SEMINARIO DI GEOMETRIA E ALGEBRA

UNIBA - POLIBA

Mercoledì 28 Febbraio 2024 - Ore 15:00 - Dip. di Matematica, aula XI

Thiago Castilho de Mello (Universidade federal de São Paulo)

Images of polynomials on algebras

Abstract. The L'vov-Kaplansky conjecture states that the image of a multilinear polynomial evaluated on the matrix algebra over a field is a vector space. This result has only been proven for matrices of order 2, with some restriction on the base field. In this talk, we will present the topic of images of polynomials in algebras, and recent results on some variations of the L'vov-Kaplansky conjecture, considering different (not necessarily associative) algebras as well as algebras with additional structures.

