

$$+ \underbrace{\Gamma_{\infty}^h \Gamma^h \cup \Gamma}_{\Gamma^h} \cong \mathbb{R}^2$$

$$\Gamma_{\infty}^h$$

$$\mathbb{R}^2$$

$$\Gamma_{\infty}^h \cup \Gamma^h$$

$$\begin{array}{c} \mathbb{R}^2 \\ \downarrow \\ \mathbb{R}^2 \times \mathbb{R}^2 \end{array}$$