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### **Solvable Lie Algebras with Nilradicals of Orthogonal Types**

Let  $n \geq 4$  be a positive integer,  $\mathfrak{n}$  a maximal nilpotent subalgebra of the orthogonal algebra  $\mathfrak{o}(2n, F)$  over a field  $F$  of characteristic not 2,  $\mathfrak{s}$  a solvable Lie algebra containing  $\mathfrak{n}$  as its nilradical. This article shows that the dimension of  $\mathfrak{s}$  is at most  $\dim(\mathfrak{n}) + n$ , and  $\mathfrak{s}$  is isomorphic to the standard Borel subalgebra  $\mathfrak{b}$  of  $\mathfrak{o}(2n, F)$  if and only if  $\dim(\mathfrak{s}) = \dim(\mathfrak{n}) + n$ .

**Keywords:** Solvable Lie algebras, derivations, nilradicals.

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