Part A. PERSONAL INFORMATION

CV date	3/10/2022

First name	Óscar		
Family name	Ciaurri		
Gender (*)	Male	Birth date (dd/mm/yyyy)	12/08/1971
ID number			
e-mail	oscar.ciaurri@unirioja.es	URL Web	
Open Researcher and Contributor ID (ORCID) (*)		0000-0002-1695-3311	

(*) Mandatory

A.1. Current position

Position	Full Professor		
Initial date	04/12/2018		
Institution	Universidad de La Rioja		
Department/Center	Departamento de Matemáticas y Computación. Facultad de Ciencia y Tecnología		
Country	Spain	Teleph. number	941299442
Key words	Fourier series, harmonic analysis, weighted inequalities, special functions		

A.2. Previous positions (research activity interuptions, art. 14.2.b))

Period	Position/Institution/Country/Interruption cause
1995-2007	Assistant Professor/Universidad de La Rioja/Spain
2007-2018	Associate Professor/Universidad de La Rioja/Spain

A.3. Education

PhD, Licensed, Graduate	University/Country	Year
Bachelor	Universidad Autónoma de Madrid	1995
PhD	Universidad de La Rioja	2000

Part B. CV SUMMARY *(max. 5000 characters, including spaces)*

● My research activity is mainly focused on harmonic analysis and its relation to special functions, including orthogonal polynomials. More exactly, I have worked on weighted inequalities for some operators in harmonic analysis (the heat and Poisson semigroups, the Riesz transform, the gk-functions, or the fractional integrals, among others) defined for the classical orthogonal polynomials and other families of special functions (Fourier-Neumann series and Fourier-Bessel series) and I have analyzed the convergence of some Fourier series in weighted spaces. Moreover, I am interested in other branches of mathematics: number theory, partial differential equations, elementary mathematics, problem solving, etc. I have four recognized research six-year evaluations ("sexenios") (1997-2002, 2003-2008, 2009-2014, and 2015-2020).

● I am author of more than 75 papers published in internationally recognized mathematical research journals. For example, I have published 2 papers in Adv. Math., 1 in Adv. in Appl. Math., 3 in Amer. Math. Monthly, 1 in Ann. Mat. Pura Appl., 1 in Appl. Math. Lett., 2 in Expo. Math., 1 in Constr. Approx., 1 in Glasgow Math. J., 5 in Integral Transforms Spec. Funct., 2 in J. Anal. Math., 4 in J. Approx. Theory, 3 in J. Comput. Appl. Math., 3 in J. Fourier Anal. Appl., 3 in J. Funct. Anal., 1 in J. Inequal. Appl., 7 in J. Math. Anal. Appl., 1 in Math. Z., 1 in Math. Mec. Solids, 1 in Mediterr. J. Math., 1 in Milan J, Math., 1 in Potential Anal., 1 in Proc. Edinb. Math. Soc. (2), 2 in Proc. Amer. Math. Soc., 1 in Rev. R. Acad. Cienc. Exactas Fís. Nat. Ser. A Mat. RACSAM, 1 in Rev. Mat. Complut., 1 in Rev. Mat. Iberoam., 1 in Semigroup Forum, 1 in SIAM J. Math. Anal., 1 in SIGMA, 3 in Studia Math., 1 in Studia Sci. Math. Hungar., 1 in Tohoku Math. J., and 1 in Trans. Amer. Math. Soc.

● I have been the advisor of four Ph. D. dissertation. Students: Luz Roncal (defended in 2009), Emilio Fernández (defended in 2019), Alberto Arenas (defended in 2019), and Edgar Labarga (defended in 2019).

● I have participated in eight national research projects and I have been the main researcher in five of them. Moreover, I have been involved in fourteen research projects granted by Universidad de La Rioja and by the local government of La Rioja.

● I have participated, with talks and posters, in more than thirty national and international meetings. Moreover, I have been involved in the organization (as member of the organizing or scientific committee) of five national and international meetings.

● I have made some research stays to collaborate with other national and international researchers. In Spain, I collaborate with professors from Universidad Autónoma de Madrid, Universidad de La Laguna, Universidad del País Vasco, Universidad de Sevilla, Universidad de Zaragoza and BCAM. Abroad, my collaborators are from India, Ireland, Chile, Poland, Portugal and USA.

● From 2017, I am the coordinator of the thematic network "Orthonet", involving the different research groups working on orthogonal polynomials and special functions in Spain. Moreover, our research group organized the first Orthonet meeting, in Logroño in 2013, and the III Orthonet School, celebrated in Bilbao in November 2018 in BCAM. The IV Orthonet School was scheduled in March of 2020, in Universidad de La Rioja, but it was cancelled due to COVID19 pandemic. This netnwork has been granted by the Spanish Government through the grant MTM2017-90694-REDT.

● My teaching activity has been focused in Analysis courses of degree, master, and doctorate. I have been the advisor of more than ten end-of-degree projects and of two master theses. Moreover, I have been involved in some administrative tasks relative to teaching.

Part C. RELEVANT MERITS *(sorted by typology)*

C.1. Publications *(see instructions)*

1. A. Arenas, Alberto, Ó. Ciaurri, and E. Labarga, *Weighted transplantation for Laguerre coefficients*, Mediterr. J. Math. 19 (2022), Paper No. 52, 21 pp.

