

**Graded modalities are indexed-families of objects from one monoidal category to the another such that their tensor products are related in a lax or colax manner.**

# Monoids in $\mathcal{C}$

$$M : \mathbf{1} \rightarrow \mathcal{C}$$

$$\eta : \mathbb{T} \rightarrow M$$

$$\mu : M \otimes M \rightarrow M$$