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Maximal subalgebras of simple modular Lie algebras
J. Algebra 284, No. 2, 824-856 (2005)

Mathematics Subject Classification 2000: 17B50; 17B05; 17B20

Keywords: Restricted simple Lie algebra of Cartan type, maximal graded subalgebra, simple classical Lie algebra, irreducible maximal subalgebra

Reviewer: Jörg Feldvoss (8086)

Let $L$ be a restricted simple Lie algebra of Cartan type over an algebraically closed field of characteristic $p > 3$. The aim of the paper under review is to classify the maximal graded subalgebras $M = M_{-2} \oplus M_{-1} \oplus M_0 \oplus M_1 \oplus \cdots \oplus M_r$ of $L$ where $L$ has the standard grading $L = L_{-2} \oplus L_{-1} \oplus L_0 \oplus L_1 \oplus \cdots \oplus L_r$ (and $L_{-2} = 0$ unless $L$ is a contact algebra). A classification of those maximal graded subalgebras $M$ of $L$ (with $L_{-2} = 0$) that contain $L_{-1} \oplus L_0$ has previously been established by A.I. Kostrikin and I.R. Shafarevich [Izv. Akad. Nauk SSSR, Ser. Mat. 33, 251-322 (1969; Zbl. 0211.05304)]. In the paper under review the author considers the remaining cases. He obtains an explicit construction unless $M = L_{-2} \oplus L_{-1} \oplus M_0 \oplus M_1 \oplus \cdots \oplus M_r$ and $M_0$ is a maximal subalgebra of $L_0$ that acts irreducibly on $L_{-1}$. In this case the problem is reduced to the classification of the irreducible maximal subalgebras of the simple classical Lie algebras which still is not complete.