2. A. Arenas, Ó. Ciaurri, and E. Labarga, *Discrete harmonic analysis associated with Jacobi expansions I: The heat semigroup*, J. Math. Anal. Appl. 490 (2020), 123996, 21 pp.

3. Ó. Ciaurri, A. Nowak, and L. Roncal, *Maximal estimates for a generalized spherical mean Radon transform acting on radial functions*, Ann. Mat. Pura Appl. (4) 199 (2020), 1597–1619.

4. F. Albiac, J. L. Ansorena, Ó. Ciaurri, and J. L. Varona, *Unconditional and quasi-greedy bases in Lp with applications to Jacobi polynomials Fourier series*, Rev. Mat. Iberoam. 35 (2019), 561–574.

5. Ó. Ciaurri, L. Roncal, and S. Thangavelu, *Hardy-type inequalities for fractional powers of the Dunkl-Hermite operator*, Proc. Edinb. Math. Soc. (2) 61 (2018), 513–544.

6. 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.

7. Ó. Ciaurri, A. Nowak, and L. Roncal, *Two-weight mixed norm estimates for a generalized spherical mean Radon transform acting on radial functions*, SIAM J. Math. Anal. 49 (2017), no. 6, 4402–4439.

8. Ó. Ciaurri, T. A. Gillespie, L. Roncal, J. L. Torrea, and J. L. Varona, *Harmonic Analysis associated with a discrete Laplacian*, J. Anal. Math. 132 (2017), 109-131.

9. Ó. Ciaurri and L. Roncal, *The Riesz transform for the harmonic oscillator in spherical coordinates*, Constr. Approx. 40 (2014), 447–472.

10. Ó. Ciaurri, L. Roncal and P. R. Stinga. *Fractional integrals on compact Riemannian symmetric spaces of rank one*, Adv. Math., 235 (2013), 627-647.

C.2. Congress

1. Hardy inequalities and orthogonal expansions; participation: invited conference; author: Óscar Ciaurri; congress: BCAM meeting on sampling, uncertainty principles, and combinatorial methods in harmonic, Bilbao, January 2018.

2. Análisis armónico discreto (Discrete harmonic analysis); participation: conference; author: Óscar CIaurri; congress: Primer Encuentro de la Real Sociedad Matemática Española y la Unión Matemática Argentina (First joint meeting RSME and UMA), December 2017.

3. The heat equation for Jacobi matrices; participation: conference; author: Óscar Ciaurri; congress: 14th OPSFA, Kent University (Canterbury, UK), July 2017.

4. Potential operators for a discrete Laplacian; participation: invited conference; author: Óscar Ciaurri; congress: Congreso RSME 2017, January-February 2017.

5. Desigualdades de Hardy (Hardy inequalities); participation: invited conference; author: Óscar Ciaurri; congress: Jornada de Física Matemática IMUS, Sevilla, November 2015.

6. Special functions in a discrete Laplacian; participation: invited conference; author: Óscar Ciaurri; congress: Congreso RSME 2015, Granada, February 2015.

7. Semigrupos en análisis armónico (Semigroups in harmonic analysis); participation: conference; autor: Óscar Ciaurri; congress: Tercer encuentro conjunto de la Real Sociedad Matemática Española y la Sociedad Matemática Mexicana (Third joint meeting RSME and SMM), Zacatecas (México), August-September 2014.

8. Vector-valued inequalities for operators associated to Jacobi and Laguerre; participation: conference; author: Óscar Ciaurri, congress: Constructive Functions 2014, Nashville (USA), May 2014.

9. The vector valued Riesz transform for orthogonal systems; participation: conference; author: Óscar Ciaurri; congress: 12nd OPSFA, Sousse (Tunisia), March 2013.

10. Transplantation for Fourier-Neumann series; participation: conference; author: Óscar Ciaurri; congress: 11th OPSFA; Leganés (Madrid), September 2011.

C.3. Research projects

In addition to several regional projects granted by Universidad de La Rioja and the local government, in the last ten years I have participated in the following national projects:

● PID2021-124332NB-C22: *Funciones especiales, aproximación y aplicaciones*; granted by Spanish Government; three years from 1/10/2022 to 30/9/2025; grant: 47.100 €; **participation: IP.**

● PGC2018-0096504-B-C32: *Ortogonalidad y aproximación: teoría y aplicaciones en física matemática*; granted by Spanish Government; three years from 1/1/2019 to 31/12/2021; grant: 29 500€; **participation: IP.**

● MTM2017-90694-REDT: *Orthonet, thematic network*; granted by Spanish Government; two years from 1/7/2018 to 30/6/2020; grant: 12 000€; **participation: IP.**

● MTM2015-65888-C4-4-P: *Ortogonalidad, teoría de la aproximación y aplicaciones en física matemática*; granted by Spanish Government; three years from 1/1/2016 to 31/12/2018; grant: 78 900€, **participation: IP.**

● MTM2012-36732-C03-02*: Ortogonalidad y aproximación: teoría y aplicaciones en ciencia y tecnología;* granted by Spanish Government; three years from 1/1/2013 to 31/12/2015; grant: 54 400€, **participation: IP.**

● MTM2009-12740-C03-03: *Ortogonalidad, teoría de la aproximación y sus aplicaciones en ciencia y tecnología;* granted by Spanish Government; three years from 1/1/2010 to 31/12/2013; grant: 77 000€; **participation: IP.**

C.4. Contracts, technological or transfer merits

Not applicable.