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*Some Factorizations of U.E.A.'s of 3 dimensional Lie algebras and some generalizations*

This is a report of joint work with J. Morita and Y. Yoshi. We say a Lie algebra  $L$  has a plus-minus pair if it has two subalgebras  $P, M$  whose sum is not all of  $L$  which satisfy  $U(L) = U(P)U(M)U(P)$ . We show a 3 dimensional Lie algebra over a field of characteristic zero has a plus-minus pair if and only if it is two generated and then use this to show there are only two 3 dimensional Lie algebras which do not have a plus-minus pair. Related results for more general Lie algebras are discussed.