$$\Rightarrow \quad g_{\alpha\beta}(x)\,w + \mathbb{C}^k = j_{\alpha\beta}(x)\,w_2 + \mathbb{C}^k$$

$$\Rightarrow \quad K = \frac{\coprod U_\alpha \times \mathbb{C}^n/\mathbb{C}^k}{(x,\ w_2+\mathbb{C}^k) \sim (x,\ j_{\alpha\beta}(x)(w_2)+\mathbb{C}^k)}$$

Since $w_2 \in \mathbb{C}^{n-k} = \{(0\cdots 0,\underbrace{*\cdots *}_{n-k}) \in \mathbb{C}^n\}$,

$K \cong Q$.

Let $E = G(k,n) \times \mathbb{C}^n$.

$S = \{(\Lambda, v) \in G(k,n)\times\mathbb{C}^n \mid v \in \Lambda\}$.

$$\begin{array}{ccccc}
U_{I'}\cap U_I \times \mathbb{C}^n & \xleftarrow{\varphi_{I'}} & U_I\cap U_{I'} \times \mathbb{C}^n & \xrightarrow{\varphi_I} & U_I\cap U_{I'} \times \mathbb{C}^n \\
\cup & & \cup & & \cup \\
U_{I'}\cap U_I \times \mathbb{C}^k & \longleftarrow & S|_{U_I\cap U_{I'}} & \longrightarrow & U_I\cap U_{I'} \times \mathbb{C}^k \\
 & & (\Lambda, v) & \longmapsto & (\Lambda, w)
\end{array}$$

Let $g_{II'} = \varphi_I \circ \varphi_{I'}^{-1}$

$$= \left(\begin{array}{c|c} h_{II'} & * \\ \hline 0 & \bar{j}_{II'} \end{array}\right)$$

$w = (x_1 \ldots x_k)$

$\Lambda^I = \begin{pmatrix} v_1 \\ \vdots \\ v_k \end{pmatrix}$ $\quad v = x_1 v_1 + \cdots + x_k v_k$

$S = \{(*\Lambda, l) \in G(n-k, n^*) \times \mathbb{C}^{n*} \mid l \in *\Lambda\}$

$\downarrow$

$G(n-k, n^*)$ $\quad \Rightarrow \quad l \in *\Lambda \Leftrightarrow l(v) = 0$ for all $v \in \Lambda$.

$$\begin{array}{ccc}
S & \longrightarrow & S^* \\
\downarrow & & \downarrow \\
G(n-k, n^*) & \longrightarrow & G(n-k, n^*)
\end{array}
\qquad
\begin{array}{ccc}
S & \longrightarrow & S^* \\
(*\Lambda, l) & \longmapsto & (*\Lambda, w)
\end{array}$$