## דנו אוניברסיטת תל-אביב איזוע UNIVERSITY

The next What-Is Seminar talk will be held on

Wednesday, 2/5/12, 11:30—13:00 in Schreiber 210

The speaker is

Nadav Yesha (TAU)

## What is Uniform Distribution Modulo 1?

Upon request, the lecture will be given in English. There will be some snacks and drinks.

You are all invited!

## Abstract

For an irrational alpha, what can we say about the sequence of the fractional parts  $\{n\alpha\}$ ? Is it dense in the interval [0,1)? How is it distributed there? And what about the sequence  $\{n^2\alpha\}$ ? The theory of uniform distribution modulo 1 addresses such questions. We will define what it means to be uniformly distributed mod 1, and explain Weyl's criterion, discrepancy, the Erdős-Turan inequality and some examples.

For more information visit: http://www.math.tau.ac.il/~pelegm/whatis