Seminar on Combinatorial Computing
October 10, 2001, Wednesday, 6:30 p.m.
Room 6495(?), Graduate Center
365 Fifth Avenue, New York

Union of geometric objects

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Abstract

The talk will review old and new results concerning the combinatorial complexity of the union of geometric objects of various kinds in two and three dimensions. In the plane, we will consider union of Minkowski sums, and more generally of pseudodisks, of fat triangles and of more general fat planar objects. In three dimensions, we will consider union of convex polyhedra, of Minkowski sums of convex polyhedra, of fat wedges and cubes, and of cylinders. We will also discuss the connection between this problem and the problem of translational motion planning.

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