argentinian National Analysts Meeting. (Invited 40-minute talk) Villa General Belgrano, Córdoba, Argentina.	Nov 2018
	Annual meeting of the Unión Matemática Argentina. La Plata, Argentina.	Sep 2018
	CIMPA Research School: Group actions on algebraic varieties. Lima, Peru.	Sep 2017
	Joint meeting between the Real Sociedad Matemática Española and the Unión Matemática Argentina (RSME–UMA). Buenos Aires, Argentina.	Dec 2017
	Annual meeting of the Unión Matemática Argentina. San Luis, Argentina.	Sep 2014

COLLOQUIUMS	*"Metrics Based on Optimal Transport"* Colloquium at the Department of Mathematics, **Florida State University**. USA.	Jan 2024
	"Exploring Dynamical Sampling Problems" Colloquium at the Department of Mathematical Sciences, **Northern Illinois University**. USA.	Mar 2024

"Bridges between Dynamical Sampling and Control Theory"   Oct 2023
Colloquium at the Department of Mathematics and Statistics, **Saint Louis University**. USA.

SEMINARS

"Techniques and Problems in Optimal Transport: Sep 2025
Barycenters, Linearization, and the Unbalanced case"
O'Higgins Seminar on Optimization. **O'Higgins University**. Chile.

"The Barycentric Coding Model in Optimal Transport"   Sep 2025
Joint seminar between the Data Science and Machine Learning (Department of Mathematics)
and the Artificial Intelligence Seminar (Department of Scientific Computing).
Florida State University. USA.

"Optimal Transport-Based Metrics: Balanced and Unbalanced Cases"   Apr 2025
AMS Postdoc Seminar. **Johns Hopkins University**. USA.

"Metrics Based on Optimal Transport Theory"   Mar 2025
Joint Inverse Problems/Data Sciences/Applied Math Seminar.
Colorado State University. USA.

"Constructing new metrics from optimal transport theory"   Sep 2024
Computational and Applied Math Seminar. **Tufts University**. USA.

"On building metrics and transforms using transportation theory"   Jun 2024
Differential Equations and Analysis seminar. FaMAF, **Universidad Nacional de Córdoba**.
Córdoba, Argentina.

"Applications of Optimal Transport Theory"   Apr 2024
Computational Analysis seminar. **Iowa State University**. Iowa, USA.

"Applications of Optimal Transport Theory" **1W-MINDS Seminar**.   Apr 2024

"Applications of Optimal Transport Theory"   Feb 2024
Computational Analysis seminar. **Vanderbilt University**. Nashville, TN, USA.

"Exploring the initial state reconstruction problem by building bridges between
Dynamical Sampling and Control Theory"   Jun 2023
Seminar of the Escola de Matemática Aplicada. **Fundação Getulio Vargas.**
Rio de Janeiro, Brazil.

"Transport as an embedding tool"   Feb 2023
Analysis Seminar Department of Mathematics. **University of Texas at Austin.**
Austin, TX, USA.

"Transport Transforms"   Aug 2022
Graduate students seminar. FaMAF, **Universidad Nacional de Córdoba**. Córdoba, Argentina.

"Mean value inequalities on graded groups"   Jun 2022
Seminar in honor of Prof. Linda Saal. Universidad Nacional de Córdoba.
Córdoba, Argentina.

"Sobolev spaces on graded groups"   May 2022
Harmonic Analysis and Fractal Geometry. Department of Mathematics.
Universidad de Buenos Aires (UBA). Buenos Aires, Argentina.

"The initial state reconstruction problem: Dynamical Sampling and Observability"   Oct 2021
Computational Analysis seminar. **Vanderbilt University**. Nashville, TN, USA.

"Dynamical sampling: Continuous vs. discrete"   Jun 2020
Functional Analysis seminar: "Mischa Cotlar".
Instituto Argentino de Matemática (IAM), CONICET. Buenos Aires, Argentina.

"Fourier, Fourier, Fourier"   Aug 2020
Graduate students webinar. FaMAF, **Universidad Nacional de Córdoba**. Córdoba, Argentina.

"Group contractions and limits of spherical functions"   Apr 2020
Differential Geometry webinar. FaMAF, **Universidad Nacional de Córdoba**.
Córdoba, Argentina.

"Sampling Seminar" (Reading Seminar)   Spring 2019
Organizer: Prof. Carlos Cabrelli. **Universidad de Buenos Aires**. Buenos Aires, Argentina.

"Time and frequency"   Oct 2019
Differential Equations and Analysis seminar. FaMAF, **Universidad Nacional de Córdoba**.
Córdoba, Argentina.

"Spherical analysis on nilmanifols"   Aug 2018
Lie theory seminar. FaMAF, **Universidad Nacional de Córdoba**. Córdoba, Argentina.

