## Department of Mathematics, BGU

## BGU Probability and Ergodic Theory (PET) seminar

On Thursday, June ,3 2021

At 11:10 – 12:00

In Online

Daren Wei (The Hebrew University)

will talk about

## Slow entropy of higher rank abelian unipotent actions

Abstract: We study slow entropy invariants for abelian unipotent actions U on any finite volume homogeneous space  $G/\Gamma$ . For every such action we show that the topological complexity can be computed directly from the dimension of a special decomposition of Lie(G) induced by Lie(U). Moreover, we are able to show that the metric complexity of the action coincides with its topological complexity, which provides a classification of these actions in isomorphic class. As a corollary, we obtain that the complexity of any abelian horocyclic action is only related to the dimension of G. This generalizes our previous rank one results from to higher rank abelian actions. This is a joint work with Adam Kanigowski, Philipp Kunde and Kurt Vinhage.

Please Note the Unusual Place!