

Department of Mathematics, BGU

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## Colloquium

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*On Tuesday, June ,10 2025*

*At 14:30 – 15:30*

*In Math 101-*

Ori Parzanchevski (HUJI)

will talk about

### **Sharp cutoff for walks on graphs and groups**

Abstract: In the 80' Diaconis and others have observed that some naturally occurring Markov chains exhibit a cutoff phenomenon: the distance from the stationary distribution drops from almost maximal to almost zero over a short period of time. It is conjectured that all transitive expander graphs exhibit this phenomenon, but so far very few examples are known. I will survey and explain some results on cutoff for walks on Ramanujan graphs and complexes, and their relation to expansion in groups.