## המחלקה למתמטיקה, בן-גוריון

## גאומטריה אלגברית ותורת המספרים

ביום רביעי, 14 ביוני, 2017

16:30 – 15:10 בשעה

*101- Math***⊃** 

ההרצאה

## tiling and subshfits for cohomology and Cocycles spaces

תינתן על-ידי

(BGU) Meyerovitch Tom



## **Ben Gurion University - Mathematics Algebraic Geometry and Number Theory Seminar**

Speaker Tom Meyerovitch (BGU)

Title Cocycles and cohomolgy for subshifts and tiling spaces

Date Wednesday, 14 June 2017

*Time* 15:10 - 16:30 (starts 15:10 sharp)

Location Room -101 in Building 58

Abstract

Group cohomology can be useful when studying combinatorial properties of certain tilings of Euclidean space. To apply cohomology one associates to a set of tiles a "tiling space " (or a subshift) and a natural group action on this space. In this talk I will define and explain the notions involved in the above statement, and illustrate the statement for various natural examples such as tilings by dimers. In particular, we will demonstrate the need to consider cocycles taking values in non-abelian groups and also higher order cocycles.

(updated 22 May 2017)