

$$\mathbb{C}_1^2 = \frac{z:\mathbb{C}w \in \mathbb{C}^2 \times \mathbb{P}^1}{z_0 w_1 = z_1 w_0} \xrightarrow{\pi} \mathbb{C}^2$$

$$z \neq 0 \xrightarrow[\text{eind}]{} \mathbb{C}w = \mathbb{C}z = \mathbb{C}\overline{z_0:z_1} = \begin{cases} \mathbb{C}\overline{1:z_1/z_0} & z_0 \neq 0 \\ \mathbb{C}\overline{z_0/z_1:1} & z_1 \neq 0 \end{cases}$$

$$z = 0 \xrightarrow[\text{bel}]{} \mathbb{C}w \in \mathbb{P}^1$$

$$E|E = -1$$

$$E|C = 0 \text{ if } E \cap C = \emptyset$$

$$K_{X \cup E} = E \cup \overline{\pi \times K_X}$$

$$K_{X \cup E}|K_{X \cup E} = K_X|K_X - 1$$

$${}^1_{\blacktriangle} \mathbb{C}^2 \times \mathbb{C}^2 = \frac{\mathbb{L} \times \mathbb{L} \in {}^1_{\blacktriangle} \mathbb{C}^2 \times \mathbb{C}^2}{\mathbb{L} \in \mathbb{L}} = \frac{\langle \mathbb{L}^0:\mathbb{L}^1 \rangle \times \mathbb{L}^0:\mathbb{L}^1}{\mathbb{L}^0\mathbb{L}^1 = \mathbb{L}^1\mathbb{L}^0}$$

$${}^1_0 \blacktriangle \mathbb{C}^2 \times \mathbb{C}^2 = \frac{\langle 0 \neq \mathbb{L}^0:\mathbb{L}^1 \rangle \times \mathbb{L}^0:\mathbb{L}^1}{\mathbb{L}^0\mathbb{L}^1 = \mathbb{L}^1\mathbb{L}^0} \xrightarrow{\gamma} \mathbb{C}^2 \cong \frac{\mathbb{L}^1}{\mathbb{L}^0}:\mathbb{L}^0$$

$${}^1_1 \blacktriangle \mathbb{C}^2 \times \mathbb{C}^2 = \frac{\langle \mathbb{L}^0:\mathbb{L}^1 \neq 0 \rangle \times \mathbb{L}^0:\mathbb{L}^1}{\mathbb{L}^0\mathbb{L}^1 = \mathbb{L}^1\mathbb{L}^0} \xrightarrow{\gamma} \mathbb{C}^2 \cong \frac{\mathbb{L}^0}{\mathbb{L}^1}:\mathbb{L}^1$$

$$\begin{array}{ccc} & & \mathbb{L}:\mathbb{L} \in \mathbb{C} \times \mathbb{C}^{\times} \cong \frac{\mathbb{L}^1}{\mathbb{L}^0}:\mathbb{L}^0 \\ & \nearrow \gamma & \downarrow \gamma \\ \langle \mathbb{L}^0 \neq 0:\mathbb{L}^1 \neq 0 \rangle \times \mathbb{L}^0:\mathbb{L}^1 \in {}^1_{01} \blacktriangle \mathbb{C}^2 \times \mathbb{C}^2 & & \\ & \searrow \gamma & \downarrow \gamma \\ & & \frac{1}{\mathbb{L}}:\mathbb{L} \in \mathbb{C} \times \mathbb{C}^{\times} \cong \frac{\mathbb{L}^0}{\mathbb{L}^1}:\mathbb{L}^1 = \frac{\mathbb{L}^1}{\mathbb{L}^0}:\mathbb{L}^0 \end{array}$$

$$\langle L^0:L^1 \rangle \times L^0:L^1 \in {}^1\blacktriangle C^2 \times C^2 \xrightarrow{\text{lp}} C^2 \ni L^0:L^1$$

$$\pi^{-1} L^0:L^1 = \begin{cases} \langle L^0:L^1 \rangle & L^0:L^1 \neq 0:0 \\ {}^1\blacktriangle C^2 & L^0:L^1 = 0:0 \end{cases}$$