

Geometry Seminar
Tuesday, January 6, 2011
Room 512 WWH at 6:00 P.M.

The Erdos distinct distance problem

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Nets Katz and I proved that a set of N points in the plane determines at least $N(\log N)^{-1}$ different distances. This estimate is sharp up to logarithmic factors. It builds on a plan laid out by Elekes and Sharir.

In the talk, I will try to explain the main ideas of the proof. The two highlights are an application of basic algebraic geometry such as ruled surfaces, and an application of the ham sandwich theorem.

For more information please visit the seminar website at:
http://www.math.nyu.edu/seminars/geometry_seminar.html.