CURRICULUM VITAE ROCIO DIAZ MARTIN

E-mail: rocio.diaz_martin at tufts.edu

Personal Web Page: https://math.tufts.edu/people/postdocs

EDUCATION

Ph.D. in Mathematics

Jun 2014 - Dec 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)

Mar 2009 – Mar 2014

Facultad de Matemática, Astronomía, Física y Computación (FaMAF) Universidad Nacional de Córdoba (UNC) – Argentina

With honors: University Prize (Top of class)

CURRENT POSITION

Postdoctoral Scholar

Aug 2024 -

Department of Mathematics, Tufts University. Medford, MA, USA.

Positions

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

Sampling Theory, Signal Processing, and Data Analysis. Springer. 21: Article number: 18

	With Ivan Medri, and Juliana Osorio.	
4.	The Signed Cumulative Distribution Transform for 1-D signal analysis and classification Foundations of Data Science, AIMS 4 (1): 137-163 DOI: 10.3934/fods.2022001 With Akram Aldroubi, Ivan Medri, Gustavo K. Rohde, and Sumati Thareja.	2022
5.	Continuous and discrete dynamical sampling Journal of Mathematical Analysis and Applications, 449 (2): 125060 DOI: 10.1016/j.jmaa.2021.125060 With Ivan Medri, and Ursula Molter.	2021
6.	On commutative homogeneous vector bundles attached to nilmanifolds Revista de la Unión Matemática Argentina, 62 (1): 141–151 DOI: 10.33044/revuma.1738 With Linda Saal.	2021
7.	Mehler-Heine formula: a generalization in the context of matrix spherical functions Journal of Lie Theory, 30 (1): 41–57 With Ines Pacharoni.	2020
8.	Matrix Spherical Analysis on Nilmanifolds Transformation Groups, 24 (3): 887–911 DOI: 10.1007/s00031-019-09518-7 With Linda Saal.	2019
9.	Spherical analysis on homogeneous vector bundles of the 3-dimensional Euclidean Motion Group Monatshefte für Mathematik, 185 (4): 621–649 DOI: 10.1007/s00605-017-1123-1 With Fernando Levstein.	2018
10.	Dynamical sampling: a view from control theory	2021

Воок CHAPTERS

DOI: 10.1007/s43670-023-00059-5

Applied and Numerical Harmonic Analysis (ANHA), book series, Birkhäuser, Boston. Excursions in Harmonic Analysis, Vol. 6, in honor of John Benedetto's 80th Birthday, Ch. 15 DOI: 10.1007/978-3-030-69637-5_15 With Ivan Medri, and Ursula Molter.

11. Data representation with optimal transport

2024

Accepted for publication in the ANHA volume in honor of Akram Aldroubi's 65th birthday. With Ivan Medri, and Gustavo K. Rohde. (arXiv.2406.15503v1)

Papers in Computer Science (CS) Conferences (Machine Learning & Artificial INTELLIGENCE)

12. Linear Spherical Sliced Optimal Transport: A Fast Metric for Comparing Spherical Data

2025

International Conference on Learning Representations (ICLR)

(Top 10 venue - Google Scholar Metrics) (Acceptance rate: 32.08%)

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.

13. 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.

14. 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.

15. 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.

16. 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.)

17. 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.)

18. 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.)

PRE-PRINTS SUBMITTED FOR PUBLICATION (MATHEMATICS)

19. 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.

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

MATH EDUCATION ARTICLES

21. 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.

THESIS AND 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).

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

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.

A novel approach through spherical functions in the characterization of invariant polynomials. With Linda Saal.

Direct methods for classification of time signals with separation guarantees using linear optimal transport embeddings. With Akram Aldroubi, Ivan Medri, Kristofor E. Pas, Gustavo K. Rohde, and Abu H.M. Rubaiyat.

Truncated dynamical frames. With Ivan Medri, and Diana Carbajal.

Gromov-Wasserstein Barycentric Coding Model. With James Murphy.

Talks

SIAM Conference on Mathematics of Data Science. Atlanta, GA, USA.

