

**Definition 0.0.3 (Structural Equivalence)** Structural Equivalence, denoted  $\equiv$  is the smallest contextual equivalence relation that satisfies the following axioms:

$$\begin{array}{ll}
P \mid Q & \equiv Q \mid P & \text{(S-COMP-COMM)} \\
(P \mid Q) \mid R & \equiv P \mid (Q \mid R) & \text{(S-COMP-ASSOC)} \\
P \mid \textit{stop} & \equiv P & \text{(S-COMP-ID)} \\
\textit{new}(c).\textit{stop} & \equiv \textit{stop} & \text{(S-REST-ID)} \\
\textit{new}(c).\textit{new}(d).P & \equiv \textit{new}(d).\textit{new}(c).P & \text{(S-REST-COMM)} \\
\textit{new}(c).(P \mid Q) & \equiv P \mid \textit{new}(c).Q, \text{ if } c \notin \text{fi}(P) & \text{(S-REST-COMP)}
\end{array}$$