

By applying the argument above to \mathbb{P}^{3*} , i.e.,

$h_i^* \in \mathbb{P}^{3*}$, and h_i^* 's linearly independent

$\Rightarrow \exists p_i'^*$ s.t. $\tilde{\phi}(\sigma(h_i^*, p_i'^*)) = \tilde{\phi}(\sigma(h_i^*)) \cap H$, $p_i'^* \in \mathbb{P}^{3*}$

$\Rightarrow p_i'^*$'s linearly independent in \mathbb{P}^{3*} .

③ $\sigma(p_i', h_i) \ni l \Rightarrow p_i' \in l \subset h_i \Leftrightarrow p_i'^* \ni l^* \ni h_i^*$

④

$$\begin{array}{ccc} G(2,4) & \xrightarrow{\tilde{\phi}} & \mathbb{P}^5 \\ \updownarrow & \nearrow \tilde{\phi} & \\ G(2,4)^* & & \end{array}$$

$G(2,4) = \{ \text{all lines in } \mathbb{P}^3 \}$

$G(2,4)^* = \{ \text{all " in } \mathbb{P}^{3*} \}$

Thus, dually, $\{p_i'\}$ is linearly independent. \square

Next, we observe that for any $i \neq j$ the line $h_i \cap h_j'$ is a line of the complex X , lying in h_j' and passing through the point p_i' . Thus

$$p_i' = \bigcap_{j \neq i} h_j',$$

i.e., the points $\{p_i'\}$ are the vertices of the tetrahedron T' having sides $\{h_j'\}$. (Figure 6.)

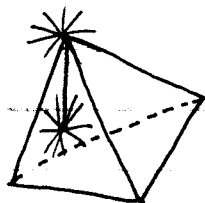


Figure 6