

FUNCTIONAL IDENTITIES

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A functional identity is an identical relation in a ring that besides arbitrary elements, that appear similarly as in a polynomial identity, also involves functions which are considered as unknowns. The goal is to find their forms, or, when this is not possible, to describe the structure of the ring in question. Results on functional identities have turned out to be applicable to various mathematical areas, particularly to Lie algebras.

In the first lecture we will give a general survey on functional identities and their applications, and in the second lecture we will focus on more recent results.

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