on $D_1 \cdots D_k$

s.t φ has poles on $D_1, \cdots D_k$, i.e $\{\varphi_{\alpha_0 \cdots \alpha_q}\}$ have poles

$\Rightarrow \exists$ an ample and irreducible divisor L s.t $k>0$

$$H^q(\underline{U}, \Omega^p(kL + D_1 + \cdots + D_k)) = 0 \quad \text{for } q>0.$$

$$\Rightarrow \exists \quad \tau \in C^{q-1}(\underline{U}, \Omega^p(kL + D_1 + \cdots + D_k))$$

$$\cap$$

$$C^{q-1}(\underline{U}, \Omega^p(kL) \cup \Omega^p(D_1) \cup \cdots \cup \Omega^p(D_k))$$

s.t $\delta\tau = \varphi$. $\qquad \cap\ C^{q-1}(\underline{U}, \Omega^p(*))$

$\Rightarrow \quad H^q(\underline{U}, \Omega^p(*)) = 0$. for $q>0$.

" Correction on P468. back

$$R : \mathcal{H}^1(\Omega(*)) \longrightarrow \bigoplus_{D \text{ irreducible}} \mathbb{C}_D$$

$$\varphi \longmapsto \bigoplus \lambda_i 1_{D_i} \quad \text{where}$$

$(\varphi)_\infty = D_1 + \cdots + D_k$ irreducible and

$$\lambda_i = \frac{1}{2\pi\sqrt{-1}} \int_{\gamma_{D_i}} \varphi$$ "

Let D_1, D_2 irreducible effective divisors on M.

$\Rightarrow \Omega^p(D_1) \cup \Omega^p(D_2)$ is the sheaf of meromorphic p-forms with poles of order ≤ 1 on D_1 and D_2.

$\Rightarrow \Omega^p(D_1 + D_2)$ is the sheaf of holomorphic p-forms with values in the line bundle $[D_1 + D_2]$, which is identified with the sheaf $\Omega^p(D_1) \cup \Omega^p(D_2)$.

Consequently, $''E_2^{p,q} = 0$ for $q>0$ and