

List of Publications Martha Gabriela Araujo Pardo

- 1) Araujo-Pardo, C. Dalfó, M.A. Fiol y N. López, "On Bipartite Biregular Large Graphs Derived From Difference Sets". *Journal of Graph Theory*, (2025)
<https://onlinelibrary.wiley.com/doi/epdf/10.1002/jgt.23263>
- 2) Araujo-Pardo, G. Berikkyzy Z. Lesniak L., "On the existence of (r, g, χ) -cages". *Graphs and Combinatorics*. (2025) <https://doi.org/10.1007/s00373-025-02915-8>
- 3) Araujo-Pardo G., Kiss G., Porupsánszki I. "On extremal almost edge-girth regular graphs". *Art Discrete Appl. Math.* (2025), doi:10.26493/2590-9770.1733.dc9
<https://adam-journal.eu/index.php/ADAM/article/view/1733>
- 4) Araujo-Pardo G., Díaz-Calderón J.C., Fresán J., González-Moreno D., Lesniak L., Olsen M. "On (r, g, χ) - graphs and cages for infinitely many values of regularity r , girth g and chromatic number χ ". *Art Discrete Appl. Math.* (2025), doi:10.26493/2590-9770.1737.0f8.
<https://adam-journal.eu/index.php/ADAM/article/view/1737>
- 5) Araujo-Pardo G., Conder M., García-Colín N., Kiss G., Leemans D. "A note on girth-diameter graphs". *Art Discrete Appl. Math.* (2025), doi:10.26493/2590-9770.1743.19f.
<https://adam-journal.eu/index.php/ADAM/article/view/1743>
- 6) Araujo-Pardo G., Kiss G., Szönyi T. "New results in bipartite biregular cages, block designs and generalized polygons". *Boletín de la Sociedad Matemática Mexicana. Festschrift on the occasion of the 80th anniversary of the Mathematics Institute of the National Autonomous University of Mexico - UNAM Bol. Soc. Mat. Mex.* 31, 20 (2025).
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- 7) Araujo-Pardo G, Montellano-Ballesteros J.J., Rubio-Montiel C., Olsen M. "On the harmonious chromatic number of graphs" *Boletín de la Sociedad Matemática Mexicana. Festschrift on the occasion of the 80th anniversary of the Mathematics Institute of the National Autonomous University of Mexico - UNAM. Bol. Soc. Mat. Mex. (3)* **30** (2024), no. 2, Paper No. 59, 16 pp.
<https://doi.org/10.1007/s40590-024-00632-5>
- 8) Araujo-Pardo, Rubio-Montiel C. "Achromatic arboricity on complete graphs". *Aequationes Mathematicae*. Publicado en línea en Noviembre de 2023.
<https://doi.org/10.1007/s00010-023-01000-w>
- 9) Araujo-Pardo G., Barrera-Cruz F., García-Colín N., "Biregular (and regular) planar cages" *Discussiones Mathematicae Graph Theory* 43 (2023), no. 4, 1171-1194.
arXiv:1811.07449v1. <https://doi.org/10.7151/dmgt.2425>
- 10) Aguilar F. Araujo-Pardo G, García-Colín N. "Scaffolding for the polyhedral embedding of cubic graphs" *Discussiones Mathematicae Graph Theory* 43 (2023), no. 2, 351–384
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- 11) Araujo-Pardo G. López N., "On new record graphs close to bipartite Moore graphs". *Graphs and Combin.* 38 (2022), no. 4, Paper No. 110, 14 pp.
- 12) Araujo-Pardo G. Leemans D. "Edge-girth-regular graphs arising from biaffine planes and Suzuki groups" *Discrete Math.* 345, no 10. (2022). Paper no. 112991.
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- 13) Araujo-Pardo G. Ramos-Rivera A., Jajcay R. Szönyi T., "On a relation between bipartite biregular cages, block designs and generalized polygons" *J. Combin. Des.* 30. No.7, 479-496 (2022). <https://doi.org/10.1002/jcd.21836>
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- 16) Araujo-Pardo G., Dalfó C., Fiol M.A., López N. "Birregular Bipartite Moore Graphs". *Discrete Math.* 344 (2021), no. 11, Paper No. 112582, 12 pp.
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- 17) Araujo-Pardo G., Díaz-Patiño J.C., Rubio-Montiel J.C. "On the achromatic number of Kneser Graphs" *Ars Mathematica Contemporanea* 21 (2021) #P1.05
(<https://doi.org/10.26493/1855-3974.2357.373>)
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- 19) Gabriela Araujo-Pardo, Zhanar Berikkyzy, Jill Faudree, Kirsten Hogenson, Rachel Kirsch, Linda Lesniak and Jessica McDonald. "Finding Long Cycles in Balanced Tripartite Graphs: A First Step". In Daniela Ferrero et al. (eds) *Research Trends in Graph Theory, Association for Women in Mathematics Series (in production)*. Springer Nature, Cham, Switzerland (2021).
- 20) Araujo-Pardo G., Kiss G., Rubio-Montiel, C, Vázquez-Ávila A. "On line coloring of finite projective spaces". *Graphs and Combinatorics* 37 (2021) 891—905
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- 21) Araujo-Pardo, Montellano-Ballesteros J.J., Rubio-Montiel C., Olsen M., "Achromatic numbers for circulant graphs and digraphs" *Discussiones Mathematicae Graph Theory* 41 (2021) 713-724, doi:10.7151/dmgt.2327.
- 22) C. Alfaro, G.Araujo-Pardo, C. Rubio-Montiel, A. Vázquez-Ávila. "On transversal and 2-packing numbers in uniform linear systems". *AKCE International Journal of Graphs and Combinatorics*. 17:1 (2020), 335-341, DOI: <https://doi.org/10.1016/j.akcej.2019.03.014>.

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In press:

1) Araujo-Pardo Gabriela, "Contributions on the Cage and Diameter Problems and Beyond". Proceedings of 2022 AWM Research Symposium. *Association for Women in Mathematics Series (in production)*. Springer Nature, Cham, Switzerland (2025).

2) Aguilar F. Araujo-Pardo G. Berman L. "Semicubic cages and small graphs of even girth from voltage graphs" *Ars Mathematica Contemporanea* (Accepted August 2025). arXiv:2305.03290.

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- 1) F. Aguilar, G. Araujo-Pardo, L. Bermann. "Semi-cubic graphs and cages of even girth". Memorias del XIII Encuentro Andaluz de Matemáticas Discretas, (julio 2023).
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