

List of Publications Martha Gabriela Araujo Pardo

- 1) 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>
- 2) 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>
- 3) 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
<https://doi.org/10.7151/dmgt.2379>
- 4) 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.
- 5) 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.
<https://doi.org/10.1016/j.disc.2022.112991>
- 6) 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>
- 7) Araujo-Pardo G, Montellano-Ballesteros J.J., Rubio-Montiel C., Olsen M., "The digrundy number of digraphs" *Discrete Appl. Math.* 317 (2022), 117-123.
<https://doi.org/10.1016/j.dam.2022.04.005>
- 8) Araujo-Pardo G., De la Cruz C. González-Moreno D. "Mixed Cages: monotony, connectivity and upper bounds". *Discrete Math.* 345 (2022) 112792. 1-11.
<https://doi.org/10.1016/j.disc.2021.112792>. arXiv:2009.13709.
- 9) 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.
<https://doi.org/10.1016/j.disc.2021.112582>
- 10) 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>)
- 11) Araujo-Pardo G. Matamala M. "Chen and Chavátla's Conjecture on Tournaments" *European Journal of Combinatorics* 97 (2021) Paper No. 103374, 8 pp.
<https://doi.org/10.1016/j.ejc.2021.103374>
- 12) 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).

13) 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
<https://doi.org/10.1007/s00373-021-02288-8>.

14) 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.

15) 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>.

16) G. Araujo-Pardo, C. Rubio-Montiel, A. Vázquez-Ávila. "On the Erdős-Faber-Lovász Conjecture: Resolvable Designs and Commutative Quasigroups". *Ars Combinatoria*. 143 (2019) 53—57.

17) Araujo-Pardo G., Hernández-Cruz César, Montellano-Ballesteros J.J. "On mixed cages" *Graphs and Combinatorics* 35 (2019). No. 5, 989—999.
<https://doi.org/10.1007/s00373-019-02050-1>

18) Araujo-Pardo G., Kiss G., Rubio-Montiel, C, Vázquez-Ávila A "On chromatic indices of finite affine spaces" *Ars Mathematica Contemporanea*. 16 (2019) 67—79.
<https://doi.org/10.26493/1855-3974.1546.c5e>

19) Araujo-Pardo G., Contreras-Mendoza F. E., Murillo-García S.J., Ramos-Tort A., Rubio-Montiel C., "Complete Colorings of planar graphs". *Discrete Applied Mathematics*. 255 (2019) 86—97 <https://doi.org/10.1016/j.dam.2018.07.031>

21) Araujo-Pardo G., Rubio C. "On $\omega\psi$ -Perfects Graphs". *Ars Combinatoria*. 141 (2018).

21) Araujo-Pardo G., Montellano-Ballesteros J.J., Rubio-Montiel C., Olsen M., "The diachromatic number of digraphs" *Electron. J. Combin.* 25 (2018) no. 3, Paper # 3.51, 17 pp.

22) Araujo-Pardo G., Montellano J.J., Rubio-Montiel C., Strausz R. "On the pseudoachromatic index of the complete graphs III" *Graphs and Combin.* Vol. 34 Issue 2 (2018) 277—287.

23) Araujo-Pardo G., Montejano A., Montejano L., Vázquez-Ávila A. "On transversal and 2-packing numbers in straight line systems on \mathbb{R}^2 " *Util. Math.* 105 (2017) 317--336. 30)

24) Araujo-Pardo G., Hernández-Cruz C., Montellano-Ballesteros J.J. "Convexity spectra of grids" *Graphs and Combinatorics* 33 (2017) no. 4, 689—713.

