

**Definition** (Symmetric monoidal poset). A *symmetric monoidal poset* is a monoidal poset  $\langle \mathbf{P}, \leq_{\mathbf{P}}, \otimes, \mathbf{1} \rangle$  such that

$$x \otimes y = y \otimes x$$

for all  $x, y \in \mathbf{P}$ .