nor g_2 as a factor.

For $\{f_1, f_2, f_3, f_4\}$, consider $f_1+\alpha_1 f_2+\alpha_2 f_3$, & f_4 $\Rightarrow$ $f_1+\alpha_1' f_2+\alpha_2 f_3$ may be considered. $\Rightarrow$ We conclude the same result as above. $\Rightarrow$ We have the desired.

$$(\sigma_1=0)=(f_1=0). \quad (\sigma_2=0)=(f_2=0).$$

$\Rightarrow (\alpha\sigma_1+\beta\sigma_2=0)=(\alpha f_1+\beta f_2=0)$, for

$$\sigma_1 : \mathbb{P}^2 \longrightarrow L.$$

$$\sigma_1 : U_0 \longrightarrow L|U_0 \quad \Longrightarrow \quad \begin{tikzcd} {[X_0,X_1,X_2]} \arrow[d] & U_0 \arrow[r, "\sigma_1"] \arrow[d] & \mathbb{C} \\ (x_1, x_2) & \mathbb{C}^2 \arrow[ur, "{f_1(1,x_1,x_2)}"'] & \end{tikzcd}$$

see p166 & p165.

Especially see P165. for the correspondence. ⊔

Reciprocity Formula, I

$$\dim|\mathcal{J}_{\Gamma_0}(n)| = \left\{\frac{n(n+3)}{2}-d\right\} + h^0(\mathcal{J}_{\Gamma}(n-3)).$$

Thus, the superabundance of Γ_0 relative to the linear system $|\mathcal{O}_{\mathbb{P}^2}(n)|$ is given by

$$\omega = h^0(\mathcal{J}_{\Gamma}(n-3)).$$

Proof. Let S be the blow-up of $\mathbb{P}^2$ along Γ_0 considered above and $L=\pi^*H^n-E$. Then $K_S+L=\pi^*H^{n-3}$ and by the result of P.713