## Department of Mathematics, BGU

## BGU Probability and Ergodic Theory (PET) seminar

**On** Thursday, March ,16 2023

At 14:00 - 15:00

In 101-

Andrei Alpeev (The Weizmann Institute of Science)

will talk about

## Amenability is equivalent to the invariant random order extension property on groups

Abstract: Classical Szpilrajn theorem states that any partial order could be extended to a linear order. An invariant random order (IRO) on a countable group is an invariant under the shfit-action probability measure on the space of all partial orders on the group. It is natural to ask whether the invariant analog of Szpilrajn theorem, the invariant random order extension property, holds for IRO's. This property is easy to demonstrate for amenable groups. Recently, Glasner, Lin a Meyerovitch gave a first example where this property fails. Based on their construction, I will show that the IRO extension property fails for all non-amenable groups.

Please Note the Unusual Time!