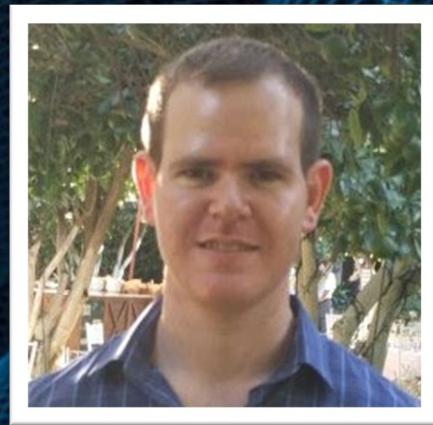# TECHNION MATH
COLLOQUIUM

"Equidistribution of large spheres in horospheres."

Speaker: **Asaf Katz (Georgia Institute of Technology)**
15.12.25, 15:30,
Amado 232

Abstract:

A classical theorem shows that large spheres equidistribute in tori. This result fueled landmark results in harmonic analysis including differentiation theorems by Stein and Bourgain.
Related ergodic theorems for spherical averages of R^n actions were proven by R. Jones and M. Lacey based on the approach of Stein.

We consider the problem of spherical averages along a horospherical R^n action on a homogenous space and show that all such spheres equidistribute in the homogeneous space, using effective disjointness theorem together with a new Van-der-Corput estimate inspired by Stein's G-function bound.

"Light refreshments will be served at 15:00 at the faculty lounge on the 8th floor."