Type G_2 Quantum Subgroups from Graph Planar Algebra Embeddings

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Abstract

We give graphical presentations for the two quantum subgroups of type G_2. To do this we use a method of extending a tensor category by embedding the planar algebra of a $\otimes$-generating object into the graph planar algebra of this object's fundamental graph. This allows the use of computational methods to uncover relations we would have little hope of arriving at otherwise.

Keywords: Graph planar algebra, tensor categories, skein theory

1 Test Section

Test output. [1]

Appendix A   Section title of first appendix

An appendix contains supplementary information that is not an essential part of the text itself but which may be helpful in providing a more comprehensive understanding of the research problem or it is information that is too cumbersome to be included in the body of the paper.

References

[1] Copeland, D., Edie-Michell, C.: Cell Systems for $\overline{\mathrm{Rep}(U_q(\mathfrak{sl}_N))}$ Module Categories (2023)