

## Definition

*A fusion category is a linear semisimple  $\otimes$ -category with duals, with finitely many simple objects.*

## Example

The representation theory of any finite group.

Fusion categories are “quantum finite groups”.

## Example

The representation category of  $U_q(\mathfrak{g})$  at a root of unity is not semisimple, but after quotient by the ‘negligible ideal’ it becomes a fusion category.