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Investigación

Oficina Web UGR

Proyectos recientes y perfil

- Investigador Principal del proyecto MTM2014-55367-P: Semigrupos Numéricos y Afines; Generalizaciones y Aplicaciones (histórico, MTM2010-15595: Semigrupos numéricos).
- Pertenezco al grupo de investigación FQM-343: Semigrupos conmutativos.
- Soy miembro del proyecto PGC2018-096446-B-C21 SINGULARIDADES Y GEOMETRÍA ALGEBRAICA. SEMIGRUPOS Y AG-CÓDIGOS CORRECTORES.
- Soy miembro del proyecto MTM2017-84890-P Estudio y aplicaciones de semigrupos numéricos y afines.
- Miembro del proyecto Arqus Research & Innovation H2020.
- Fui miembro del proyecto de excelencia Nuevos Desafíos de la Matemática Combinatoria (FQM-5849).
- Perfil en mathscinet, scopus, orcid, researcherid y en Google Scholar.

Publicaciones

Tesis

-Semigrupos Afines, Universidad de Granada, 1996, dirigida por José Carlos Rosales (ver en Mathematics Genealogy Project); premio extraordinario por la Universidad de Granada.

Libros

1. J. C. Rosales y P. A. García-Sánchez, Finitely generated commutative monoids, Nova Science Publishers, Inc., New York, 1999.
2. J. C. Rosales y P. A. García-Sánchez, Numerical semigroups, Springer, 2009.
3. A. Assi, P. A. García-Sánchez, Numerical semigroups and applications, RSME Springer series 1, Springer, Switzerland, 2016.
4. A. Assi, M. D'Anna, P. A. García-Sánchez, Numerical semigroups and applications, Second edition, RSME Springer series 3, Springer, Switzerland, 2020.

Artículos y capítulos de libros

Los últimos trabajos en los que he participado se pueden consultar en arXiv.

1. W. Bruns, P. A. García-Sánchez, L. Moci, The monoid of monotone functions on a poset and quasi-arithmetic multiplicities for uniform matroids, *J. Algebra*, 569 (2021), 377–400.
2. P. A. García-Sánchez, D. Llena and I. Ojeda, Critical binomial ideals of Northcott type, *J. Aust. Math. Soc.* 110 (2021), 48–70
3. W. Bruns, P. A. García-Sánchez, C. O'Neill, D. Wilburne, Wilf's conjecture in fixed multiplicity, *Int. J. Algebra Comp.* 30, No. 4 (2020) 861–882.
4. P. A. García-Sánchez, A. Herrera-Poyatos, Isolated factorizations and their applications in simplicial affine semigroups, *J. Algebra Appl.* 19, No. 5 (2020) 2050082 (42 pages).
5. P. A. García-Sánchez, H. Martín Cruz, Numerical semigroups with embedding dimension three and minimal catenary degree, *Integers* 20 (2020) #A81.
6. A. Abbas, A. Assi, P. A. García-Sánchez, Canonical bases of modules over one dimensional K-algebras, *RACSAM* (2019) 113-1121.
7. P. A. García-Sánchez, U. Krause, D. Llena Inside factorial monoids and the cae monoid of a linear Diophantine equation, *Journal of Algebra* 531 (2019) 125–14

8. P. A. García-Sánchez, I. Ojeda, Almost symmetric numerical semigroups with high type, *Turk. J. Math.* (2019) 43: 2499– 2510.
9. P. A. García-Sánchez, C. O'Neill, G. Webb, On the computation of factorization invariants for affine semigroups, *J. Algebra Appl.* 18 (2019) 1950019 (21 pages).
10. J. I. Farrán, P. A. García-Sánchez, B. A. Heredia, On the second Feng-Rao distance of Algebraic Geometry codes related to Arf semigroups, *Designs, Codes and Cryptography* 86(12) (2018), 2893– 2916. DOI: 10.1007/s10623-018-0483-4
11. J. I. Farrán, P. A. García-Sánchez, B. A. Heredia, M. Leamer, The second Feng-Rao number for codes coming from telescopic semigroups, *Designs, Codes and Cryptography* 86 (2018), 1849– 1864. DOI: 10.1007/s10623-017-0426-5
12. M. D'Anna, P. A. García-Sánchez, V. Micalè, L. Tozzo, Good subsemigroups of \mathbb{N}^n , *Int. J. Algebra Comp.* 28 (2018), 179– 206.
13. P. A. García-Sánchez, D. Llena, A. Moscariello, Delta sets for nonsymmetric numerical semigroups with embedding dimension three, *Forum Math.* 30 (1) (2018), 15– 30.
14. P. A. García-Sánchez, D. Llena, A. Moscariello, Delta sets for symmetric numerical semigroups with embedding dimension three, *Aequationes Math.* 91 (2017), 579– 600.
15. A. Assi, P. A. García-Sánchez, V. Micalè, Bases of subalgebras of $K[x]$ and $K[x]$, *Journal of Symbolic Computation* 79(1) (2017), 4– 22.
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Comité editorial

Editor asociado de *Le Matematiche*, *Communications in Algebra*.

Paquetes

Paquete `numericalsgps` para `GAP`, que mantengo junto con M. Delgado (ver en `swmath`). La versión de desarrollo se aloja en [GitHub](#).

Algunas contribuciones en [GitHub](#).

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