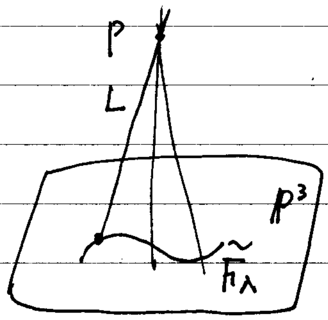
「 See P734 ~ P735, and P736 ⊛. 」

Since there are two lines on $\tilde{F}_\lambda$ containing the point $L \cap \tilde{F}_\lambda$, there will be two 2-planes on F_λ containing L, one from each family.

「



Since $T_p(F_\lambda) \cap F_\lambda$ is the cone through p over a surface $\tilde{F}_\lambda$, and $L \subset T_p(F_\lambda)$, $L = \overline{p,\ q}$, where $q = L \cap \tilde{F}_\lambda$.
$\Rightarrow$ By the result on P478 ⊛, there are two lines on $\tilde{F}_\lambda$, i.e., $\tilde{F}_\lambda \cap T_q(\tilde{F}_\lambda)$.
Let $L_1 \cup L_2 = \tilde{F}_\lambda \cap T_q(\tilde{F}_\lambda)$.
$\Rightarrow$ $\overline{p, L_1} = \Lambda_1$ & $\Lambda_2 = \overline{p, L_2}$ are two 2-planes on F_λ containing L. $\Lambda_1 \cap \Lambda_2 = L \Rightarrow \dim(\Lambda_1 \cap \Lambda_2) = 1 \not\equiv 2 \pmod 2 \Rightarrow \Lambda_1$ & Λ_2 belong to the different families.
」

Suppose, on the other hand, that F_λ is singular. Inasmuch as $X = F_\lambda \cap F_\mu$ is smooth, the singular locus of F_λ must lie outside F_μ; in particular, it follows that the singular locus of F_λ is only a point q, and that F_λ is the cone through q over a smooth quadric $\tilde{F}_\lambda$ in a $\mathbb{P}^4 \subset \mathbb{P}^5$.

「 If the singular locus of F_λ is of $\dim \geq 1$, it intersects with F_μ, since, by P110. 3, every