"Shannon sampling theorem"   May 2017
Graduate students seminar. FaMAF, **Universidad Nacional de Córdoba**. Córdoba, Argentina.

"Matrix spherical functions on the strong Gelfand pair $(\mathbb{R}^3, \mathrm{SO}(3))$"   Jun 2016
Differential Equations and Analysis seminar. FaMAF, **Universidad Nacional de Córdoba**.
Córdoba, Argentina.

"Introduction to wavelets"   Oct 2015
Differential Equations and Analysis seminar. FaMAF, **Universidad Nacional de Córdoba**.
Córdoba, Argentina.

"A mathematical approach to a problem in a taxi agency"   Sep 2014
Graduate students seminar. FaMAF, **Universidad Nacional de Córdoba**. Córdoba, Argentina.

"A brief tour around harmonic analysis on groups"   May 2014
Differential Equations and Analysis seminar. FaMAF, **Universidad Nacional de Córdoba**.
Córdoba, Argentina.

Mini-courses   **Annual meeting of the Unión Matemática Argentina**. Salta, Argentina.   Sep 2023
Mini-course: *"Four faces of the Optimal Transport Problem"*

Winter school: "Harmonic analysis and special functions in mathematical physics".
Universidad Nacional de Córdoba, Argentina.   Jul 2023
Mini-course for graduate students: *"Spherical functions of positive type:*
The core of the Plancherel measure"

Posters   **ICLR–2024: Twelfth International Conference on Learning Representations**.   May 2024
Vienna, Austria.

Fall Fourier Talks.   Oct 2023
The Norbert Wiener Center, Mathematics Department, University of Maryland, USA.

ICML–2023: Fortieth International Conference on Machine Learning.   Jul 2023
Honolulu, Hawaii, USA.

ICM: International Congress of Mathematicians. Rio de Janeiro, Brazil.   Aug 2018

CIMPA Research School and IX SANTALO School: Jul 2017
Harmonic Analysis, Geometric Measure Theory and Applications.
Uniersidad de Buenos Aires, Argentina.

FELLOWSHIPS & **AWARDS**	**Workshop at ICERM, Brown University.** "Optimal Transport in Data Science" May 2023 (Lodging and Travel Funding.)
	Instituto de Matemática Pura e Aplicada (IMPA) Jan – Feb 2019 Scholarship – Programa de Verão (Summer Program). Rio de Janeiro – Brazil.
	CONICET – Ph.D. Fellowship. Córdoba – Argentina. Apr 2014 – Mar 2019
	ICM Open Arms Grants to attend the Aug 2018 International Congress of Mathematicians - ICM 2018. Rio de Janeiro, Brazil.
	CIMPA Full Scholarship to attend the school "Harmonic Analysis, Geometric Measure Theory and Applications". UBA, Argentina. Jul 2017
	CIMPA Full Scholarship to attend the school "Group actions on algebraic varieties". Sep 2017 Pontificia Universidad Católica del Perú, Lima, Perú.
	Undergraduate monographs contest. First place. Unión Matemática Argentina. 2014
	University Prize – Universidad Nacional de Córdoba. 2013 **Top of class, best GPA.**
	Universidad Nacional de Córdoba Stimulus Fellowship for Scientific Vocation 2013 for undergraduate students.
	Universidad Nacional de Córdoba (UNC) Technical Assistant Fellowship. 2013 Art, Science and Technology Show: "Cuatrociencia" in commemoration of the 400 years of the UNC.

ORGANIZATION **OF EVENTS**	**Special Session at the Mathematical Congress of the Americas - MCA 2025** Jul 2025 "Applied Harmonic Analysis and Operator Theory" Co-organizers: Akram Aldroubi and Javad Mashreghi.
	Special Seminar in Analysis Jul 2024 Host of the invited speaker Prof. Ilya Krishtal from Northern Illinois University who gave the talk entitled "A Spectral Theory Approach to Prony's Problem" at FaMAF, Universidad Nacional de Córdoba, Argentina.
	Computational Analysis Seminar Fall 2023 – Spring 2024 Department of Mathematics, Vanderbilt University, Nashville, TN, USA. Co-organizers: Ryan Matzke and Christina Giannitsi.
	Graduate Students Seminar Fall and Spring 2016 FaMAF, Universidad Nacional de Córdoba, Argentina.
	Workshop on Mathematics in Industry: Dec 2014 "Taller de Matemática Aplicada a la Industria". Universidad Nacional de Córdoba, Argentina.

