α, β, γ s.t $\alpha+\beta+\gamma = 2k+l$, $1 \le l \le k$.

$\Rightarrow$ For $\Lambda \in \sigma_a(V) \cap \sigma_b(V') \cap \sigma_c(V'')$,

$\dim(\Lambda \cap V_{n-k+\alpha-a_\alpha}) \geq \alpha$. $\dim(\Lambda \cap V'_{n-k+\beta-b_\beta}) \geq \beta$

$\dim(\Lambda \cap V''_{n-k+\gamma-c_\gamma}) \geq \gamma$.

$\Rightarrow \dim(\Lambda \cap V_{n-k+\alpha-a_\alpha} \cap V'_{n-k+\beta-b_\beta} \cap V''_{n-k+\gamma-c_\gamma}) \geq l$. see note p511 ~ p512.

Thus $n-k+\alpha-a_\alpha + n-k+\beta-b_\beta + n-k+\gamma-c_\gamma - 2n$
$= n-3k+(\alpha+\beta+\gamma) - (a_\alpha+b_\beta+c_\gamma) = n-3k+2k+l$
$-(a_\alpha+b_\beta+c_\gamma) = n-k+l-(a_\alpha+b_\beta+c_\gamma)$

$\Rightarrow$ If $a_\alpha+b_\beta+c_\gamma > n-k$, $\dim(V \cap V' \cap V'') \leq l-1$.

$\Rightarrow \exists$ no $\Lambda \in \sigma_a(V) \cap \sigma_b(V') \cap \sigma_c(V'')$.

$\Rightarrow \#(\sigma_a \cdot \sigma_b \cdot \sigma_c) = 0$

If $a_\alpha + b_\beta + c_\gamma = n-k$, $\#(\sigma_a \cdot \sigma_b \cdot \sigma_c)_{G(k,n)} = \#(\sigma_{a-\hat{a}_\alpha} \cdot \sigma_{b-\hat{b}_\beta} \cdot \sigma_{c-\hat{c}_\gamma})_{G(k-1,n-1)}$.

Suppose $\Lambda \in \sigma_{a,0\cdots}(V)$.

$\pi : \mathbb{C}^n \longrightarrow L^\circ$, $\mathbb{C}^n = L^\circ \oplus L$

$\overline{V_1} = \pi(V_1)$

$\vdots$

$\overline{V}_{n-k+1-a-1} = \pi(V_{n-k+1-a-1}) = \pi(V_{n-k+1-a})$

$\vdots$

$\overline{V}_{n-1} = \pi(V_n) = L^\circ$.

Claim: $\overline{\overline{\Lambda}, L} = \Lambda \in \sigma_a(V) \overset{?}{\Longleftrightarrow} \overline{\Lambda} \in G(k-1, n-1) = G(k-1, L^\circ)$

Pf ($\Rightarrow$) $\Lambda \in \sigma_a(V) \Rightarrow \dim(\Lambda \cap V_{n-k+1-a}) \geq 1$

$\Rightarrow$ Since $\overline{\Lambda} \subset L^\circ$ and $L \subset V_{n-k+1-a}$,

$\pi(\Lambda) = \overline{\Lambda}$ and $\dim(\overline{\Lambda} \cap \overline{V}_{n-k+1-a-1}) \geq 0$.

$\dim(\overline{\Lambda} \cap \overline{V}_{n-1-(k-1)+0-a}) \geq 0 \Rightarrow$ No problem