

Department of Mathematics, BGU

Algebraic Geometry and Number Theory

On *Wednesday, June ,14 2017*

At *15:10 – 16:30*

In *Math 101-*

Tom Meyerovitch (BGU)

will talk about

**Cocycles and cohomology for subshifts and tiling
spaces**

Abstract:



Ben Gurion University - Mathematics
Algebraic Geometry and Number Theory Seminar

Speaker **Tom Meyerovitch (BGU)**
Title **Cocycles and cohomology 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)