

A6 Theory

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Typing Rules for the Pi Calculus:

$$\overline{\Gamma \vdash 0 \text{ wf}}$$

$$\frac{\Gamma \vdash Q_1 \text{ wf} \quad \Gamma \vdash Q_2 \text{ wf}}{\Gamma \vdash Q_1 | Q_2 \text{ wf}}$$

$$\frac{\Gamma, x : \tau \vdash Q \text{ wf} \quad x \notin \Gamma}{\Gamma \vdash \text{new } x : \tau, Q \text{ wf}}$$

$$\frac{\Gamma_1 \vdash \text{pat} : \tau \rightsquigarrow \Gamma_2 \quad \Gamma_1 \vdash e : \tau \quad \Gamma_1 \Gamma_2 \vdash Q \text{ wf}}{\Gamma \vdash \text{send } e_1(\text{pat}), Q \text{ wf}}$$

$$\frac{\Gamma \vdash \text{rec } e(\text{pat}), Q \text{ wf}}{\Gamma \vdash \text{rec! } e(\text{pat}), Q \text{ wf}}$$