Geometry Seminar
April 11, 2003, Tuesday, 6:00 p.m.
Room 613, Courant Institute
251 Mercer Street, New York

Affine diameters of convex bodies

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Abstract

The talk deals with a list of open problems and relating existing results (with sketches of their proofs) on affine diameters of convex bodies in Euclidean space. Special attention is given to the following topics:

1. Characterization of simplices by means of affine diameters.
2. Grünbaum's problem on the maximum number of affine diameters through a given point.
3. Measure of the set of points in a convex body, each belonging to an even number of affine diameters.

For further information contact {pach,pollack}@cims.nyu.edu, or visit our website: http://www.math.nyu.edu/seminars/geometry_seminar.html