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polymake and lattice polytopes. (English) Zbl 1391.52019


Summary: The polymake software system deals with convex polytopes and related objects from geometric combinatorics. This note reports on a new implementation of a subclass for lattice polytopes. The features displayed are enabled by recent changes to the polymake core, which will be discussed briefly.

For the entire collection see [Zbl 1196.05001].

MSC:

52B55 Computational aspects related to convexity
05B20 Combinatorial aspects of matrices (incidence, Hadamard, etc.)

Keywords:

polymake system; lattice polytope; Hilbert basis; toric geometry

Software:

LattE; cdd; Normaliz; polymake; 4ti2; SageMath; nauty; JavaView

Full Text: Link