

$$\Rightarrow \#(B_L \cdot \tilde{D})_A = \#(\Delta \cdot L)_X = 8$$

□

We are now in a position to sketch a picture of the generic pencil L of the complex X in relation to the Kummer surface S . Assume that neither L nor its coplanar pencil $L' = \iota'(L)$ is specil. and let

$h_L = h_{L'}$ be the plane of the pencil $\{L\}_{x \in L}$,

$p_L, p_{L'}$ be the foci of the pencils L and L' ,

$$C_L = h_L \cap S,$$

$$j|_{B_L}: B_L \longrightarrow C_L$$

the map sending a line $M \subset X$ meeting L to the focus p_M of the corresponding pencil, and

$$r: B_L \longrightarrow L$$

the extension of the map from $B_L - \{L\}$ to L sending each line $M \neq L \in B_L$ to its point of intersection with L .

¶ for $j|_{B_L}: B_L \longrightarrow C_L$, see P2P2

Assume $L = \{[*], [*], 0, 0, 0, 0\}$. $\Rightarrow L = \{x e_1 + y e_2\}$

$M = \langle x_1 e_1 + y_1 e_2 + w, x_2 e_1 + y_2 e_2 + \alpha w \rangle$ since $M \cap L \neq \emptyset$

Suppose $\begin{vmatrix} x_1 & y_1 \\ x_2 & y_2 \end{vmatrix} \neq 0$. M can be expressed as

$\langle e_1 + w, e_2 + \alpha w \rangle$. w is a vector expressed as a linear combination of e_3, e_4, e_5 & e_6 .

$\Rightarrow M \cap L = \alpha e_1 - e_2 \Rightarrow r$ is locally expressed