

**The Weizmann Institute of Science
Faculty of Mathematics and Computer Science**

Midrasha on Groups Seminar

Lecture Hall, Ziskind Building
on Monday, Jun 17, 2024
at 14:15

ZOOM

The seminar will be frontal and also on Zoom (password: 400359)

Shai Evra
HUJI

will speak on

Cosystolic expanders

Abstract:

In this talk we will introduce a notion slightly weaker than the coboundary expansion notion of Linial–Meshulam called the cosystolic expansion, which is strong enough to imply Gromov's topological property for high dimensional complexes. We will then give a criterion for proving this notion assuming our complex has good enough local structure. Examples of complexes with such good local structure are quotient of affine buildings (e.g. the LSV complexes). This allows us to present a family of bounded degree complexes with the topological overlapping property.

This is based in a joint work with Tali Kaufman.