

On Edge Unfoldings of Convex Polyhedra

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There is a long standing problem: to prove that any convex polyhedron has at least one non-self-intersecting edge unfolding. It is curious that in the set of concave polyhedra for any $N > 0$ there are concave polyhedra such that any edge unfolding consists of at least N components (A. Tarasov, A. Glazyrin, "Anti-Dürer problem " by N.P.Dolbilin).

Regardless a strong activity around this problem, the state of art is too far from the solution. In the talk we will prove that there is an edge unfolding consisting of at most $F/2$ components where F is the number of faces.