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Oda's Conjecture for Smooth Projective Toric Varieties of Lower Picard Rank

Oda's conjecture predicts the surjectivity of certain multiplication maps between linear systems on smooth projective toric varieties. Equivalently, it asserts a strong integer decomposition property for Minkowski sums of pairs of lattice polytopes. A key consequence of this surjectivity is that the smooth projective toric variety associated to the smooth polytope P is projectively normal with respect to all embeddings defined by the dilations of P . In this talk, I will survey known results on when the conjecture holds and present aspects of my work on this problem for toric varieties of lower Picard rank.