

$$A \sim 16 \cdot \sigma_{4,2} + 16 \cdot \sigma_{3,3}.$$

$$\begin{aligned} \text{If } A \sim a_1 \sigma_6 + a_2 \sigma_{5,1} + a_3 \sigma_{4,2} + a_4 \sigma_{4,1,1} + a_5 \sigma_{3,3} \\ + a_6 \sigma_{3,2,1} + a_7 \sigma_{3,1,1,1} + a_8 \sigma_{2,2,2} + \dots \end{aligned}$$

$$\sigma_{6,0} = \phi$$

$$\sigma_{6,1} = \phi.$$

$$\sigma_{4,1,1} = \{ \Lambda : \dim(\Lambda \cap V_{4+i-a_i}) \geq i \}$$

$$= \{ \Lambda : \dim(\Lambda \cap V_1) \geq 1, \dim(\Lambda \cap V_4) \geq 2$$

$$\dim(\Lambda \cap V_6) \geq 3 \} = \phi, \text{ since } \Lambda = \mathbb{C}^2$$

$$\sigma_{3,2,1} = \{ \Lambda : \dim(\Lambda \cap V_2) \geq 1, \dim(\Lambda \cap V_4) \geq 2$$

$$\dim(\Lambda \cap V_6) \geq 3 \} = \phi$$

$$\sigma_{3,1,1,1} = \{ \Lambda : \dim(\Lambda \cap V_6) \geq 3 \dots \} = \phi$$

$$\dots \text{ Similarly, we get } \sigma_{2,2,2} = \{ \Lambda : \dim(\Lambda \cap V_5) \geq 3 \dots \} = \phi \dots$$

$$\Rightarrow A \sim a_3 \sigma_{4,2} + a_5 \sigma_{3,3}.$$

$$\Rightarrow a_3 = (A \cdot \sigma_2) = a_3 (\sigma_{4,2} \cdot \sigma_2) \text{ and } a_5 = (\sigma_{3,3} \cdot \sigma_{1,1})$$

□

Now, for any point  $a \in A$ , we can find a hyperplane  $V_4 \subset \mathbb{P}^5$  containing the corresponding line  $L_a \subset X$  and intersecting  $X$  transversely (by Bertini, the generic  $V_4$  containing  $L_a$  meets  $X - L_a$  transversely, and by direct examination we see that  $V_4 \cap X$  is smooth along  $L_a$  for a generic such 4-plane).

□ Consider a linear system  $\{H \cap X \mid H \supset L_a\} \Rightarrow$