



Πανεπιστήμιο Ιωαννίνων/University of Ioannina



Τμήμα Μαθηματικών/Department of Mathematics

ΕΒΔΟΜΑΔΙΑΙΑ ΣΕΜΙΝΑΡΙΑ ΤΜΗΜΑΤΟΣ ΜΑΘΗΜΑΤΙΚΩΝ
WEEKLY SEMINAR OF THE DEPARTMENT OF MATHEMATICS

Bouquet algebra of toric ideals

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To any toric ideal (encoded by an integer matrix A) we associate a matroid structure called the bouquet graph of A , and introduce another toric ideal called the bouquet ideal of A , which captures the essential combinatorics of the initial toric ideal. This allows us to answer some open questions about toric ideals. For example, we provide a characterization of toric ideals for which the following sets are equal: the Graver basis, the universal Groebner basis, any reduced Groebner basis and any minimal generating set. We also show that complexity of the Graver basis for $0/1$ matrices is the same as complexity of a general toric ideals

Αίθουσα Σεμιναρίων Τμήματος Μαθηματικών
Lecture Room of the Department of Mathematics
5 Φεβρουαρίου/February 2015, 13:00