PARTICIPATION **AT SPECIAL** **EVENTS**	**Wasserstein Gradient Flows in Math and Machine Learning.** Jul 2025 Banff International Research Station for Mathematical Innovation and Discovery (BIRS), Canada. (Invited participant)
	Hybrid seminar **Introduction to Frame Theory and Its Applications.** Jul 2025 Ball State University, IN, USA. (Participant)

TEACHING **EXPERIENCE**	**Assistant Professor** Fall 2025 Florida State University, FL, USA

Course: Calculus I.

Instructor Spring 2025
Tufts University, MA, USA
Course: Statistics.

Teaching Assistant (TA) Fall 2024
Tufts University, MA, USA
Course: Calculus II.

Instructor Spring 2022 – Spring 2024
Vanderbilt University, Nashville, TN, USA
Courses: Ordinary Differential Equations, Differential Equations with Linear Algebra,
and Multivariable Calculus.

Teaching Assistant (TA) Fall 2021
Vanderbilt University, Nashville, TN, USA
Course: Single variable calculus.

Assistant Professor (Profesora Adjunta) Apr 2020 – Aug 2021
FaMAF – Universidad Nacional de Córdoba – Argentina
Courses: Ordinary Differential Equations, Single variable calculus.

Teaching Assistant (Profesora Ayudante) Apr 2021 – Jul 2021
Facultad de Ciencias Exactas y Naturales – Universidad de Buenos Aires (UBA) – Argentina
Course: Measure Theory.

Graduate Teaching Assistant Mar 2015 – Mar 2020
(Profesora Ayudante: Mar 2015 – Aug 2018 / Profesora Asistente Aug 2018 – Mar 2020)
FaMAF – Universidad Nacional de Córdoba – Argentina
Courses: Euclidean Geometry, Functional Analysis I and II, Linear Algebra, Numerical Analysis,
Single variable calculus.

Graduate Teaching Assistant (Profesora Ayudante) Mar 2018 – Feb 2019
Facultad de Ciencias Agropecuarias – Universidad Nacional de Córdoba – Argentina
Courses: Calculus.

Undergraduate Teaching Assistant Mar 2012 – Feb 2014
FaMAF – Universidad Nacional de Córdoba – Argentina.
Courses: Discrete algebra, Linear Algebra, Multivariable calculus, Single variable calculus.

Substitute teacher – Bachelor level Sep 2013 and Aug 2015
Bilingual School "Dante Alighieri", Villa Carlos Paz, Córdoba, Argentina

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TEACHING
TRAINING COURSES

Teaching Seminar. Vanderbilt University. (Attendance only) Spring 2022

Introduction on undergraduate education. UNC, Argentina. (60 hours) Aug 2016

Teacher Training Workshop. UNC, Argentina. (9 hours) Mar 2012

SUPERVISION OF
UNDERGRADUATE
STUDENTS

Co-mentor (together with Prof. Akram Aldroubi) of the Honor Project of the 2024
undergraduate students Kaiwen Shi and Abihith Kothapalli. Vanderbilt University.

Faculty Advisor of the student David A. Hulett. 2019 – 2020
Universidad Nacional de Córdoba (UNC).
Final work to obtain the degree of *"Licenciado en Matemática"* (M.Sc. in Math. equivalent)

Undergraduate thesis title: *"From Fourier to Wavelets: time-frequency analysis"*.

<table>
<tr><td>THESIS
COMMITTEES</td><td>Member of the Doctoral Thesis Tribunal of the graduate student Lucia Morey. Advisor: Prof. Pablo Román. Thesis title: "Extensions of matrix-valued orthogonal polynomials".
Universidad Nacional de Córdoba, Argentina.</td><td>2024</td></tr>
</table>

Member of the Doctoral Thesis Tribunal of the graduate student Carmen Luz Blanco Villacorta. Advisor: Prof. Inés Pacharoni. Thesis title: "Spherical Functions of Finite Groups"
Universidad Nacional de Córdoba, Argentina.   2023

Member of the Undergraduate Thesis Tribunal of the student Ignacio Nicolás Bono Parisi, to obtain the degree of "Licenciado en Matemática" (M.Sc. in Math. equivalent).
Advisor: Prof. Inés Pacharoni. Undergraduate thesis title: "El Problema Matricial de Bochner."
Universidad Nacional de Córdoba, Argentina.   2021

Member of the Doctoral Thesis Tribunal of the graduate student Andrea Gallo. Advisor: Prof. Linda Saal. Thesis title: "Harmonic analysis on nilmanifolds".
Universidad Nacional de Córdoba, Argentina.   2020

Member of the Undergraduate Thesis Tribunal of the student Lucía Morey, to obtain the degree of "Licenciado en Matemática" (M.Sc. in Math. equivalent). Advisor: Prof. Pablo Román. Undergraduate thesis title: "Propiedades analíticas y estructurales de polinomios ortogonales matriciales."
Universidad Nacional de Córdoba, Argentina.   2019

SHORT VISITS AND STAYS

Scuola Normale Superiore di Pisa – Pisa, Italy   Apr – May 2016
Hosted by Prof. Fulvio Ricci

Universidad Nacional del Sur – Bahía Blanca, Argentina   Jun 2017
Hosted by Prof. Pablo Rocha

EDITOR, REFEREE & REVIEWER

Editor – Revista de Educación Matemática (Math Education Journal)   2023 –
ISSN:0326-8780 – ISSN: 1852-2890 on-line
Universidad Nacional de Córdoba (UNC) and Unión Matemática Argentina (UMA).