- 25) Araujo-Pardo G., Rubio C. "Pseudoachromatic and connected pseudoachromatic indices of the complete graphs". *Discrete Applied Math.* 231 (2017) DOI information: 10.1016/j.dam.2017.03.019
- 26) Araujo-Pardo G. Vázquez-Avila A. "A note about Erdős, Faber and Lovász Conjecture and edge coloring of complete graphs". *Ars Combin.* 129 (2016), 287-298.
- 27) Abajo E., Araujo-Pardo G., Balbuena C., Bendala M., "New small regular graphs of girth 5". *Discrete Math.* 340 (2017), no. 8, 1878—1888.
DOI information: 10.1016/j.disc.2017.03.020
- 28) G. Araujo-Pardo., C., Balbuena, M. Miller., M. Zdimalovna. "A family of Dense Mixed Graphs of Diameter 2" *Discrete Applied Math.* 218 (2017), 57--63.
<http://dx.doi.org/10.1016/j.dam.2016.09.034>.
- 29) Araujo-Pardo G., Diaz-Patiño J.C., Montejano L. Oliveros Déborah. "The (p,q)-extremal problem and the fractional chromatic number of Kneser graphs" *Discrete Math* 339 (2016), no. 11, 2819—2825.
- 30) Aichholzer O., Araujo-Pardo G., García-Colín N., Hackl T., Lara D., Rubio-Montiel C., Urrutia J. "Geometric achromatic and pseudoachromatic index" *Graphs and Combin.* 32 (2016). No. 2, 431—451.
- 31) Araujo-Pardo Gabriela, Exoo Geoffrey, Jajcay Robert. "Small bi-regular graphs of even girth". *Discrete Math* 339 (2016), no. 2, 658—667
- 32) Araujo_Pardo., Kiss G. Montejano A. "On the balanced upper chromatic number of cyclic projective planes and projective spaces" *Discrete Math.* 338 (2015), no. 12, 2562--2571.
- 33) Abreu M., Araujo-Pardo G., Balbuena C., Labbate D., Salas J. "Small Regular Graphs of Girth 7". *Electron. J. Combin.* 22 (2015) no. 2, Paper 3.5, 16 pp.
- 34) Abreu M., Araujo-Pardo G., Balbuena C. Labbate D. "A construction of small (q-1,8)-regular graphs" *Electron. J. Combin.* 22 (2015) no. 2, Paper 2.10, 8 pp.
- 35) Araujo-Pardo G., Hubard I., Oliveros D. Shulte E. "Colorful Asociahedron and Cycloahedron". *Journal of Combinatorial Theory. Serie A* 129 (2015) 122--141.
- 36) Araujo-Pardo G., Barrière E. "Defensive Alliances in Circulant Graphs". *Ars Combinatoria* 115 (2014) 115--138.
- 37) Araujo-Pardo G., Barrière E. "Defensive Alliances in Regular Graphs". *Ars Combinatoria* 115 (2014) 35--54.
- 38) Araujo-Pardo G., Montellano J.J., Rubio C., Strausz R. "On the pseudoachromatic index on the complete graph II". *Bol. Soc. Mat. Mex.* Vol.20, Issue1. (2014) 17-28. DOI. 10.1007/s40590-014-0007-9.

- 39) Araujo-Pardo G., Balbuena C. López-Chávez G., Montejano L. "Bi-regular small graphs of even girth at least 8". *Aequationes Mathematicae* 86 (2013) 201—216. DOI 10.1007/s00010-013-0227-5
- 40) Araujo-Pardo G., Hubard I., Oliveros D. Shulte E. "Colorful Polytopes". *Israel Journal of Mathematics* 195 (2013) No. 2 647—675. DOI: 10.1007/s11856-012-0136-7.
- 41) Abreu M., Araujo-Pardo G., Balbuena C., Labbate D., López-Chávez G. "Biregular cages of girth 5". *Electronic Journal of Combinatorics* Vol 20. Issue 1 (2013) P71.
- 42) Abreu Marien, Araujo-Pardo G., Balbuena C. Labbate D. "Families of small regular graphs of girth 5". *Discrete Mathematics* 312 (2012) 2832-2842.
- 43) Araujo-Pardo G., Balbuena C., Olsen M., Valencia P., "On second order degree of graphs" *Acta Mathematica Sinica, English Series*. 28-1 (2012) 171-182.
- 44) Araujo-Pardo, Balbuena C. "Constructions of small regular bipartite graphs of girth 6". *Networks* 57-2 (2011) 121--127.
- 45) Araujo-Pardo G., Balbuena C., Montejano L. Valenzuela J.C. "Partial linear spaces and identifying codes". *European Journal of Combinatorics* 32-3 (2011) 344--351.
- 46) Araujo-Pardo G., Del Río-Francos M., López-Dudet M., Oliveros, D, Schulte, The graphicahedron. *European J. Combin.* 31 (2010), no. 7, 1868–1879.
- 47) Araujo-Pardo G., Montellano J.J., Strausz R. "On the pseudoachromatic index of the complete graph". *Journal of Graph Theory* 66-2 (2010) 89--97.
- 48) Araujo-Pardo Gabriela, "On upper bounds of odd girth cages" *Discrete Mathematics* 310 (2010) 1622-1626.
- 49) Araujo-Pardo, Balbuena C., Heger Tamas "Finding small regular graphs of girth 6, 8 and 12 as subgraphs of cages" *Discrete Mathematics* 310 (2010) 1301-1306.
- 50) Araujo Gabriela, Olsen Mika "A conjecture of Neumann-Lara on infinite families of r-dichromatic circulant tournaments". *Discrete Mathematics* 310 (2010) 489-492.
- 51) Araujo-Pardo G., Balbuena C., Olsen M. "On $(k,l;g)$ -cages". *Ars Combinatoria*, 92 (2009) 289-301.
- 52) Araujo-Pardo G, Balbuena C, Valenzuela J.C. "Constructions of bi-regular cages" *Discrete Mathematics*, 309 (2009) 1409--1416.
- 53) Araujo G, Figueroa-Centeno R.M., Ichishima R., Muntaner-Batle F. "How many graphs are super edge magic?. An asymptotic approach". *Journal of Combinatorial Mathematics and Combinatorial Computing* 65 (2008) 33--40.

