

the 4-plane spanned by the points  $L_1' \cap L_3$ ,  $L_1' \cap L_4$ ,  $L_2' \cap L_3$ ,  $L_2' \cap L_4$ , and  $L_3' \cap L_2$ .

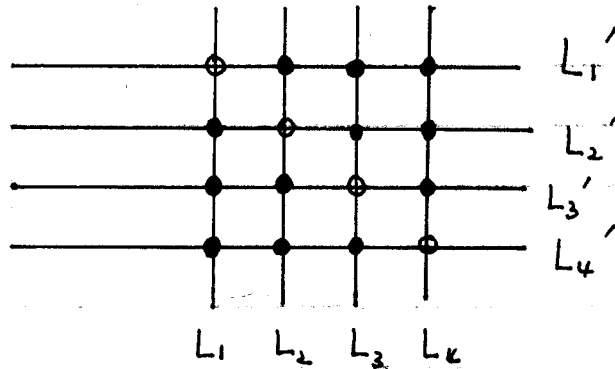


Figure 1

If the points  $L_1' \cap L_3$ ,  $L_1' \cap L_4$ ,  $L_2' \cap L_3$ ,  $L_2' \cap L_4$  and  $L_3' \cap L_2$  are linearly independent, the claim is O.K. But we can not say so yet. I think the proof is not well-organized. We have to show that  $\{L_i\}$  &  $\{L_i'\}$  span a 4-plane. If we read more, we will see this.  $\square$

On the other hand, no quadric surface  $Q = G \cap V_3$  in  $\mathbb{P}^3$  can contain such a configuration of lines: if  $Q$  were smooth, then clearly the lines  $\{L_i\}$  and  $\{L_i'\}$  would belong to opposite families - but in that case  $L_i$  and  $L_i'$  would meet; if  $Q$  had rank three, all lines on  $Q$  would meet, and if  $Q$  were the union of two planes, any