

⌈ We are going to compute a section of S^* over $G(2,4)$.

To do this, first we have to compute the transition functions for S .

$$S \subset G(2,4) \times \mathbb{C}^4$$



$$G(2,4).$$

$$U_{12}, U_{13}, U_{14}, U_{23}, U_{24}, U_{34}$$

$$U_{12} \longrightarrow \mathbb{C}^{2(4-2)} = \mathbb{C}^4 \quad \Rightarrow$$

$$\downarrow$$

$$\Lambda \longmapsto \begin{pmatrix} 1 & 0 & z_1 & z_2 \\ 0 & 1 & z_3 & z_4 \end{pmatrix} \longmapsto \begin{pmatrix} z_1 & z_2 \\ z_3 & z_4 \end{pmatrix}$$

$$U_{13} \longrightarrow \mathbb{C}^4$$



$$\Lambda \longmapsto \begin{pmatrix} 1 & w_1 & 0 & w_2 \\ 0 & w_3 & 1 & w_4 \end{pmatrix} \longmapsto \begin{pmatrix} w_1 & w_2 \\ w_3 & w_4 \end{pmatrix}$$

$$\mathbb{C}^4 \longleftarrow U_{12} \cap U_{13} \longrightarrow \mathbb{C}^4$$



$$\begin{pmatrix} 1 & w_1 & 0 & w_2 \\ 0 & w_3 & 1 & w_4 \end{pmatrix} \longleftarrow \Lambda \longmapsto \begin{pmatrix} 1 & 0 & z_1 & z_2 \\ 0 & 1 & z_3 & z_4 \end{pmatrix}$$

$$\Rightarrow \begin{pmatrix} 1 & z_1 \\ 0 & z_3 \end{pmatrix}^{-1} \begin{pmatrix} 1 & 0 & z_1 & z_2 \\ 0 & 1 & z_3 & z_4 \end{pmatrix} = \begin{pmatrix} 1 & w_1 & 0 & w_2 \\ 0 & w_3 & 1 & w_4 \end{pmatrix}$$