

Scientific publications
by
Margherita Barile

Published/accepted papers

1. M. BARILE, *The Cohen-Macaulayness and the a -invariant of an algebra with straightening laws on a doset*, Communications in Algebra **22** (1994), 413-430.
2. M. BARILE, *Arithmetical ranks of ideals associated to symmetric and alternating matrices*, Journal of Algebra **176** (1995), 59-82.
3. M. BARILE, *On the number of equations defining certain varieties*, Manuscripta Mathematica **91** (1996), 483-494.
4. M. BARILE, M. MORALES, *On the equations defining projective monomial curves*, Communications in Algebra **26** (1998), 1907-1912.
5. M. BARILE, M. MORALES, *On certain algebras of reduction number one*, Journal of Algebra **206** (1998), 113-128.
6. M. BARILE, M. MORALES, *On the equations defining minimal varieties*, Communications in Algebra **28** (2000), 1223-1239.
7. M. BARILE, M. MORALES, *On Stanley-Reisner rings of reduction number one*. Annali della Scuola Normale Superiore di Pisa – Classe di Scienze (4) **XXIX** (2000), 605-610.
8. M. BARILE, M. MORALES, A. THOMA, *On simplicial toric varieties which are set-theoretic complete intersections*, Journal of Algebra **226** (2000), 880-892.
9. M. BARILE, M. MORALES, A. THOMA, *On free complete intersections*, in “Geometric and Combinatorial Aspects of Commutative Algebra”, Lecture Notes in Pure and Applied Mathematics **217**, J. Herzog and G. Restuccia eds., Marcel Dekker, New York-Basel (2001), 1-9.
10. M. BARILE, M. MORALES, A. THOMA, *On systems of relations associated to toric semigroups*, Queen’s Papers in Pure and Applied Mathematics **123**, Queen’s University, Kingston (2002), 175-185.
11. M. BARILE, M. MORALES, A. THOMA, *Set-theoretic complete intersections on binomials*, Proceedings of the American Mathematical Society **130** (2002), 1893-1903.
12. M. BARILE, J.M. COHEN, *A sequence of polynomials for studying production functions*, Journal of Pure and Applied Algebra **185** (2003), 35-42.
13. A. ASSI, M. BARILE, *Toric modifications of free toric varieties*, in: “Algebra, Arithmetic and Geometry with Applications”, a cura di C. Christensen, C. Bajaj, G. Sundaram, A. Sathaye, Springer, (2004), 175-182.
14. M. BARILE, M. MORALES, *On unions of scrolls along linear spaces*, Rendiconti del Seminario di Matematica dell’Università degli Studi di Padova **111** (2004), 161-178.
15. M. BARILE, *On the computation of arithmetical ranks*, International Journal of Pure and Applied Mathematics **17** (2004), 143-161.
16. A. ASSI, M. BARILE, *Computing irreducible curve singularities with Mathematica*, in: L. González-Vega, T. Recio (eds.), Actas de los Encuentros de Algebra Computacional y Aplicaciones (EACA), Santander, Spain, Universidad de Cantabria, (2004), 17-21.
17. M. BARILE, G. LYUBEZNIK, *Set-theoretic complete intersections in characteristic p* . Proceedings of the American Mathematical Society **133** (2005), 3199-3209.
18. R. ANGLANI, M. BARILE, *Two very short proofs of a combinatorial identity*. Integers – Electronic Journal of Combinatorial Number Theory **5** (2005), #A18, 3 pages.
<http://www.integers-ejcnt.org>.
19. M. BARILE, *On ideals whose radical is a monomial ideal*. Communications in Algebra **33** (2005), 4479-4490.

