

Codimensions of algebras with polynomial identities

Daniela La Mattina¹,

¹ University of Palermo, Italy

Let A be an associative algebra over a field F of characteristic zero and let $Id(A)$ be the T-ideal of polynomial identities of A . One associates to A , in a natural way, a numerical sequence $c_n(A)$, $n = 1, 2, \dots$, called the sequence of codimensions of A , which is the main tool for the quantitative investigation of the polynomial identities of the algebra A . Such a sequence, in case A satisfies a nontrivial identity, is exponentially bounded. The purpose of this talk is to survey some recent results on the growth of codimensions.