

A WAY OF GETTING SUPERALGEBRAS USING TENSOR CATEGORIES

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The category $\text{Rep } C_3$ of representations of the cyclic group of order 3 over a field of characteristic 3, is not semisimple. However, Verlinde category Ver_3 , which is the category whose objects are the objects of $\text{Rep } C_3$ and whose morphisms are the morphisms of $\text{Rep } C_3$ modulo the subspace of negligible morphisms, is semisimple.

In this talk it will be introduced the concept of semisimplification of the algebras in $\text{Rep } C_3$ and then, it will be shown a method to get superalgebras from the algebras in $\text{Rep } C_3$ by using the equivalence of Ver_3 and the category of supervector spaces sVec .