In the even part of $N \subset M$, there is a special object ${}_N M_N$, which has an algebra structure. From this, we can recover the subfactor.

Theorem

For every algebra object $\mathcal{A}$ in a unitary fusion category $\mathcal{C}$, there is a finite depth II_1 subfactor $N \subset M$ so

$$(\mathcal{A}, \mathcal{C}) \cong (M, {}_N mod_N).$$

In fact, a finite depth subfactor is equivalent to either

1. a unitary $\otimes$-category $\mathcal{C}$, an algebra object $A \in \mathcal{C}$, and a chosen object X in the category of A-module objects, or
2. a pair of unitary $\otimes$-categories $\mathcal{C}$ and $\mathcal{D}$, a (categorical) Morita equivalence $\mathcal{X}$ between them, and a chosen object $X \in \mathcal{X}$.

Because of this close relationship between unitary fusion categories and subfactors, we often take advantage of both settings to prove theorems.