גאומטריה אלגברית ותורת המספרים

ביום רביעי, 11 בינואר, 2017

בשעה 15:10 – 16:30

ב‏*Math -101*

ההרצאה

tensor a for fractions of field skew universal The algebras free of product

תינתן על-ידי

Vinnikov Victor (BGU)

תקציר:

Ben Gurion University – Mathematics

Algebraic Geometry and Number Theory Seminar

Speaker   **Victor Vinnikov (BGU)**

Title   **The universal skew field of fractions for a tensor product of free algebras**

Date   Wednesday, 11 January 2017

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

Location   Room -101 in Building 58

Abstract   Noncommutative localization is a tricky business: a noncommutative integral domain cannot always be embedded into a skew field of fractions, and when it can, the embedding can be highly non-unique. The correct notion of the universal skew field of fractions was identified by Amitsur in his groundbreaking work on rational identities where he constructed what is called now the free skew field, namely the universal skew field of fractions of a free algebra; it was shown later by P.M. Cohn in his extensive studies that any fir (free ideal ring) admits a universal skew field of fractions. However a tensor product of free algebras is not a fir. I will describe a construction of the universal skew field of fractions thereof which is based on ``tensor'' matrix evaluations and is motivated by recent progress in free noncommutative analysis. This is a joint work with Igor Klep and Jurij Volcic.

(updated 19 Dec 2016)