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## **Invariants of Lie algebras represented as tensor products**

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**Abstract:** I will discuss current Lie algebras, i.e. Lie algebras represented as the tensor product of a Lie algebra and an associative commutative algebra, and their generalizations – Lie algebras represented as the tensor product of algebras over Koszul dual operads. A simple linear-algebraic technique, somewhat resembling separation of variables of differential equations, allows to compute some interesting invariants of such Lie algebras: Poisson structures, delta-derivations, commutative cocycles, etc. If time will permit, I will also tell about applications in the theory of varieties of algebras.