

On semidirect sum of Lie algebras

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Abstract

There are considered some properties of a semidirect sum of Lie algebras, the construction which has a wide range of important applications, both theoretical and practical. For the semidirect sum of Lie algebras are extended some theoretic designs like necessary and sufficient conditions to be an ideal or to be a center. Some properties of a homomorphism and a derivative, simplicity and semisimplicity, or nilpotency of semidirect sums are regarded as well.

References

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