

# Parallel Enumeration of Triangulations

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We report on the implementation of an algorithm for computing the set of all regular triangulations of finitely many points in Euclidean space. This algorithm, which we call down-flip reverse search, can be restricted, e.g., to computing full triangulations only; this case is particularly relevant for tropical geometry. Most importantly, down-flip reverse search allows for massive parallelization, i.e., it scales well even for many cores. Our implementation allows to compute the triangulations of much larger point sets than before.