

$\Sigma \cap h$  is a conic curve with multiplicity 2. See P175 & P174.  $\equiv$

Now consider the map  $p$  from  $A$  to the K-3 surface  $\Sigma \subset \mathbb{P}^5$ .  $p$  is given, as the reader may check, by the linear series of curves in the system  $|4\mathbb{H}|$  passing the 16 half-lattice points of  $A$ , or more properly by the linear system  $|4\pi^*\mathbb{H} - \sum E_i|$

on the blow-up  $\tilde{A}$  of  $A$  at the half-lattice points of  $A$ .

$$\begin{array}{ccc} \tilde{A} & \xrightarrow{p} & \Sigma \subset \mathbb{P}^5 \\ & \searrow \downarrow \pi & \\ A & \xrightarrow{j} & S \subset \mathbb{P}^3 \end{array} \quad \begin{array}{l} \exists \text{ a unique map } p: A \\ \rightarrow \Sigma \text{ s.t. } \pi \circ p = j. \end{array}$$

Just as P183 ~ P184, consider the hyperplane  $H$  in  $\Sigma$  corresponding to the tetrahedron with vertices  $P_0, P_{ij}, P_{jk}$  and  $P_{ik}$ . (See P175 ~ P176 for notations).  $\Rightarrow$  By the arguments on P175 ~ P176, we have ①  $H \cap \Sigma = 8$  lines ( $\Sigma \cap H$  is a curve of degree 8, since  $\Sigma$  is the intersection of 3 quadrics, and  $\deg \Sigma = 8$ .)

②  $\pi^{-1}(h_i + h_j) = H$  as a set.

From ① & ②,  $p^*(H) = j^*(h_i + h_j) = 2B_{L_1} + 2B_{L_2} = 4B_{L_1} \Rightarrow$  By P185 & P186, since  $[j^*(h_i)] = [2\mathbb{H}]$ ,  $[j^*(h_i + h_j)] = [p^*(H)] = [4\mathbb{H}]$ .