54) Araujo G. Balbuena C., García-Vázquez P., Marcote X, Valenzuela J.C. "On the order of $(\{r,m\};g)$ -cages of even girth". *Discrete Mathematics*, 308 (2008) 2484—2491.

55) Araujo Gabriela, Balogh József, Fabila Ruy, Salazar Gelasio, Urrutia Jorge "A note on harmonic subgraphs in labeled geometric graphs". *Information Processing Letters*, 105- 3 (2008), 98-112.

56) Araujo-Pardo Gabriela, Villaroel-Flores Rafael, "Almost regular cages" *International Mathematical Forum* 2, no. 59, (2007), 2911-2917.

57) Araujo Gabriela, González Moreno Diego, Montellano Juan José, Serra Oriol. "On upper bounds and conectivity of cages" *Australasian Journal of Combinatorics*. 38 (2007), 221—228.

58) Araujo Gabriela, Noy Marc y Serra Oriol. "A geometric construction of large vertex transitive graphs of diameter 2". *Journal of Combinatorial Mathematics and Combinatorial Computing*. 57 (2006), 97—102

59) Araujo Gabriela, Montellano Juan José. "Cages: constructions and new upper bounds". *IEEE Computer Society Press. "2005 International Symposium on Parallel Architectures, Algoritms and Networks"* 472--475 (no indexado).

60) Araujo Gabriela, Dumitrescu Adrián, Hurtado Ferrán, Noy Marc y Urrutia Jorge "On the chromatic number of some geometric type Kneser graphs". *Computational Geometry: Theory and applications* 32 (2005) 59--69.

61) Araujo Gabriela, San Agustín Rodolfo. "A graph representation of the mystic hexagrama configuration". *International Mathematical Journal*, Vol 3, 2003, no. 9, 1013--1027

62) Araujo-Pardo Martha Gabriela "Daisy Structure in Desarguesian Projective Planes". *Journal of the Australian Mathematical Society*. Vol. 74 Part. 2. April 2003, 145--153.

Publications in proceedings of international conferences with strict peer review

1) F. Aguilar, G. Araujo-Pardo, L. Bermann. "Voltage graphs as a technique to obtaining semi-cubic cages" (Brief announcement). *Procedia Computer Science*, XII Latin and American Algorithms, Graphs and Optimization Symposium. 00. 2023 (1-3).

2) E. Abajo, G. Araujo-Pardo., C. Balbuena., M. Bendala "New family of small regular graphs of girth 5". *Electronic Notes in Discrete Mathematics*. (54), 2016, 139—144.2)

3)G. Araujo-Pardo., J.C. Díaz Patiño, C. Rubio-Montiel. "The achromatic number of Kneser graphs" Aceptado en el *Electronic Notes in Discrete Mathematics*. (54), 2016, 253—258.

4) G. Araujo-Pardo., C., Balbuena, M. Miller., M. Zdimalovna. "A construction of dense mixed graphs of diameter 2" Aceptado en el *Electronic Notes in Discrete Mathematics*. (54), 2016, 235—240.

- 5) Araujo-Pardo G., Montejano A., Montejano L., Vázquez-Ávila A. "The transversal numbers of linear systems with given 2-packing numbers" *Electronic Notes in Discrete Mathematics* (44), 2013 133–139.
- 6) Araujo-Pardo G., Rubio C. "The $\omega\psi$ -Perfection of Graphs". *Electronic Notes in Discrete Mathematics* (44), 2013 163--168.
- 7) Abreu M., Araujo-Pardo G., Balbuena C., Labbate D., Salas J. "Families of Small Regular Graphs of Girth 7". *Electronic Notes in Discrete Mathematics* (40) 2013, 341-345.
- 8) Araujo-Pardo G., Balbuena C., López-Chávez G., Montejano L. "Bounds on the order of biregular graphs with even girth at least 8." *Electronic Notes in Discrete Mathematics* (40) 2013, 59-63.
- 9) Abreu M., Araujo-Pardo G., Balbuena C., Labbate D., López-Chávez G. "Constructions of biregular cages of girth five" *Electronic Notes in Discrete Mathematics* (40) 2013, 9-14.
- 10) Araujo-Pardo G, Strausz R. "Bounding the pseudoachromatic index of the complete graph via projective planes". *Electronic Notes in Discrete Mathematics* (30) 2008, 105-110.
- 11) Araujo-Pardo Gabriela, Olsen Mika "Infinite families of $(n+1)$ -dichromatic vertex critical circulant tournaments". *Electronic Notes in Discrete Mathematics* (28) 2007, 141-144.
- 12) Araujo Gabriela, González Moreno Diego, Montellano Juan José, Serra Oriol. "On upper bounds and connectivity of cages" *Electronic Notes in Discrete Mathematics* (28) 2007, 137-140.
- 13) Balbuena C., Araujo G, García-Vázquez Pedro, Marcote X., Valenzuela J.C. "On the order of bi-regular cages of even girth" *Electronic Notes in Discrete Mathematics* (26) 2006, 1-7.

