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Packing properties of some classes of cubic squarefree monomial ideals

Let I be an ideal in a Noetherian ring R. Its n-th symbolic power of I is defined as

$$I^{(n)} = \bigcap_{p \in Ass(R)} (I^n R_p \cap R).$$

Symbolic powers for several classes of ideals have been investigated for many years. The symbolic powers in general are not equal to the ordinary powers. Therefore, one interesting question here is for what classes of ideals ordinary and symbolic powers coincide? The answer for this question for squarefree monomial ideals may be packing property. In this talk we will briefly survey packing property for squarefree monomial ideals from combinatorial and algebraic aspects. Then we will focus on the cubic squarefree monomial ideals and we will see some new results.