

Department of Mathematics, BGU

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# BGU Probability and Ergodic Theory (PET) seminar

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*On Thursday, January, 12 2023*

*At 11:10 – 12:00*

*In 101-*

Arielle Leitner (Weizmann Institute and Afeka College of  
Engineering)

will talk about

## **An Advertisement for Coarse Groups and Coarse Geometry**

Abstract: Coarse structures are used to study the large scale geometry of a space. For example, although the integers and the real line are different topologically, they look the same from “far away”, in the sense that any geometric configuration in the real line can be approximated by one in the integers, up to some uniformly bounded error. A coarse group is a group object in the category of coarse spaces, for example, this means the group operation is only “coarsely associative,” etc. In joint work with Federico Vigolo we study coarse groups. This talk will be an advertisement for our work, as we walk through examples that illustrate some of our main results, and connections to other subjects.