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Abstracts of Short Communications and Posters

Section:

7. Lie Groups and Lie Algebras

1991 MS Classification: Primary:22, Secondaries:12,13,14,20
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I Invariant Theory for some Infinite-Dimensional Lie Groups

Several theorems of polynomial invariants of the classical groups and their duals(in the sense of reductive dual pairs of Roger Howe) are generalized for some dual pairs of infinite-dimensional Lie groups. These generalizations include the separation of variables theorem of Kostant, the Chevalley restricting invariants theorem, and the RacahChevalley theorem for Casimir invariants.