

$$\begin{aligned}
 \begin{matrix} \mathbb{E}_2^{0,1} \\ \downarrow \\ [a] \end{matrix} & \xrightarrow{\phi} H^1(U, \mathcal{O}^*) \\
 & \longmapsto \lambda_1 \left(\frac{f_1}{g_1}, \frac{f_1}{h_1}, \frac{g_1}{h_1} \right) + \lambda_2 \left(\frac{f_2}{g_2}, \frac{f_2}{h_2}, \frac{g_2}{h_2} \right) \\
 & = \lambda_1 (g_{\alpha\beta}^1) + \lambda_2 (g_{\alpha\beta}^2).
 \end{aligned}$$

where $g_{\alpha\beta}^1 = \frac{f_1}{g_1}$, $g_{\alpha r}^1 = \frac{f_1}{h_1}$ $g_{\beta r}^1 = \frac{g_1}{h_1}$

$g_{\alpha\beta}^2 = \frac{f_2}{g_2}$ $g_{\alpha r}^2 = \frac{f_2}{h_2}$ & $g_{\beta r}^2 = \frac{g_2}{h_2}$

$\Rightarrow \phi$ is well-defined, for if we have another representation for $a_i^{0,1}$'s, then

$$g^1 - g'^1 \in \text{im } \delta \quad \& \quad g^2 - g'^2 \in \text{im } \delta.$$

The argument above proves the statement 3, i.e.,

3. The map i assigns to 1_D the fundamental class $\eta_D \in H^2(M, \mathbb{Z})$ of the divisor D . \square

3. The map i assigns to 1_D the fundamental class $\eta_D \in H^2(M, \mathbb{Z})$ of the divisor D .

4. The map $H^2(M, \mathbb{C}) \rightarrow H^2(\Omega(*))$ is again induced by the isomorphism $(***)$ and inclusion $\Omega^p \hookrightarrow \Omega^p(*)$.

Now the isomorphism

$$\begin{aligned}
 H^1(M, \mathbb{C}) & \cong \ker R \\
 & = \underbrace{\{ \text{1-forms of the second kind} \}}_{\text{exact forms}}
 \end{aligned}$$

gives $p_i = b_i$.

\square $\varphi \in H^1(\Omega(*))$ with $R(\varphi) = 0. \Rightarrow$