1054-05-253   **Alex Iosevich*** (`iosevich@gmail.com`), Alex Iosevich, Department of Mathematics, University of Missouri, Columbia, MO 6520365211. *Finite point configurations in Euclidean and arithmetic settings.*

We will show that a sufficiently large subsets of the Euclidean space or a vector space over a finite field determines a large number of distinct finite configurations. Fourier and combinatorial methods play an important role. (Received September 15, 2009)