

Curriculum Vitae

Analía Silva

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Personal Data

DATE OF BIRTH: August 26, 1982. PASSPORT: AAA593429
NUMBER OF CHILDREN: 1, born on June 2020.
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Highest obtained degree

Phd. in Mathematical Sciences (2008–2013). Facultad de Ciencias Exactas y Naturales, Universidad de Buenos Aires. Thesis: *Elliptic problems with nonstandard growth and lack of compactness*. Advisor: Julián Fernández Bonder.

Current Position

- Full Professor, Math Department, Universidad Nacional de San Luis, since 10/2021.
- Member of CONICET (Adjoint Researcher). Since 11/2018.

Past undergraduate students

Bachelor Thesis, Natalí Ailín Cantizano, Calculus of variations, Universidad Nacional de San Luis, 2017.

Current graduate students

- Belem Betsabé Schvager, Phd student at Universidad Nacional de San Luis. Since 2019.
- María José Suarez Marziani, Phd student at Universidad Nacional de San Luis. Since 2019.
- María Celeste Romero Longar, Phd student at Universidad Nacional de San Luis. Since 2018.

Publications (Last 5 years)

I have published 21 articles in international journals. In the last 5 years I published the following:

1. Ochoa, P., Silva, A. and Marziani, M.J.S. Existence and multiplicity of solutions for a Dirichlet problem in fractional Orlicz-Sobolev spaces. *Annali di Matematica* (2023). <https://doi.org/10.1007/s10231-023-01351-w>
2. A.Salort, B.Schvager and A.Silva. *Nonstandard growth optimization problems with volume constraint*. *Differential and Integral Equations*, Volume 36, Numbers 7-8 (2023), 573-592.
3. S.Alarcón, A. Ritorto and A.Silva. *Existence and nonexistence of solutions for the fractional nonlinear Schrödinger equation*. *Mathematical Methods in the Applied Sciences*, 44 (11), 2021, 8903-8924.
4. J. Fernández Bonder, A. Silva and J. Spedaletti. *Gamma convergence and asymptotic behaviour for eigenvalues of nonlocal problems*. *Discrete and Continuous Dynamical Systems*, 41, 5, 2021, 2125-2140.
5. J.V. da Silva, P.Ochoa and A. Silva. *Fractional elliptic problems with nonlinear gradient sources and measures*. *Revista Matemática Complutense* (2021). <https://doi.org/10.1007/s13163-021-00391-1>

6. J.V.da Silva, A.M. Salort, A.Silva and J. F Spedaletti. *A constrained shape optimization problem in Orlicz - Sobolev Spaces*. Journal of Differential Equations, 267, (2019), 9, 5493-5520.
7. J. Fernández Bonder, A. Silva and J.F Spedaletti. *Uniqueness of minimal energy solution for a semilinear problem involving the fractional laplacian*. Proc. Amer. Math. Soc.147 (2019), no 7, 2925-2936.
8. N. Cantizano and A. Silva. *Three solutions for a nonlocal problem with critical growth*. J. Math. Anal. Appl 469 (2019), no 2, 841-851.

Invited talks

1. *Un problema crítico para el p -Magnético Laplaciano Fraccionario*, invited speaker at *Workshop Avances recientes en ecuaciones diferenciales no lineales, análisis armónico y aplicaciones*. Buenos Aires, 2022.
2. *Effect of non-linear lower order terms in quasilinear equations involving the $p(x)$ - Laplacian*,invited speaker at *Mathematical Congress of the Americas (MCA 2021), Session: Diverse Aspects of Elliptic PDEs and Related Problems*. virtual, 2021.
3. *The concentration compactness Principle in unbounded domains*, invited speaker at *Applied Mathematics Seminar (Utrecht University)*. Utrecht, Netherlands, 2019.
4. *Opinion formation model with heterogeneous persuasion and zealotry*, invited speaker at *Workshop for women in Differential Equations*. UFABC, Santo André, Brazil, 2018.
5. *A mass transportation approach for Sobolev inequality*, invited Speaker at *XII Encuentro Nacional de Analistas A.P Calderón.*, Argentina , 2016.

Current and past grants

- Director of the Research Project PIP 11220210100238CO of CONICET, *Problemas elípticos con crecimiento no estándar*, 2022-2024.
- Director of the Research Project PICT 2019-03837 of ANPCyT, *Problemas con crecimiento no estándar*, 2021-2024.
- Codirector of the Research Project PROIPRO 03-2420 UNSL, director: Juan Spedaletti, *Ecuaciones Diferenciales*, 2020-2022.
- Director of the Research Project PICT 2017-0704 of ANPCyT, *Problemas no locales y modelos de formación de opinión*, 2019 -2021.
- Director of the Research Project PROIPRO 03-2418 UNSL, codirector: Juan Spedaletti, *Ecuaciones Diferenciales*, 2018-2020.

Conferences Organized

1. Organizer as a member of the Executive Committee of UMA at *Reunión Anual de la UMA 2022*.
2. Organizer as a member of the Executive Committee of UMA at *VirtUMA 2021*.
3. Organizer as a member of the Executive Committee of UMA at *VirtUMA 2020*.
4. Member of local organizing committee at *V international Symposium on Nonlinear PDEs and Free boundary problems*, 2017.
5. Member of local organizing committee at *X Americas Conference on Differential Equations and Nonlinear Analysis*, 2015.

Others

- Secretary of the Argentinian Mathematical Union (UMA). November 2019-October 2022.