Program Committee – The Fortieth AAAI Conference on Artificial Intelligence (AAAI-26)

Referee – Results in Mathematics.   2025

Referee – IEEE Open Journal of Signal Processing.   2025

Referee – Numerical Functional Analysis and Optimization. Taylor & Francis Group. 2025

Reviewer – Conference on Neural Information Processing Systems (NeurIPS 2025). 2025

Reviewer – Canadian Mathematical Bulletin.   2025

Reviewer – International Conference on Machine Learning (ICML 2025).   2025

Reviewer – "Women in Mathematics Latin America"   2024
Volume Springer-Birkhäuser Trends in Mathematics Series.

Reviewer – International Conference on Learning Representations (ICLR 2025).   2024

Reviewer – IEEE International Conference on Acoustics, Speech, and Signal Processing 2024

(ICASSP 2025).

Reviewer – Conference on Neural Information Processing Systems (NeurIPS 2024).	2024
Reviewer – International Conference on Pattern Recognition (ICPR2024).	2024
Referee – Revista de la Unión Matemática Argentina, UMA, Argentina.	2025
Referee – Journal of Fourier Analysis and Applications (JFAA).	2024
Reviewer – Sampling Theory and Applications Conference (SampTA) – July 10–14 at Yale.	2023
Referee – Sampling Theory, Signal Processing, and Data Analysis. Springer.	2023
Referee – Poincare Journal of Analysis and Applications.	2023
Referee – Journal of Pure and Applied Algebra (JPAA).	2020
Reviewer – Mathematical Reviews.	2021 –

OUTREACH & SERVICE ACTIVITIES

Jury Member of the Mathematical Monograph Competition of the Argentine Mathematical Union. Dic 2025
(Concurso de Monografías Matemáticas de la UMA)

Mentor in the Directed Reading Program. Spring 2024
Vanderbilt University, Nashville, TN, USA.
The program pairs undergraduate mentees with graduate mentors who work through a semester-long independent study project together, usually based on a particular book or article.

President of the jury of the Argentine Interuniversity Mathematics Competition:
"Competencia Interuniversitaria de Matemática Argentina" (CIMA) 2021 – 2024

Member of the Argentinian National Mathematical Olympiad jury:
"Olimpíada Matemática Argentina" (OMA) 2014 – 2021

CIEM – CONICET Advisory Board on behalf of the Graduate Students 2017 – 2018

Tutor of PACENI program. FaMAF, UNC, Argentina. Aug 2012 – Jul 2013
A program devoted to orienting Freshmen students.

Collaborator on several Math Festivals in Argentina. 2010 – 2021

REFERENCES

Akam Aldoubi (Postdoc Mentor)
Vanderbilt University – Nashville, Tennessee, USA.
akram.aldroubi@vanderbilt.edu

Carlos Cabrelli
Universidad de Buenos Aires - CONICET, Buenos Aires, Argentina.
carlos.cabrelli@gmail.com

Soheil Kolouri
Vanderbilt University – Nashville, Tennessee, USA.
soheil.kolouri@vanderbilt.edu

Jorge Lauret
CIEM, Universidad Nacional de Córdoba – CONICET, Córdoba, Argentina.
jorge.lauret@gmail.com

Javad Mashreghi
Laval University, Quebec, Canada.
`javad.mashreghi@mat.ulaval.ca`

Ursula Molter
IMAS, Universidad de Buenos Aires – CONICET, Buenos Aires, Argentina.
`umolter@gmail.com`

James Murphy (Postdoc Mentor)
Tufts University, Boston, USA.
`jm.murphy@tufts.edu`

Alexander Powell
Vanderbilt University, Nashville, TN, USA.
`alexander.m.powell@vanderbilt.edu`

Fulvio Ricci
Scuola Normale Superiore di Pisa, Italy.
`fulvio.ricci@sns.it`

Gustavo K. Rohde
University of Virginia, Charlottesville, VA, USA.
`gustavo.rohde@gmail.com`

Linda Saal (Ph.D. advisor)
Universidad Nacional de Córdoba, Córdoba, Argentina.
`saal@mate.uncor.edu`