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On the growth of almost soluble Lie algebras. (English) [Zbl 1138.17304](#)

Russ. Math. Surv. 60, No. 5, 970-972 (2005); translation from Usp. Mat. Nauk 60, No. 5, 165-166 (2005).

From the text: Using the notation and results from the second author's previous papers, the purpose of the present note is the following subexponential upper estimate of the growth of almost soluble Lie algebras.

Theorem 2. Suppose that a finitely generated Lie algebra L has a subalgebra $H \subseteq L$ of finite codimension which is soluble of derived length q . Then $\text{Dim}^{q+1} L \leq \dim_K(L/H)$.

MSC:

17B01 Identities, free Lie (super)algebras

17B30 Solvable, nilpotent (super)algebras

Keywords:

generalized Gelfand-Kirillov dimension; subexponential growth

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