Invited talk. Mini-symposium Incorporating Optimal Transport in Machine Learning:

Oct 2024

Theory	and	Applications	;.
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Colloquiums

Seminars

"Constructing new metrics from optimal transport theory" Computational and Applied Math Seminar. Tufts University. USA.	Sept 2024
"Bridges between Dynamical Sampling and Control Theory" Colloquium at the Department of Mathematics and Statistics, Saint Louis University	Oct 2023 v. USA.
"Exploring Dynamical Sampling Problems" Colloquium at the Department of Mathematical Sciences, Northern Illinois University	Mar 2024 ty . USA.
"Metrics Based on Optimal Transport" Colloquium at the Department of Mathematics, Florida State University. USA.	Jan 2024
Annual meeting of the Unión Matemática Argentina. San Luis, Argentina.	Sep 2014
Joint meeting between the Real Sociedad Matemática Española and the Unión Matemática Argentina (RSME-UMA). Buenos Aires, Argentina.	Dec 2017
CIMPA Research School: Group actions on algebraic varieties. Lima, Peru.	Sep 2017
Annual meeting of the Unión Matemática Argentina. La Plata, Argentina.	Sep 2018
Argentinian National Analysts Meeting. (Invited 40-minute talk) Villa General Belgrano, Córdoba, Argentina.	Nov 2018
Annual meeting of the Unión Matemática Argentina. (Virtual).	Sep 2020
Congress Dr. Antonio Monteiro. Bahía Blanca, Argentina (Virtual).	May 2021
Latin American Congress of Mathematicians (VI CLAM). (Invited speaker) Montevideo, Uruguay – Virtual.	Sep 2021
Focus Program on data science, approximation theory, and harmonic analysis (Invited speaker). Fields Institute for Research in Mathematical Science, Toronto, Cana	
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
PRIMA CONGRESS 2022. (Invited 20-minute talk) Vancouver, Canada.	Dec 2022
International Conference on Approximation Theory and Beyond. (Invited talk) Nashville, TN, USA.	May 2023
Instituto de Matemática y Ciencias Afines (IMCA), Lima, Peru. Frame Theory Day. (Invited talk) Saint Louis University, Saint Louis, MO, USA.	Oct 2023
Harmonic Analysis, and Applications. Vanderbilt University, Nashville, TN, USA.Encuentro de Matemática (Math Meeting) IMCA 2023.	Dec 2023
Hosted by Prof. José Luis Romero 2024 Shanks Workshop on Dynamical Sampling, Frame Theory,	Mar 2024
Acoustic Research Institute (ARI). Vienna, Austria.	May 2024
Frame Theory Days Conference. (Invited talk) Saint Louis University, Sain Louis, MO, USA.	Oct 2024

"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. Feb 2023 "Transport as an embedding tool" 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. Jun 2020 "Dynamical sampling: Continuous vs. discrete" 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" 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

Jun 2016

Graduate students seminar. FaMAF, Universidad Nacional de Córdoba. Córdoba, Argentina.

"Matrix spherical functions on the strong Gelfand pair (\mathbb{R}^3 , SO(3))"

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" Graduate students seminar. FaMAF, Universidad Nacional de Córdoba. Córdoba,	Sep 2014 Argentina.
	"A brief tour around harmonic analysis on groups" Differential Equations and Analysis seminar. FaMAF, Universidad Nacional de Córdoba, Argentina.	May 2014 doba .
Mini-courses	Annual meeting of the Unión Matemática Argentina. Salta, Argentina. Mini-course: "Four faces of the Optimal Transport Problem"	Sep 2023
	Winter school: "Harmonic analysis and special functions in mathematical phy Universidad Nacional de Córdoba, Argentina. Mini-course for graduate students: "Spherical functions of positive type: The core of the Plancherel measure"	ysics". Jul 2023
Posters	ICLR-2024: Twelfth International Conference on Learning Representations. Vienna, Austria.	May 2024
	Fall Fourier Talks. The Norbert Wiener Center, Mathematics Department, University of Maryland, USA.	Oct 2023
	ICML-2023: Fortieth International Conference on Machine Learning. Honolulu, Hawaii, USA.	Jul 2023
	ICM: International Congress of Mathematicians. Rio de Janeiro, Brazil.	Aug 2018
	CIMPA Research School and IX SANTALO School: Harmonic Analysis, Geometric Measure Theory and Applications. Uniersidad de Buenos Aires, Argentina.	Jul 2017
Fellowships & Awards	Optimal Transport in Data Science–Workshop at ICERM, Brown University. (Lodging and Travel Funding.)	May 2023
	Instituto de Matemática Pura e Aplicada (IMPA) Scholarship – Programa de Verão (Summer Program). Rio de Janeiro – Brazil.	- Feb 2019
	CONICET – Ph.D. Fellowship. Córdoba – Argentina. Apr 2014 –	Mar 2019
	ICM Open Arms Grants to attend the International Congress of Mathematicians - ICM 2018. Rio de Janeiro, Brazil.	Aug 2018
	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". Pontificia Universidad Católica del Perú, Lima, Perú.	Sep 2017
	Undergraduate monographs contest. First place. Unión Matemática Argentin	na. 2014
	University Prize – Universidad Nacional de Córdoba. Top of class, best GPA.	2013
	Universidad Nacional de Córdoba Stimulus Fellowship for Scientific Vocation for undergraduate students.	2013
	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

Accepted Special Session at the 2025 Mathematical Congress of the Americas:

"Applied Harmonic Analysis and Operator Theory"

Co-organizers: Akram Aldroubi, and Javad Mashreghi.

