

$H_W = \{ \omega' \in P(\wedge^2 \mathbb{C}^4) \mid \omega' \wedge \omega = 0 \} \Rightarrow$  If  $\omega' \in \sigma(p) \cap H_W$ , then  $\omega' = \omega \wedge \omega' = 0$ , and by P156  
 $\omega' = v \wedge v'$ , where  $p = [v] \Rightarrow \omega \wedge v \wedge v' = 0$   
 $\Rightarrow \omega \wedge v \wedge v' = P_\omega(v, v') = 0 \Rightarrow \{ v' \in P(\mathbb{C}^4) \mid P_\omega(v, v') = 0 \} = h$   $\wedge$  corresponds to one to one  
 $X_p = \sigma(p) \cap H_W$ , since  
 $\overline{v, v'} \in \sigma(p) \cap H_W \stackrel{1-1}{\Leftrightarrow} \sigma(p, h)$   
 $(\because \sigma(p) \cap H_W \ni l \Leftrightarrow l = \overline{v, v'} \Leftrightarrow v' \in \ker P_\omega(v, \cdot) = h. \Leftrightarrow \overline{v, v'} \subset h)$   $\sqcup$

An amusing construction associated to a nonsingular linear complex  $X = G \cap H$  is the Configuration of Möbius defined as follows: Let  $T$  be any tetrahedron in  $\mathbb{P}^3$ , with sides  $h_1, h_2, h_3, h_4$  and vertices

$$p_i = \bigcap_{j \neq i} h_j.$$

For each  $i$ , let  $h'_i$  be the plane of the pencil  $X_{p_i} = \sigma(p_i) \cap H$  of lines of  $X$  through  $p_i$  and  $p'_i$  the focus of the pencil  $X_{h_i} = \sigma(h_i) \cap H$  of lines of  $X$  lying in  $h_i$ .

$\square$  By the results on P159,  $X_{p_i} = \sigma(p_i) \cap H = \sigma(p_i, h)$   
 $\Rightarrow$  Let  $h = h_i$ . Similarly,  $X_{h_i} = \sigma(h_i) \cap H = \sigma(p, h) \Rightarrow$  Let  $p = p'_i$ .  $\sqcup$