

in  $R^*$ .  $\Rightarrow$  By applying the same arguments to  $S^*$ , each point  $h^* \in R^*$  lies on six of hyperplanes  $p^* \in R$ .

$\Rightarrow$

This configuration of 16 points and 16 hyperplanes is called the  $(16_6)$  configuration.

Now consider the K-3 surface  $\Sigma \subset \mathbb{P}^5$ .  $\Sigma$  contains 32 lines: the 16 lines  $\{X_p\}_{p \in R}$  forming the inverse image  $\pi^{-1}(R)$  of the double points of  $S$ , and likewise the 16 lines  $\{X_h\}_{h \in R^*}$ ; the latter may be thought of either the exceptional divisors of the desingularization  $\pi: \Sigma \rightarrow S^*$  or as the inverse images  $\{\pi^{-1}(C_h)\}_{h \in R^*}$  of the 16 double hyperplane sections of  $S$ .

$\square$  Refer to P 773 and see note P 927.

$\pi^{-1}(C_h) = \pi^{-1}(h \cap S) \Rightarrow$  By the result above,  
 $\exists$  a double point  $p_i \in h \cap S \Rightarrow \pi^{-1}(p_i) = \mathbb{P}^1$   
 $\Rightarrow \pi^{-1}(C_h) = \mathbb{P}^1 \cup K \not\cong \mathbb{P}^1 \Rightarrow$  I think  $\{\pi^{-1}(C_h)\}_{h \in R^*}$  is not equal to  $\{X_h\}_{h \in R^*}$ .

$\Rightarrow$

The lines  $\{X_p\}$  are, of course, all disjoint, as are the lines  $\{X_h\}$ ; and from our last argument we see that each line  $X_p$  on  $\Sigma$  meets