COLLOQUIUM

Using graph theory, additive number theory, and geometric measure theory to study

finite point configurations

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9-13-18

Neckers 156

Time: 3:00pm

Reception immediately following in the math library.

Abstract:

In 1946 Paul Erdős asked for asymptotic estimates on how often a single distance could occur in a large finite point set in the plane. We discuss this and related problems, touching on methods from graph theory, additive number theory, and geometric measure theory. We will also look at a variety of settings, from discrete point sets and fractals in Euclidean space, to vector spaces over finite fields, and other algebraic settings.

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