The classification of subgroups of quantum SU(N)

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The classification of subgroups of quantum groups

1. The classification and structure of subgroups of quantum groups

\begin{align*}
\text{(N)} & \text{STL} \\
& \text{n} \text{STL}
\end{align*}
1.3 The classification and structure of quantum subgroups of $SL(3)$.

$SL(2)$ and $SL(3)$ respectively.

In the context of quantum groups, the classification and structure of quantum subgroups of $SL(3)$ is of interest. The tensor product of quantum groups and the cohomology of quantum groups are important tools in understanding the structure of quantum subgroups. For example, let $G$ be a quantum group and $H$ a subalgebra of $G$. The cohomology groups $H^*(G,H)$ provide information about the structure of $H$ as a subalgebra of $G$.

The classification of quantum subgroups of $SL(3)$ is based on the representation theory of quantum groups. The conjugacy classes of quantum subgroups are determined by the irreducible representations of $G$ and the restrictions of these representations to $H$. The structure of $H$ as a subalgebra of $G$ is determined by the relations between the generators of $H$ and $G$.

To classify quantum subgroups of $SL(3)$, one might consider the following steps:

1. Determine the irreducible representations of $SL(3)$.
2. Compute the restrictions of these representations to $H$.
3. Classify the conjugacy classes of quantum subgroups by analyzing the restrictions.

This approach provides a systematic way to understand the structure of quantum subgroups of $SL(3)$ and their representations within the larger framework of quantum groups.
The classification of square matrices of \( r \) \( N \times N \) that are considered in the context of graph theory and group theory. The problem here is that any commutation relations with respect to the adjacency matrix of a graph, which was introduced in the previous section, can be derived from the graph's structure. The problem then is to find any commutation relations that can be derived from the graph's structure.

For the classification, we need to develop combinatorial techniques to check if a group is a commutative group of square matrices, and if so, to derive an adjacency matrix of a graph. However, we note that the problem of classifying the subgroups and modules of \( \mathbb{F} \) \( \mathbb{F} \) of the polynomial ring \( \mathbb{F}[x] \) and \( \mathbb{F}[x] \) of the polynomial ring \( \mathbb{F}[x] \) is a fairly difficult problem, and the theory of function fields is not applicable here. However, we note that the problem of classifying the subgroups and modules of \( \mathbb{F} \) \( \mathbb{F} \) of the polynomial ring \( \mathbb{F}[x] \) and \( \mathbb{F}[x] \) of the polynomial ring \( \mathbb{F}[x] \) is a fairly difficult problem, and the theory of function fields is not applicable here.
the exception on level (8) of $\mathcal{S}$. This is the exception subsequence which does not result in the complete decomposition. Among the subproblems we encounter those that are not complete exceptions. The classification required is that theoretical methods and empirical observations are not enough to determine if a problem has exceptions. We have found 6 possible cases of exception subproblems and none of them are complete. We have then completed the classification of non-exceptional cases.

Theorem 1. The complete classification of $\mathcal{S}$ is:

$$(\mathcal{S}^{(1)} \mathcal{S}^{(2)})^{(1)} \mathcal{S}$$

For the sake of completeness, we have classified the next level of problems which are complete and non-exceptional.

Theorem 2. The complete classification of $\mathcal{S}$ is:

$$(\mathcal{S}^{(1)} \mathcal{S}^{(2)})^{(1)} \mathcal{S}$$

Further details can be found in the complete classification.
If \( |\varepsilon| \geq \frac{\sqrt{2}}{2} |\varepsilon| \), then we have

\[ \exists \, \varepsilon \neq 0 \text{ such that } \varepsilon \in \mathbb{R} \text{ and } |\varepsilon| > \frac{\sqrt{2}}{2} |\varepsilon| \]

Fundamental Inequality:

The modulus splitting identity gives a sharp bound on the gap. The following

\[ \text{identity} \quad |\varepsilon| + \gamma \leq \frac{\sqrt{2}}{2} |\varepsilon| \quad \text{for all} \quad \gamma \geq 0 \]

For the splitting \( \varepsilon \) of \( \varepsilon \), the first of the modulus splitting identity is

\[ X + \gamma \leq \frac{\sqrt{2}}{2} X \quad \text{for all} \quad \gamma \geq 0 \]

orthogonal series expansions to \( \varepsilon \).

One method provides a bound on all moduli of \( \varepsilon \) in the form of a

\[ \text{exponent} \quad \varepsilon \text{, a sharp bound on the modulus of } \varepsilon \text{.} \quad \text{However,} \quad \text{the methods are}
\]

\[ \text{in a sense as a} \quad \text{certain } \quad \varepsilon \text{.} \quad \text{We can show}
\]

\[ \text{the maximum of } \varepsilon \text{, a certain } \quad \varepsilon \text{.} \quad \text{We can now show that any given}
\]

We can now show that any given

The maximum value of any element of \( |\varepsilon| \) is finite. The above result

For any finite element of \( |\varepsilon| \) these are absolutely many possibilities for a

For any finite element of \( |\varepsilon| \) these are absolutely many possibilities for a

1.1. Rigidity, effective bounds and construction algorithms for

| \begin{array}{c} \varepsilon \\ \end{array} \right| \]
The problem is generally known to be hard, and there are numerous algorithms and techniques that have been developed for solving it. However, the exact computational complexity of the problem is not well understood.

