

close to Λ_0 , so that the last $k \times (k + a_i - \bar{i})$ minor of $\Lambda > k - \bar{i}$. \Rightarrow This is impossible since the minor has exactly rank $k - \bar{i}$. Thus we can conclude that $\dim(\Lambda_0 \cap V_{b_i}) \geq \bar{i}$. $\Rightarrow \Lambda_0 \in \{\Lambda \in G(k, n) \mid \dim(\Lambda \cap V_{b_i}) \geq \bar{i}\}$.

(ii) $\{\Lambda \in G(k, n) \mid \dim(\Lambda \cap V_{b_i}) \geq \bar{i}\} \subset \overline{W}$.

Suppose $\Lambda_0 \in G(k, n)$ s.t. $\dim(\Lambda_0 \cap V_{b_i}) \geq \bar{i}$ for $\bar{i} = 1, \dots, k$.

For a fixed \bar{i} , $\dim(\Lambda_0 \cap V_{b_i}) > \bar{i}$.

Let $\Lambda_0 \in U_J$.

$$\Rightarrow \Lambda_0 = \begin{pmatrix} * & \dots & * & 1 & * & \dots & 0 \\ * & & * & 0 & * & & \vdots \\ \vdots & & \vdots & \vdots & \vdots & & \vdots \\ * & & * & 0 & * & & 0 \end{pmatrix}$$

\Rightarrow The last $k \times (k + a_i - \bar{i})$ minor of Λ_0 has rank $< k - \bar{i}$.

Claim: $\exists \Lambda \in W$ s.t. given $\epsilon > 0$,

$$\|\varphi(\Lambda) - \varphi(\Lambda_0)\| < \epsilon, \text{ where } \varphi: U_J \rightarrow \mathbb{C}^{K(n-k)}.$$

Let ^{the} rank of the last $k \times (k + a_i - \bar{i})$ minor of Λ_0 be $l < k - \bar{i}$.

$$k \begin{pmatrix} & & k + a_i - \bar{i} \\ & 0 & \\ & \vdots & \\ & 0 & \\ * & * & 1 & * & \dots & * \\ & 0 & \\ & 0 & \end{pmatrix}$$

last

The rank of the ^{last} $k \times (k + a_i - \bar{i})$ minor depends on the vectors other than $\left\{ \begin{pmatrix} 0 \\ \vdots \\ 1 \\ \vdots \end{pmatrix} \right\}$.