

## Publicaciones

1. Herrón, Sigifredo; Lopera, Emer y Sánchez, Diana. Solutions for a problem involving a  $\phi$ -Laplacian-like operator via energy analysis, phase plane and shooting method. *Journal of Mathematical Analysis and Applications*, volume 543, 2, Part 1, 128910, 2025. <https://doi.org/10.1016/j.jmaa.2024.128910>.
2. Herrón, Sigifredo; A. Castro, J. Cossio y C. Vélez. Shooting from singularity to singularity and a quasilinear p-Laplace-Beltrami equation with indefinite weight. *Discrete and Continuous Dynamical Systems - S*, 2024, 17(5&6): 2186-2207. doi: 10.3934/dcdss.2023108.
3. Herrón, Sigifredo. Libro "Una introducción a los fundamentos del análisis". Ganador concurso de publicación Sello UN, Colección Obra Selecta, Techné. Febrero 2023. Editorial Universidad Nacional de Colombia.
4. Herrón, Sigifredo; Lopera, Emer y Sánchez, Diana. Positive solutions for a semipositone  $\Phi$ -Laplacian problem. *Journal of Mathematical Analysis and Applications* Volume 510, Issue 2, 15 June 2022, 126042.
5. Herrón, Sigifredo; A. Castro, J. Cossio y C. Vélez. *Infinitely many radial solutions for a p-Laplacian problem with negative weight at the origin*, Special Issue 01 (2021), pp. 101-114.
6. Herrón, Sigifredo; A. Castro, J. Cossio and C. Vélez. Infinitely many radial solutions for a p-Laplacian problem with indefinite weight, *Discrete & Continuous Dynamical Systems*, 2021, 41 (10): 4805 - 4821.
7. Herrón, Sigifredo; Aduén, Hugo. Nonradial solutions of elliptic weighted superlinear problems in bounded symmetric domains. *J. Math. Anal. Appl.* Vol 492, Issue 1, December 2020, 124429.
8. Herrón, Sigifredo; A. Castro, J. Cossio, R. Pardo and C. Vélez. Infinitely many radial solutions for a sub-super critical p-Laplacian problem. *Annali di Matematica* 199, 737-766 (2020).
9. Herrón, Sigifredo; Castro, Alfonso; Cossio, Jorge; Vélez, Carlos. "Existence and multiplicity results for a semilinear elliptic problem". *J. Math. Anal. Appl.* Vol 475, No 2. (2019), 1493-1501.
10. Herrón, Sigifredo; Villamizar-Roa, Élder J. "On non-Newtonian fluids with convective effects", *Electron. J. Differential Equations*, Vol. 2017 (2017), No. 155, pp. 1-28.
11. Herrón, Sigifredo; Cossio, Jorge; Vélez, Carlos. "Existence of multiple solutions for a Quasilinear Elliptic problem". *Topological Methods in Nonlinear Analysis*, Vol 50, No 2 December 2017.
12. Herrón, Sigifredo; Aduén, Hugo. "On the uniqueness of sign-changing solutions to a semipositone problem in annuli", *Revista Integración*, Vol 34 N 2. 2016, pp. 207-224.
13. Herrón, Sigifredo; Lopera, Emer. Non-existence of positive radial solution for semipositone weighted p-Laplacian problems. *Electronic Journal of Differential Equations*, Vol. 2015 (2015), No. 130, pp. 1-9. ISSN: 1072-6691.
14. Herrón, Sigifredo. Libro "Tópicos previos a la Matemática superior". Ganador concurso de publicación Sello UN, Colección Obra Selecta, Techné. Marzo 2014. Editorial Universidad Nacional de Colombia.
15. Herrón, Sigifredo; Lopera, Emer. Signed Radial Solutions for a Weighted p-Superlinear Problem. *Electronic Journal of Differential Equations*, Vol. 2014 (2014), No. 24, pp. 1-13. ISSN: 1072-6691.
16. Herrón, Sigifredo; Cossio, Jorge; Vélez, Carlos. "Multiple solutions for nonlinear Dirichlet problems via bifurcation and additional results ". *J. Math. Anal. Appl.* 399 (2013) 166-179.

17. Herrón, Sigifredo; Cossio, Jorge; Vélez, Carlos Infinitely many radial solutions for a  $p$ -Laplacian problem  $p$ -superlinear at the origin. *J. Math. Anal. Appl.* 376 (2011), No 2. 741-749.
18. Herrón, Sigifredo; Vélez, C.; Cossio, J. Existence of solutions for an asymptotically linear Dirichlet problem via Lazer-Solimini results. *Nonlinear Analysis*, Vol. 71, p. 66-71, 2009.
19. Herrón, Sigifredo; Cossio, Jorge. Existence of radial solutions for asymptotically linear  $p$ -Laplacian problem, *Journal of Mathematical Analysis and Applications*, Volume 345, Issue 1, 1 September 2008, Pages 583-592.
20. Herrón, Sigifredo, Existencia de soluciones para problemas de Dirichlet asintóticamente lineales en ecuaciones con el Laplaciano y el  $p$ -Laplaciano. Tesis Doctoral, Universidad Nacional de Colombia, Sede Medellín, 2006.
21. Herrón, Sigifredo; Cossio, J. Nontrivial solutions for a semilinear Dirichlet problem with nonlinearity crossing multiple eigenvalues. *Journal of Dynamics and Differential Equations*, Vol. 16, No.3, p.795 - 803, 2004.
22. Herrón, Sigifredo, Teoría de Grado. Revista de La Facultad de Ciencias Universidad Nacional de Colombia Medellín, Vol.5, No.1, p.59 - 70, 1997.
23. Herrón, Sigifredo. Relación entre la Teoría de Grado y la Teoría de puntos críticos. Tesis de Maestría, Universidad Nacional de Colombia, Sede Medellín, 1995.