$$0 \in U \underset{\text{off}}{\subseteq} \mathbb{C}^n$$

$$\underbrace{U - U}_{} \cap \Lambda = 0$$

$$\alpha \in \mathbb{C}^n$$

$$\mathbb{C}^n \underset{\text{off}}{\supseteq} U + \alpha \xrightarrow[\text{homeo}]{\pi\big|_{U+\alpha}} \pi\left(U + \alpha\right) \underset{\text{off}}{\subseteq} \mathbb{C}^n/\Lambda$$

$$z \in U + \alpha \ni w \Longrightarrow z - \alpha \in U \ni w - \alpha$$

$$\pi\left(z\right) = \pi\left(w\right) \Longrightarrow \Lambda \ni z - w = (z - \alpha) - (w - \alpha) \in U - U \Longrightarrow z - w = 0 \Longrightarrow z = w$$

$$\phi_\alpha^{-1}\left(\pi\left(U + \alpha\right) \cap \pi\left(U + \beta\right)\right) = \frac{z \in U + \alpha}{z + \Lambda}$$

$$\phi_\alpha^{-1}\left(V_\alpha \cap V_\beta\right)$$

$$\phi_\beta^{-1}\left(V_\alpha \cap V_\beta\right)$$

$$V_\alpha \cap V_\beta$$

ϕ_α

ϕ_β

ϕ_α^β