

Channel system (CS)

PC2.2-25

$[\mathcal{P}_1 \mid \mathcal{P}_2 \mid \dots \mid \mathcal{P}_n]$ where \mathcal{P}_i are program graphs over a pair $(\mathit{Var}, \mathit{Chan})$

Var set of typed variables

Chan set of typed channels with capacities $\mathit{cap}(\cdot)$ and domains $\mathit{Dom}(\cdot)$

program graphs $\mathcal{P}_i = (\mathit{Loc}_i, \mathit{Act}_i, \mathit{Effect}_i, \hookrightarrow_i, \mathit{Loc}_{0,i}, \mathit{g}_0)$ with conditional transitions

$l \xrightarrow{g:\alpha}_i l'$ guarded command

$l \xrightarrow{c!v}_i l'$ sending value v via channel c

$l \xrightarrow{c?x}_i l'$ receiving a value for variable x via channel c