

**Definition** (Symmetric monoidal category). A *symmetric monoidal category* is a braided monoidal category  $\langle \mathbf{C}, \otimes, \mathbf{1}, \text{br} \rangle$  for which the braiding satisfies the symmetry condition

$$\text{br}_{c,d} \circ \text{br}_{d,c} = \text{Id}_{c \otimes d}$$

for all  $c, d \in \text{Ob } \mathbf{C}$ .