

המחלקה למתמטיקה, בן-גוריון

גאומטריה אלגברית ותורת המספרים

ביום רביעי, 4 בינואר, 2017

בשעה 15:10 – 16:30

ב-101 Math

ההרצאה

**relative Kim's and spaces path rational Motivic
conjecture section unipotent**

תינתן על-ידי

(BGU) Dan-Cohen Ishai

תקציר:



Ben Gurion University - Mathematics
Algebraic Geometry and Number Theory Seminar

Speaker **Ishai Dan-Cohen (BGU)**

Title **Motivic rational path spaces and Kim's relative unipotent section conjecture**

Date Wednesday, 4 January 2017

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

Location Room -101 in Building 58

Abstract

I will report on ongoing joint work with Tomer Schlank. We initiate a study of path spaces in the nascent context of "motivic dga's". This enables us to reconstruct the prounipotent completion of the fundamental group of a pointed scheme from the associated augmented motivic dga, and provides us with a factorization of Kim's relative unipotent section conjecture into several smaller conjectures with a homotopical flavor. Based on a conversation with Joseph Ayoub, we prove that the path spaces of the punctured projective line over a number field are concentrated in degree zero with respect to Levine's t -structure for mixed Tate motives. This constitutes a step in the direction of Kim's conjecture.

(updated 15 Dec 2016)