Publications in proceedings of international conferences:

- 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).
- 2) Abajo E., Araujo-Pardo G., Balbuena C., Bendala M., "New families of small regular graphs of girth 5". Memorias del XIX Encuentro Andaluz de Matemáticas Discretas, (octubre 2015).
- 3) G. Araujo-Pardo. "Sobre el problema de existencia y construcción de jaulas". Memorias del VIII Encuentro Andaluz de Matemáticas Discretas, (octubre 2013).
- 4) G. Araujo-Pardo, C. Rubio-Montiel, A. Vázquez-Ávila. "On the Erdős-Faber-Lovász Conjecture: Resolvable Designs and Commutative Quasigroups". Enviado al Mexican Conference on Discrete Mathematics and Computational Geometry, (agosto 2013).
- 5) G. Araujo-Pardo, C. Rubio-Montiel, A. Vázquez-Ávila. "On the Erdős-Faber-Lovász Conjecture: Resolvable Designs and Commutative Quasigroups". Memorias del VIII Encuentro Andaluz de Matemáticas Discretas, (agosto 2013).
- 6) Abreu Marien, Araujo-Pardo G., Balbuena C. Labbate D. "Una fórmula explícita para obtener cuadrángulos generalizados y otros grafos pequeños de cintura 8". Avances de Matemática Discreta en Andalucía (vol 2). Carmona, Sevilla. Noviembre, 2011.

- 7) Araujo-Pardo G., Balbuena C., Montejano L. Valenzuela J.C. "Regular partial linear spaces admitting $(1;k)$ -identifying codes". IWONT 2010. Julio 2010.
- 8) Araujo-Pardo G., Balbuena C., Montejano L. Valenzuela J.C. "Regular partial linear spaces admitting $(1;k)$ -identifying codes". Septimas Jornadas de Matemática Discreta y Algorítmica. Castrourdiales, Santander, Julio 2010.
- 9) Araujo-Pardo Gabriela, Balbuena Camino, Valenzuela Juan Carlos. "Grafos bi-regulares de orden mínimo y cintura dada" Sextas Jornadas de Matemática Discreta y Algorítmica. Lleida, Julio 2008.
- 10) Araujo-Pardo Gabriela, Balbuena Camino. "Subgrafos de jaulas minimales que son (k,g) -grafos de pequeño orden". Sextas Jornadas de Matemática Discreta y Algorítmica. Lleida, Julio 2008.
- 11) Araujo-Pardo Gabriela, Balbuena Camino, Valenzuela Juan Carlos. "Sobre el orden de jaulas bi-regulares" V Encuentro Andaluz de Matemática Discreta. Cádiz Julio del 2007.
- 12) G. Araujo, C. Balbuena, P. García-Vázquez, X. Marcote, J.C. Valenzuela, (2006) "Cotas sobre el orden de las $(\{r,m\},g)$ -jaulas". V Jornadas de Matemática Discreta y Algorítmica. Universidad de Valladolid, ISBN 10: 84-8448-380-0, ISBN 13: 978-84-8448-380-9, pp. 65-70.
- 13) Araujo Gabriela, González Moreno Diego, Montellano Juan José, Serra Oriol. "On upper bounds and connectivity of cages". IV Encuentro Andaluz de Matemática Discreta, Utrera-Sevilla, Septiembre 2005.
- 14) Araujo Gabriela, Dumitrescu Adrián, Hurtado Ferrán, Noy Marc y Urrutia Jorge "On the chromatic number of some geometric type Knneser graphs". X Encuentros de Geometría Computacional, Sevilla, Junio 2003.
- 15) Araujo Gabriela, Noy Marc y Serra Oriol. "Large vertex transitive graphs of diameter 2". Terceras Jornadas de Matemática Discreta y Algorítmica. Sevilla, Septiembre 2002.