Department of Mathematics, BGU

BGU Probability and Ergodic Theory (PET) seminar

On *Thursday, December ,16 2021*

At *11:10 – 12:00*

In *101-*

Andreas Wieser (The Hebrew University)

will talk about

Linnik's basic lemma with unfiormity over the base field

Abstract: Long periodic geodesics on the unit tangent bundle of the modular surface are not necessarily equidistributed. However, there is a natural way to group finitely many geodesics together so that the so-obtained unions do equidistribute. This theorem (in this instance going back to Duke (88' is very well studied nowadays. In the talk, we discuss a dynamical approach due to Linnik through what is nowadays called Linnik's basic lemma (providing in particular an entropy lower bound). We present here a new proof of Linnik's basic lemma based on geometric invariant theory. This is joint work with Pengyu Yang.