

$$\text{interval } H \xrightarrow[\text{stet streng mon}]{\gamma} \mathbb{R} \Rightarrow H \xleftarrow[\text{stet}]{\gamma^{-1}} {}^H\gamma \text{ interval}$$

$$\gamma \text{ stet} \Rightarrow {}^H\gamma \text{ interval}$$

$$\gamma \text{ streng mon} \Rightarrow \gamma^{-1} \text{ streng mon} \Rightarrow \gamma \text{ mon bij} \Rightarrow {}^{H\gamma^{-1}}\gamma = H \text{ interval} \Rightarrow \gamma^{-1} \text{ stet}$$

$$\text{interval } H \xrightarrow[\text{stet inj}]{\gamma} \mathbb{R} \Rightarrow \gamma \text{ streng mon}$$

$$a \leq c \leq b \begin{cases} a\gamma \leq b\gamma & \Rightarrow a\gamma \leq c\gamma \leq b\gamma \\ a\gamma \geq b\gamma & \Rightarrow a\gamma \geq c\gamma \geq b\gamma \end{cases}$$

$$\nexists a\gamma \leq b\gamma < c\gamma \xrightarrow{\text{ZWS}} \bigvee_{a \leq x < c} x\gamma = b\gamma \xrightarrow{x < c \leq b} \gamma \text{ not inj} \nexists$$

$$\nexists c\gamma < a\gamma \leq b\gamma \xrightarrow{\text{ZWS}} \bigvee_{c < x \leq b} x\gamma = a\gamma \xrightarrow{a \leq c < x} \gamma \text{ not inj} \nexists$$

$$\bigvee_{\in H} \begin{cases} a < b \\ a\gamma < b\gamma \end{cases}$$

$$H \ni x < y$$

$$\begin{cases} y \leq a \Rightarrow y\gamma \leq a\gamma < b\gamma \\ b \leq x \Rightarrow a\gamma < b\gamma \leq x\gamma \\ \overline{x|y} \cap \overline{a|b} \neq \emptyset \Rightarrow \bigvee_z \begin{cases} x \leq z \leq y \\ a \leq z \leq b \end{cases} \end{cases}$$

$$\begin{aligned} &\Rightarrow x\gamma < y\gamma \leq a\gamma \\ &\Rightarrow b\gamma \leq x\gamma < y\gamma \end{aligned}$$

$$\begin{aligned} &\Rightarrow a\gamma \leq z\gamma \leq b\gamma \xrightarrow{x \leq z \leq b} x\gamma \leq z\gamma \leq b\gamma \xrightarrow{x \leq z \leq y} x\gamma \leq z\gamma \leq y\gamma \end{aligned}$$