**Title:** Projection theorems and applications

**Abstract:** Given a fractal set E on the plane and a set F of directions, can we find one direction L in F such that the orthogonal projection of E along L is large?

If the fractal set E is not contained in any line, can we find a point x in E such that the set of directions between x and E is large?

We discuss some classical and recent projection theorems and their connection to distance problem and incidence geometry. This is based on joint work with Pablo Shmerkin.