

# CODIMENSIONS OF ALGEBRAS WITH ADDITIONAL STRUCTURES

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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  $cn(A), n = 1, 2, \dots$ , 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 non-trivial identity, is exponentially bounded. The purpose of this talk is to survey some recent results on the growth of codimensions of algebras with additional structures.