Listing All Convex Polyhedra Glued from Squares in Polynomial Time

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1 Bounds on the number of egde-to-edge gluings of squares

In this section, we prove that the number of edge-to-edge gluings of n squares is polynomial in n. These theorems allows to develop a polynomial algorithm to list the nets.

▶ **Theorem 1.** *There are $O\left(n^{36}\right)$ edge-to-edge gluings of at most n squares that satisfy Alexandrov's conditions.*

▶ **Theorem 2.** *There are $\Omega\left(n^{\frac{5}{2}}\right)$ edge-to-edge gluings of at most n squares that satisfy Alexandrov's conditions.*

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