Reaktive Systeme (SoSe 2015)

MTV: Modelle und Theorie Verteilter Systeme *13.04.2015 – 17.07.2015*

$$\text{ACT} \quad \frac{}{\alpha.P \xrightarrow{\alpha} P}$$

$$\text{SUM}_j \quad \frac{P_j \xrightarrow{\alpha} P'_j}{\sum_{i \in I} P_i \xrightarrow{\alpha} P'_j} \quad \text{where } j \in I$$

$$\text{COM1} \quad \frac{P \xrightarrow{\alpha} P'}{P \mid Q \xrightarrow{\alpha} P' \mid Q}$$

$$\text{COM2} \quad \frac{Q \xrightarrow{\alpha} Q'}{P \mid Q \xrightarrow{\alpha} P \mid Q'}$$

$$\text{COM3} \quad \frac{P \xrightarrow{a} P' \qquad Q \xrightarrow{\overline{a}} Q'}{P \mid Q \xrightarrow{\tau} P' \mid Q'}$$

$$\text{RES} \quad \frac{P \xrightarrow{\alpha} P'}{P \setminus L \xrightarrow{\alpha} P' \setminus L} \quad \text{where } \alpha, \overline{\alpha} \notin L$$

$$\text{REL} \quad \frac{P \xrightarrow{\alpha} P'}{P[f] \xrightarrow{f(\alpha)} P'[f]}$$

$$\text{CON} \quad \frac{P \xrightarrow{\alpha} P'}{K \xrightarrow{\alpha} P'} \quad \text{where } K \stackrel{\text{def}}{=} P$$

SOS rules for CCS ($\alpha \in \mathsf{Act}, a \in \mathcal{L}$)