Section 02: Algebra. Number Theory

Combinatorics and Commutative Algebra

Vittoria Bonanzinga, Università di Reggio Calabria, (Italia).

ABSTRACT_

We show some results of Commutative Algebra and its relation to Combinatorics. We study monomial ideals of exterior algebra and we deduce some homological properties of simplicial complexes associated to such ideals.

References

- [AHH1] A. Aramova, J. Herzog and T. Hibi. Gotzmann theorems for exterior algebras and combinatorics. J. Algebra 191 (1997), 174-211.
- [AHH2] A. Aramova, J. Herzog and T. Hibi., Squarefree lexsegment ideals, Math. Z. (to appear).
- [BH] W. Bruns, J. Herzog, Cohen-Macaulay rings, University Press, Cambridge, Great Bretain 1993.
- [B] V. Bonanzinga, Lex-segment ideals in the exterior algebra, preprint, (1999).
- [Hi] T. Hibi, Algebraic Combinatorics on Convex Polytopes, Carslaw Publications, Glebe, Australia, 1992.
- [S] R. P. Stanley, Combinatorics and Commutative Algebra, Birkhäuser, 41, (1996).

Keywords: simplicial complex, term oder

Mathematics Subject Classification: 13D02, 13C99

Contact Address: sebon@tin.it or bonanzin@ns.ing.unirc.it