Differential identities and varieties of algebras

Carla Rizzo[1],

[1] University of Palermo, Italy

Let $\mathcal{V}$ be an L-variety of associative L-algebras, i.e., algebras where a Lie algebra L and its universal enveloping algebra $U(L)$ act on them by derivations, and let $c_n^L(\mathcal{V})$, $n \geq 1$, be its L-codimension sequence. If $\mathcal{V}$ is generated by a finite dimensional L-algebra, then such a sequence is polynomially bounded if and only if it does not contain two explicitly described L-algebras.

In this talk I shall present the classification of the subvarieties of such L-varieties by giving a complete list of finite dimensional L-algebras generating them.