המחלקה למתמטיקה, בן-גוריון

# קולוקוויום

ההרצאה

## of space moduli the on flow Horocycle surfaces translation

תינתן על-ידי

## University) Aviv (Tel Weiss Barak

תקציר: By work of Ratner, Margulis Dani, and many others, unipotent flows on homogeneous spaces have strong measure theoretic and topological rigidity properties. By work of Eskin-Mirzakhani, and Eskin-Mirzakhani-Mohommadi, translation of surfaces have similar rigidity properties. We will describe how the action of SL(2,R) and the upper triangular subgroup of SL(2,R) on strata of translation surfaces. some of these results fail for the horocycle flow on strata of translation surfaces. In particular, (1 There exist horocycle orbit closures with fractional Hausdorff dimension. (2 There exist points which do not equidistribute under the horocycle (3 There exist points which equidistribute measure. with respect to any flow distribute under the horocycle flow to a measure, but they are not in the topological support of that measure. This is joint work with Jon Chaika and John Smillie. The talk will be elementary and will require no prior background in dynamics.