

NYC Dynamics Seminar at Yeshiva University

Barak Weiss (Tel Aviv University)

will speak on

Dynamics on closed subsets of \mathbb{R}^d and questions of Danzer and Gowers

Wednesday, February 24th, 5pm

Lectures will last 1 hour and be followed by 30 minutes for further lecture and/or discussion.

Yeshiva University, 215 Lexington Ave, Room 506

On the SW corner of Lexington Ave and 33rd Street. You will need to sign in.

Abstract:

Let X denote the collection of closed subsets of \mathbb{R}^d . Equipped with the Chabauty-Fell topology, this is a compact metric space on which any group of homeomorphisms of \mathbb{R}^d acts. In joint work with Solan and Solomon, we show that the only minimal sets for the action of volume preserving affine maps, are the two fixed points.

As a consequence we solve a question of Gowers in discrete geometry, which is a variant of the following open question of Danzer: does there exist a discrete subset of the plane, with finite upper density, which intersects every convex subset of area one?

The talk will be elementary and self-contained.

Seminar website: <http://nycdynamics.s3-website-us-east-1.amazonaws.com/>