

Operations of Lie Groups and Lie Algebras on Manifolds (Conference Paper)

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Abstract

Lie groups are a concept that has originate from few strong intuitive ideas. We have illustrated the operations of Lie groups (LG) as well as Lie algebras (LA) on multitudinous in this paper. The matrix part and Bi-invariant systems of Lie groups, as well as representations of Lie Algebras, can be used. A Lie group which is a multitudinous on the product and inverse section operations are well-defined. It is extremely significant in the theory of fiber bundles, as well as having numerous applications in physics. Lie algebras are a product of Lie groups in the past (the tangent space introduced a Lie group). On smooth manifolds, we worked nonstop to describe the mathematical aspects of Lie groups along with Lie algebras. © 2021 IEEE.

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