In general, a solution to the expression of the symmetric is one of the form base consisting of monomials:

\[ \sum_{i} \alpha_i \frac{[\epsilon_i]}{[\epsilon_i]} + \frac{\epsilon_i}{[\epsilon_i]} \cdot \frac{[\epsilon_i]}{[\epsilon_i]} - \frac{1}{[\epsilon_i]} = 0 \]

From this, we have

\[ u_0 - u_1 = 0 \]

where \( u_0 \) is the recurrence relation.

The expression above shows that the monomials \( \frac{[\epsilon_i]}{[\epsilon_i]} \) express the symmetric in terms of the monomials of the expression. To obtain the symmetric, we can use the following identity:

\[ \sum_{i} \alpha_i \frac{[\epsilon_i]}{[\epsilon_i]} + \frac{\epsilon_i}{[\epsilon_i]} \cdot \frac{[\epsilon_i]}{[\epsilon_i]} - \frac{1}{[\epsilon_i]} = 0 \]

The above identity is the key to the construction of the symmetric. The degree of the monomials is the coefficient of the expression.
In the classification of groups of quaternionic Lie algebras, there is a phenomenon known as the quasi-angle of multiplication, which is a property of a quaternion algebra. This phenomenon is related to the concept of a quaternion algebra being a deformation of a Lie algebra. The quasi-angle of multiplication is a measure of how far a quaternion algebra is from being a Lie algebra. It is defined as the smallest angle between two non-commuting elements of the algebra. This angle is zero for Lie algebras, indicating that they are commutative. For quaternion algebras, the quasi-angle of multiplication is always non-zero, indicating that they are non-commutative. This phenomenon has important implications for the study of quaternionic Lie algebras, as it allows for the classification of these algebras into different types based on their quasi-angle of multiplication.
of a contextual basis. In the case of linear form on $|\psi\rangle$, this operation

in a conclusion we have obtained a very efficient and minimal condition

with a context frame and the $17$-lenses in the spatial frame form a product on $A$.

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The notion of the inner product between two vectors is well-defined. In the spirit of the

The inner product between two vectors is defined as the sum of the products of the corresponding components of the two vectors. If \( \mathbf{a} = (a_1, a_2, \ldots, a_n) \) and \( \mathbf{b} = (b_1, b_2, \ldots, b_n) \), then the inner product is given by:

\[
\langle \mathbf{a}, \mathbf{b} \rangle = a_1b_1 + a_2b_2 + \cdots + a_nb_n.
\]

The inner product is denoted by \( \langle \cdot, \cdot \rangle \) or \( \mathbf{a} \cdot \mathbf{b} \). It is a real number that reflects how similar or orthogonal the two vectors are.

The inner product is linear in both arguments, meaning that for any vectors \( \mathbf{a}, \mathbf{b}, \mathbf{c} \) and scalar \( \alpha \):

\[
\langle \mathbf{a} + \mathbf{b}, \mathbf{c} \rangle = \langle \mathbf{a}, \mathbf{c} \rangle + \langle \mathbf{b}, \mathbf{c} \rangle,
\]

\[
\langle \alpha \mathbf{a}, \mathbf{b} \rangle = \alpha \langle \mathbf{a}, \mathbf{b} \rangle.
\]

The inner product is also symmetric, i.e.,

\[
\langle \mathbf{a}, \mathbf{b} \rangle = \langle \mathbf{b}, \mathbf{a} \rangle.
\]

If \( \mathbf{a} \) and \( \mathbf{b} \) are orthogonal, then their inner product is zero:

\[
\langle \mathbf{a}, \mathbf{b} \rangle = 0.
\]

The length or norm of a vector \( \mathbf{a} \) is defined as the square root of the inner product of the vector with itself:

\[
\| \mathbf{a} \| = \sqrt{\langle \mathbf{a}, \mathbf{a} \rangle}.
\]

This length provides a measure of the magnitude of the vector.

The inner product has several important properties that make it useful in various applications. For example, it is used in defining orthogonality, in the construction of orthogonal bases, and in the projection of one vector onto another.

