



Seminario de Álgebra, Geometría algebraica y Singularidades
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On robustness and related properties on toric ideals

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A toric ideal is robust if its universal Gröbner basis (the union of all the reduced Gröbner bases) is a minimal set of generators, and is generalized robust if its universal Gröbner basis equals its universal Markov basis (the union of all its minimal sets of binomial generators). Robust and generalized robust toric ideals are both interesting from both a Commutative Algebra and an Algebraic Statistics perspective. However, only a few nontrivial examples of such ideals are known. In this talk we study these properties (and some related ones) for toric ideals of both graphs and numerical semigroups.

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