20. M. BARILE, *A note on Veronese varieties*. Rendiconti del Circolo Matematico di Palermo **54** (2005), 359-366.
21. A. ASSI, M. BARILE, *Effective construction of irreducible curve singularities*. International Journal of Mathematics and Computer Science **1** (2006), 125-149.
22. M. BARILE, *On toric varieties of high arithmetical rank*. Yokohama Mathematical Journal **52** (2006), 125-130.
23. M. BARILE, *On toric varieties which are almost set-theoretic complete intersections*. Journal of Pure and Applied Algebra **207** (2006), 109-118.
24. M. BARILE, *A note on monomial ideals*. Archiv der Mathematik **87** (2006), 516-521.
25. M. BARILE, *Almost set-theoretic complete intersections in characteristic zero*. Collectanea Mathematica **58** (2007), 61-72.
26. M. BARILE, F. BARONE, W.M. TULCZYJEW, *Polarizations and differential calculus in affine spaces*. Linear and Multilinear Algebra **55** (2007), 121-146.
27. M. BARILE, *On a special class of simplicial toric varieties*. Journal of Algebra **308** (2007), 368-382.
28. M. BARILE, F. BARONE, W.M. TULCZYJEW, *The category of local algebras and points proches*. Bulletin Mathématique de la Société des Sciences Mathématiques de Roumanie **50** (2007), 3-31.
29. M. BARILE, *Determinantal ideals and monomial curves in the three-dimensional space*. Journal of Algebra and its Applications **6** (2007), 323-336.
30. M. BARILE, *Certain minimal varieties are set-theoretic complete intersections*. Communications in Algebra **35** (2007), 2082-2095.
31. M. BARILE, *On ideals generated by monomials and one binomial*. Algebra Colloquium **14** (2007), 631-638.
32. M. BARILE, F. BARONE, W.M. TULCZYJEW, *Local algebra bundles and α -jets of mappings*. Bulletin Mathématique de la Société des Sciences Mathématiques de Roumanie **50** (2007), 207-222.
33. M. BARILE, *On simplicial toric varieties of codimension 2*. Rendiconti dell'Istituto di Matematica dell'Università di Trieste **39** (2007), 9-42.
34. M. BARILE, *On binomial set-theoretic complete intersections in characteristic p* . Revista Matemática Complutense **21** (2008), 265-282.
35. M. BARILE, *On the arithmetical rank of an intersection of ideals*. Algebra Colloquium **15** (2008), 681-688.
36. M. BARILE, *Arithmetical ranks of Stanley-Reisner ideals via linear algebra*. Communications in Algebra **36** (2008), 4540-4556.
37. M. BARILE, *On the arithmetical rank of the edge ideals of forests*. Communications in Algebra **36** (2008), 4678-4703.
38. M. BARILE, *On the arithmetical rank of a special class of minimal varieties*. Beiträge zur Algebra und Geometrie **50** (2009), 47-69.
39. M. BARILE, *A Generalization of a Lemma by Schmitt and Vogel*. Tokyo Journal of Mathematics **32** (2009), 435-440.
40. M. BARILE, N. TERAJ, *Arithmetical ranks of Stanley-Reisner ideals of simplicial complexes with a cone*. Communications in Algebra **38** (2010), 3686-3698.
41. M. BARILE, *On binomial equations defining rational normal scrolls*. Algebra Colloquium **18** (2011), 121-128.
42. M. BARILE, N. TERAJ, *The Stanley-Reisner ideals of polygons as set-theoretic complete intersections*. Communications in Algebra **39** (2011), 621-633.
43. M. BARILE, F. BARONE, W.M. TULCZYJEW, *The total exterior differential*. Cahiers de Topologie et Géométrie Différentielle Catégoriques **52** (2011), 126-155.
44. M. BARILE, D. BERNARDI, A. BORISOV, J.-M. KANTOR, *On empty simplices in dimension 4*. Proceedings of the American Mathematical Society **139** (2011), 4247-4253.

45. M. BARILE, D. KIANI, F. MOHAMMADI, S. YASSEMI, *Arithmetical rank of the cyclic and bicyclic graphs*. math.AC/0805.1657. To appear in: Journal of Pure and Applied Algebra.