

Department of Mathematics, BGU

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## BGU Probability and Ergodic Theory (PET) seminar

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*On Thursday, April ,22 2021*

*At 11:10 – 12:00*

*In Online*

Zohar Reizis (Ben-Gurion University)

will talk about

### **Random walks on finite partite simplicial complexes**

Abstract: Random walks on graphs (and their spectral analysis) is an extensively explored topic with many applications in pure math and computer science. Recently, there has been much interest (by both the math and the CS communities) in the study of random walks on simplicial complexes as a high dimensional generalization on random walks on graphs. In this talk, we consider the spectrum of random walks on finite partite simplicial complexes and show how with a general decomposition theorem on Hilbert spaces we can improve previous works. All the definitions will be given. This is a joint work with Izhar Oppenheim.

**Please Note the Unusual Place!**