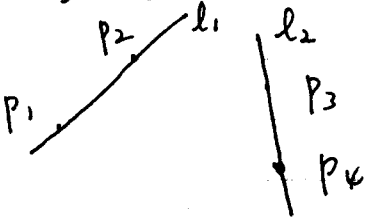
generic four points in $\mathbb{P}^5$, and $\{[a_0,\cdots a_5]\in\mathbb{P}^5 \mid a_0\sigma_0(p_i)+\cdots+a_5\sigma_5(p_i)=0\}$ is a generic pencil.
Thus a generic pencil of conics cuts out on a generic line l a linear system of degree 2.
$\Rightarrow$ By P874, the # of branch points of the corresponding covering map is 2. $\Rightarrow$ Let $\tilde{l}$ be a generic line in W. $\Rightarrow$ $\tilde{l}\cap I_l$ is a set of 2 distinct points.
$\Rightarrow$ $I_{p_1}\cdot I_{p_2}\cdot I_{p_3}\cdot I_{p_4}\cdot I_l = 2$
As in the case I_p^5, for generic points p_1, p_2, p_3, p_4 and a generic line l, $\exists$ no conic in W_1 passing p_i's and tangent to l.



$\Rightarrow$ l_1+l_2 may not be tangent to l.

$\Rightarrow$ $\tilde{I}_{p_1}\cap\tilde{I}_{p_2}\cap\tilde{I}_{p_3}\cap\tilde{I}_{p_4}\cap\tilde{I}_l\cap E=\phi$
$\Rightarrow$ $I_{p_1}\cdot I_{p_2}\cdot I_{p_3}\cdot I_{p_4}\cdot I_l = \tilde{I}_{p_1}\cdot\tilde{I}_{p_2}\cdot\tilde{I}_{p_3}\cdot\tilde{I}_{p_4}\cdot\tilde{I}_l$.
Though we do not consider it, $I_p^5=\tilde{I}_p^5$

Next, the quadratic transformation of $\mathbb{P}^2$ based at three points p_1, p_2, p_3 transforms the net of conics through p_1, p_2, p_3 into the complete series of lines in $\mathbb{P}^2$, and the generic lines in $\mathbb{P}^2$ into conics; the number of conics through p_1, p_2, p_3 tangent to two lines is just the number of