

Department of Mathematics, BGU

BGU Probability and Ergodic Theory (PET) seminar

On Thursday, March ,19 2020

At 11:10 – 12:00

In 101-

Arielle Leitner (Weizmann Institute)

will talk about

Generalized cusps on convex projective manifolds

Abstract: Convex projective manifolds are a generalization of hyperbolic manifolds. Koszul showed that the set of holonomies of convex projective structures on a compact manifold is open in the representation variety. We will describe an extension of this result to convex projective manifolds whose ends are generalized cusps, due to Cooper-Long-Tillmann. Generalized cusps are certain ends of convex projective manifolds. They may contain both hyperbolic and parabolic elements. We will describe their classification (due to Ballas-Cooper-Leitner), and explain how generalized cusps turn out to be deformations of cusps of hyperbolic manifolds. If time permits we will discuss current work on the moduli space of generalized cusps (current joint work with Ballas and Cooper).