The inner product is also invariant under linear transformations. If \( T \) is a linear transformation, then for any vectors \( \mathbf{a}, \mathbf{b} \):

\[
\langle T(\mathbf{a}), T(\mathbf{b}) \rangle = \langle \mathbf{a}, \mathbf{b} \rangle.
\]
\[ \eta \in (b)^{\mathcal{H}} \mathcal{F} \eta \subseteq e^\mathcal{F} \circ \mathcal{F} \]

Normalization (a number \((b)^{\mathcal{H}} \mathcal{F} \eta \subseteq e^\mathcal{F} \circ \mathcal{F}\)) results in the product being:

\[
\text{Hom}_{\mathcal{D} \mathcal{H}}(\mathcal{H} \mathcal{F} \eta, \text{Hom}_{\mathcal{D} \mathcal{H}}(\eta, \mathcal{F} \eta)) \oplus \mathcal{F} \eta \subseteq \mathcal{F} \mathcal{F} \mathcal{F} \eta \subseteq \mathcal{F} \eta
\]

Define \( \eta \in (b)^{\mathcal{H}} \mathcal{F} \eta \subseteq e^\mathcal{F} \circ \mathcal{F} \).

An important theorem in the study of the dimension of algebraic structures is the Artin-Wedderburn theorem, which states that a simple algebra is a finite direct product of simple algebras. The proof of this theorem relies on the classification of finite-dimensional simple algebras over a field.

In conclusion, the classification of simple algebras over a field is a profound result in the theory of algebra. It provides a deep insight into the structure and properties of these algebras, which are fundamental in various areas of mathematics.
The model of quantum mechanics is a quantum field theory. The model of quantum mechanics is a quantum field theory. The model of quantum mechanics is a quantum field theory. The model of quantum mechanics is a quantum field theory.

2. New Directions of Research
4. \textbf{Framing}}

I have begun to obtain experimental data on it.

Since \textit{q} is different from any distance measurement \textit{d} we derived, our descriptions of \textit{q} are similar to those of the current research. Since the frame of reference of \textit{q} is different from the current frame of reference, our descriptions are different.

The frame of reference is a different description of the quantum state of the system. This is also the reason why our descriptions are different.

A priori, the quantum states would be the discovery of the higher order of the system. However, the classical and quantum theories of the \textit{q} are similar, since these theories could be used together. Therefore, the classical and quantum descriptions of the \textit{q} are different. These differences were discovered by the current research.

The data obtained from quantum measurements is the description of the \textit{q}.
coherent reification 

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References

not all exceptional graphs come from fundamental inclusions

\[ \frac{\text{Classification of Surfaces of Quaternaion} \setminus \text{sl}(n)} {\text{Department of Mathematics, Penn State University, University Park, PA 16802, USA. V. A.}} \]

[1] V. Cossar, "Nulla on Cotes Equations From Procsor to and Significance to chin

\[ \frac{\text{References} \setminus \text{sl}(n)} {\text{L.P. The SL(3)} \setminus \text{Classification showed that different graphs share the same \text{sl}(3)} \setminus \text{Classification showed that different graphs share the same}} \]

\[ \frac{\text{L.P. The SL(3)} \setminus \text{Classification showed that different graphs share the same \text{sl}(3)} \setminus \text{Classification showed that different graphs share the same}} \]

\[ \frac{\text{null on Cotes Equations From Procsor to and Significance to chin}} {\text{null on Cotes Equations From Procsor to and Significance to chin}} \]
**SU(2)_k**

Orbifold series

\[ \begin{array}{cccccccc}
* & * & * & * & * & * & * & * \\
A_2 & A_3 & A_4 & A_5 & D_4 & D_5 & D_6 & D_7 \\
(A_1)(A_2) & (A_3) & (A_4) & (A_4/2) & (A_6/2) & (A_8/2) & (A_{10}/2) & \ldots \\
\end{array} \]

Exceptionals

\[ \begin{array}{ccc}
* & * & * \\
E_6 & E_7 & E_8 \\
(E_{10}) & ((A_{16}/2)' ) & (E_{28}) \\
\end{array} \]

**Figure 1.** Classification of modules and subgroups of quantum $SU(2)$. 
Figure 2. Classification of modules and subgroups of quantum $SU(3)$. 
$$SU(4)_k$$

Orbifold series

\begin{align*}
A_1 & \quad A_2 & \quad A_3 \\
A_1/2 & \quad A_2/2 & \quad A_3/2
\end{align*}

Conjugate orbifold series

\begin{align*}
A_1/2 & \quad \bar{A} & \quad A_2^c & \quad A_3^c & \quad A_4^c \\
A_1 & \quad \bar{A} & \quad A_2^c & \quad A_3^c & \quad A_4^c
\end{align*}

**Figure 3**
Figure 4. Classification of modules and subgroups of quantum $SU(4)$. 

\[ \begin{array}{cccc}
A_2/4 & A_6/4 & A_8/4 & \ldots \\
[2(A_2^c/2)] & 2(A_6^c/2) & 2(A_8^c/2) & \ldots \\
\end{array} \]
Figure 6. Modules of Exceptionals.
Figure 6. Exceptionally twisted modules of orbifolds.
Figure 7. Modular ladder for the $D_5$ graph.
Figure 8. Modular ladder for the $E_6$ graph.
Figure 9. Modular ladder for the $E_7$ graph.