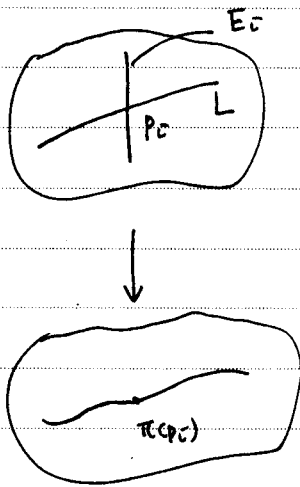


a smooth point. $\Rightarrow \pi(L)$ is a smooth rational curve.



Now

$$L = \pi^*(\pi(L)) - \sum_{p_i \in \pi(L)} E_i$$

and so

$$\begin{aligned} 1 &= \tilde{C} \cdot L = (\pi^* 3H - \sum E_i) \cdot (\pi^* \pi(L) - \sum_{p_i \in \pi(L)} E_i) \\ &= 3H \cdot \pi(L) + \sum_{p_i \in \pi(L)} E_i \cdot E_i. \end{aligned}$$

Again note that $[\tilde{C}] = [H \cap \iota_{\tilde{C}}(\tilde{P}^2)] = [H \cap S]$
 \Rightarrow Since L is a line, $\tilde{C} \cdot L = \#(H \cap S \cap L)$
 $= \#H \cap L = 1$

This tells us that $\pi(L)$ must contain exactly two of the points p_i in case $\pi(L)$ is a line, five of the points p_i if $\pi(L)$ is a conic, and hence that