המחלקה למתמטיקה, בן-גוריון

תורת החבורות וגיאומטריה

ביום ראשון, 22 בינואר, 2017

בשעה *15:30 – 14:30*

ב-101

ההרצאה

algebraic and groups compact of Automorphisms actions.

תינתן על-ידי

(BGU) Meyerovitch Tom

תקציר: Actions of countable discrete groups Γ on a compact (metrizable) group X by (continuous) automorphisms group are a rich class of dynamical systems. The case where X is abelian is an important subclass, also called algebraic actions". By actions, Pontryagin duality, algebraic actions are in one-to-one correspondence with $\mathbb{Z}\Gamma$-modules. There is a fascinating "dictionary" algeraic between the two, a beautfiul interplay between dynamics, Fourier analysis, and commutative or noncommutative algebra. In the last several years, much progress has been made towards understanding the algebraic actions of general countable groups. Somehow surprisingly, operator algebras turn out to be important for such a study. This introductory talk will cover some basic aspects of the theory. (New results and open questions might be discussed in a followup talk).