אוניברסיטת
בן-גוריון בנגב

The Department of Mathematics

2023—24—A term

Course Name Expander graphs and expansion in groups

Course Number 201.2.0411

Course web page
`https://www.math.bgu.ac.il//en/teaching/fall2024/courses/expander-graphs-and-exp`

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Office Hours `https://www.math.bgu.ac.il/en/teaching/hours`

Abstract

Requirements and grading[1]

Course topics

.1 Expander graphs and their applications — Equivalent definitions, Mixing Lemma, Alon–Boppana Theorem, Applications, Constructions

.2 Kazhdan Property (T) - group representations (short intro.), Cayley and Schrier graphs, Property (T) — definition and properties, examples, construction of expander graphs via property (T)

.3 Additional topics (as time allows)

[1] Information may change during the first two weeks of the term. Please consult the webpage for updates