Special Seminar in Analysis

Jul 2024

2025

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.

Teaching **EXPERIENCE** Teaching Assistant (TA)

Fall 2024

Fall 2021

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)

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.

Graduate 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.

TEACHING	Teaching Seminar. Vanderbilt University. (Attendance only)	Spring 2022
TRAINING COURSES	Introduction on undergraduate education. UNC, Argentina. (60 hours)	Aug 2016
	Teacher Training Workshop. UNC, Argentina. (9 hours)	Mar 2012
Supervision of undergraduate	Co-mentor (together with Prof. Akram Aldroubi) of the Honor Project of the undergraduate students Kaiwen Shi and Abihith Kothapalli. Vanderbilt University.	2024
STUDENTS	Faculty Advisor of the student David A. Hulett. Universidad Nacional de Córdoba (UNC). Final work to obtain the degree of "Licenciado en Matemática" (M.Sc. in Math. equi Undergraduate thesis title: "From Fourier to Wavelets: time-frequency analysis".	2019 – 2020 valent)
Thesis COMMITTEES	Member of the Doctoral Thesis Tribunal of the graduate student Lucia Morey. Advisor Román. Thesis title: "Extensions of matrix-valued orthogonal polynomials". Universidad Nacional de Córdoba, Argentina.	: Prof. Pablo
	Member of the Doctoral Thesis Tribunal of the graduate student Carmen Luz Bland Advisor: Prof. Inés Pacharoni. Thesis title: "Spherical Functions of Finite Groups" Universidad Nacional de Córdoba, Argentina.	co Villacorta. 2023
	Member of the Undergraduate Thesis Tribunal of the student Ignacio Nicolás Bono Parthe degree of "Licenciado en Matemática" (M.Sc. in Math. equivalent). Advisor: Prof. Inés Pacharoni. Undergraduate thesis title: "El Problema Matricial de Universidad Nacional de Córdoba, Argentina.	
	Member of the Doctoral Thesis Tribunal of the graduate student Andrea Gallo. A Linda Saal. Thesis title: "Harmonic analysis on nilmanifolds". Universidad Nacional de Córdoba, Argentina.	dvisor: Prof. 2020
	Member of the Undergraduate Thesis Tribunal of the student Lucía Morey, to obtain "Licenciado en Matemática" (M.Sc. in Math. equivalent). Advisor: Prof. Pablo Ro graduate thesis title: "Propiedades analíticas y estructurales de polinomios ortogonales Universidad Nacional de Córdoba, Argentina.	mán. Under-
SHORT VISITS AND STAYS	Scuola Normale Superiore di Pisa – Pisa, Italy Hosted by Prof. Fulvio Ricci Ap	r – May 2016
	Universidad Nacional del Sur – Bahía Blanca, Argentina Hosted by Prof. Pablo Rocha	Jun 2017
Editor, Referee & Reviewer	Editor – Revista de Educación Mateática (Math Education Journal) ISSN:0326-8780 – ISSN: 1852-2890 on-line Universidad Nacional de Córdoba (UNC) and Unión Matemática Argentina (UMA).	2023 –
· · ·	Reviewer – "Women in Mathematics Latin America" Volume Springer-Birkhäuser Trends in Mathematics Series.	2024
	Reviewer – International Conference on Learning Representations (ICLR 2025)	2024
	Reviewer – IEEE International Conference on Acoustics, Speech, and Signal Processin	ng 2024

(ICASSP 2025)

Reviewer – Conference on Neural Information Processing Systems (NeurIPS 2024).	2024
${\bf Reviewer-International\ Conference\ on\ Pattern\ Recognition\ (ICPR2024)}.$	2024
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

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 Mathematics 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

 $\label{thm:conditional} \mbox{Vanderbilt University - Nashville, Tennessee, USA.}$

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

 $IMAS,\ Universidad\ de\ Buenos\ Aires-CONICET,\ Buenos\ Aires,\ Argentina.$ $\verb"umolter@gmail.com"$

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

 $\label{lem:charlottesville} University \ of \ Virginia, \ Charlottesville, \ VA, \ USA. \\ \verb"gustavo.rohde@gmail.com"$

Linda Saal (Ph.D. advisor)

Universidad Nacional de Córdoba, Córdoba, Argentina. saal@mate.uncor.edu