「 If $\#(\Sigma_{k,n}\cdot\sigma_b)\neq 0$, $\exists\ \Lambda_{k+1}\subset\mathbb{C}^{n+2}$ s.t $\Lambda_{k+1}\in\Sigma_{k,n}\cap\sigma_b$. To $\Lambda_{k+1}\in\sigma_b=\{\dim(\Lambda_{k+1}\cap V_{n-k+1+i-b_i})\geq i\}$, since

$$\dim\Lambda_{k+1}\cap V_\alpha\leq\frac{\alpha-2}{2}+1 \text{ by the result above.}$$

$(\because \dim(\Lambda\cap\overline{V}_\alpha)\leq\frac{\alpha-2}{2})$

projective planes

$$i\leq\dim(\Lambda_{k+1}\cap V_{n-k+1+i-b_i})\leq\frac{n-k+1+i-b_i}{2}.$$

$$\Rightarrow\ 2i\leq n-k+1+i-b_i\ \Rightarrow\ b_i\leq n-k+1-i$$ 」

But from

$$\begin{aligned}(n-k+1)(k+1)-\frac{(k+1)(k+2)}{2} &= \sum_{i=1}^{k+1} b_i\\ &\leq\sum_{i=1}^{k+1} n-k-i+1\\ &=(n-k+1)(k+1)-\sum_{i=1}^{k+1} i\\ &=(n-k+1)(k+1)-\frac{(k+1)(k+2)}{2}\end{aligned}$$

we deduce that $b_i=n-k-i+1$, i.e.,

The cycle $\Sigma_{k,n}\subset G(k+1,n+2)$ has intersection number