

and $\#(V_0(L) \cdot \sigma_{1,1}) = 6$, $\#(V_0(L) \cdot \sigma_2) = 2$, $a = 2$ and $b = 6$. $\Rightarrow V_0(L) \sim 2\sigma_2 + 6\sigma_{1,1}$

□

We proceed to a generic net $N = \{F_{\lambda,\mu}\}_{(\lambda,\mu) \in \mathbb{P}^2}$ of quadrics. In this case we may associate to N two varieties of lines: the set $V_0(N) = \bigcup_{\mu,\lambda} V(F_{\mu,\lambda})$

of all lines contained in some quadric of N , and the set $V_1(N)$ of lines that lie on a pencil of quadrics in N . The latter is readily described: if $l \subset \mathbb{P}^3$ lies on a pencil $\overline{F_{\mu,\lambda}, F_{\mu',\lambda'}}$ of quadrics in N , then the intersection of l with the base locus of N consists of two points:

$$l \cap F_{\mu,\lambda} \cap F_{\mu',\lambda'} \cap F_{\mu'',\lambda''} = l \cap F_{\mu'',\lambda''}$$

for any third quadric $F_{\mu'',\lambda''}$ in N .

□ Since $l \subset \overline{F_{\mu,\lambda}, F_{\mu',\lambda'}}$, $l \subset \{x_1 F_{\mu,\lambda} + x_2 F_{\mu',\lambda'} = 0\}$.
 $\Rightarrow l \cap F_{\mu,\lambda} \cap F_{\mu',\lambda'} \cap F_{\mu'',\lambda''} = l \cap F_{\mu'',\lambda''}$ for all (x_1, x_2) .
 $\Rightarrow \#(l \cap F_{\mu'',\lambda''}) = 2$, counting multiplicity.

□

Conversely, if l contains two base points p, q of N , choose a third point $r \in l$; r will lie on a pencil of quadrics from N that, containing