

$$\mathbb{F}_+ \triangleleft \mathcal{G}|J = \begin{cases} \mathbb{F} \triangleleft \mathcal{G}|J \xleftarrow{\text{nexion}} J \\ \bigwedge_{t \in \mathbb{F}} \underbrace{t \cdot h1} = \underbrace{t \cdot h1 + t \cdot \mathbb{K}1} \end{cases}$$

$$h - \bar{h} \in \mathbb{F} \triangleleft \mathcal{G}|J$$

$$\begin{aligned} \overbrace{t \cdot h - t \cdot \bar{h}} \cdot h1 &= \underbrace{t \cdot h1} - \underbrace{t \cdot \bar{h}1} = \underbrace{t \cdot h1 + t \cdot \mathbb{K}1} - \underbrace{t \cdot \bar{h}1 + t \cdot \mathbb{K}1} \\ &= \underbrace{t \cdot h1 + t \cdot \mathbb{K}1} - \underbrace{t \cdot \bar{h}1 + t \cdot \mathbb{K}1} = \underbrace{t \cdot h1} - \underbrace{t \cdot \bar{h}1} \\ &= \overbrace{t \cdot h - t \cdot \bar{h}} \cdot 1 = \overbrace{t \cdot h - t \cdot \bar{h}} \cdot h1 \Rightarrow \overbrace{t \cdot h - t \cdot \bar{h}} \in \mathcal{G}|J \end{aligned}$$

$$\begin{array}{c} \mathbb{F}_+ \triangleleft \mathcal{G}|J \\ \downarrow d \\ \mathbb{F} \triangleleft \mathcal{G}^2|J \end{array}$$

$$\overline{d_{\mathbb{H}}^1} = \overline{r \times r} - \overline{r \times r} \in \mathbb{G} | \mathbb{J}$$

$$\begin{aligned} \overline{d_{\mathbb{H}}^1} &= \overline{r \overline{r}} - \overline{r \overline{r}} - \overline{r \times r} \\ &= \overline{r \overbrace{r}^1 + r \overbrace{r}^{\times} 1} - \overline{r \overbrace{r}^1 + r \overbrace{r}^{\times} 1} - \overline{\overbrace{r \times r}^1 + r \overbrace{r}^{\times} 1} \\ &= \overbrace{r \overbrace{r}^1}^1 + \overbrace{r \overbrace{r}^{\times} 1}^{\times} + \overbrace{r \overbrace{r}^{\times} 1}^{\times} + r \overbrace{r \times r}^{\times} 1 \\ &\quad - \overbrace{r \overbrace{r}^1}^1 - \overbrace{r \overbrace{r}^{\times} 1}^{\times} - \overbrace{r \overbrace{r}^{\times} 1}^{\times} - r \overbrace{r \times r}^{\times} 1 \\ &\quad - \overline{\overbrace{r \times r}^1} - r \overbrace{r \times r}^{\times} 1 \\ &= \overbrace{r \overbrace{r}^1}^1 - \overbrace{r \overbrace{r}^1}^1 - \overline{\overbrace{r \times r}^1} + r \overbrace{r \times r}^{\times} 1 - \overbrace{r \times r}^{\times} 1 - \overbrace{r \times r}^{\times} 1 \\ &= \overbrace{r \overbrace{r}^1}^1 - \overbrace{r \overbrace{r}^1}^1 - \overline{\overbrace{r \times r}^1} = \overline{d_{\mathbb{H}}^1} \end{aligned}$$