$$\mathbb{K}^n \underset{\text{off}}{\supset} U_\alpha \xrightarrow[\text{homeo}]{\phi_\alpha} V_\alpha \underset{\text{off}}{\subseteq} M$$

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

ϕ_α

ϕ_α^β

$V_\alpha \cap V_\beta$

ϕ_β

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