

On the complex orthogonal group $O(12)$

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Abstract - The aim of this article is to make as explicit as possible the main linear representations of the complex orthogonal group $O(12)$. Our descriptions make constant use of the group $O(13)$.

Key words and phrases : orthogonal group $O(13)$, linear representations

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Contents

1. Introduction
2. The group $SL(4, \mathbb{C})$
3. A Clifford algebra
4. Some Lie subalgebras of L_{66}
5. The spinorial representations
6. The associated differential operators
7. Decomposing the module $S^2(L_{78})$
8. Reality restrictions
9. An application of É. Cartan's theorem
10. The Γ -module $\Delta \otimes \Delta$
11. The extended Dirac equation
12. Eigen-vectors and eigen-values

1 Introduction

Since the fundamental works of E. Cartan and H. Weyl, linear representations of simple Lie groups are classified by considering their complexifications.

The spinorial representations of the Lie algebras of orthogonal groups have been discovered by E. Cartan at the beginning of the last century,