Seminar on Combinatorial Computing
May 14, Wednesday, 6:30 p.m.
Room 6417, Graduate Center
365 Fifth Avenue, New York

Anti-Dürer conjecture for nonconvex polytopes

Alexey Glazyrin
University of Texas, Brownsville

Abstract

There is a classic open question which goes back to Albrecht Dürer: does there exist for every convex polytope an edge unfolding which consists of exactly one polygon? In 2006, N. Dolbilin proposed so called Anti-Dürer conjecture: for any natural number N, there exists a convex polytope with an edge unfolding that consists of at least N components. In this talk, we give an overview of this problem and some related questions. Also, it will be shown that the Anti-Dürer conjecture is true for the set of nonconvex polytopes with convex faces.

For further information contact János Pach at pach@cims.nyu.edu,
or visit our website
http://www.math.nyu.edu/∼pach/public_html/combinatorics_seminar.html