

$$H^k(X, \mathbb{C}) \cong \bigoplus_{p+q=k} H^{p,q}(X).$$

$$\prod_{p \in \mathbb{P} \text{ divides } n} (a_p, b_p)_p = 1$$

$$\omega = \frac{i}{2\pi} \partial \bar{\partial} \log \|z\|^2$$

$$H^1(G; \mathbb{Z}) \cong 0.$$

Th (Chow) Every analytic subset of \mathbb{P}^n is an algebraic variety.

$$H^{\bullet}_{\text{an}}(E) \cong H^{\bullet-n}(M)$$

$$H^2(U; \mathbb{Q}) \cong H^2(V; \mathbb{Q})$$

$$\prod_{\alpha} F(u_{\alpha}) \Rightarrow \prod_{\alpha < \beta} F(u_{\alpha\beta}) \Rightarrow \prod_{\alpha < \beta < \gamma} F(u_{\alpha\beta\gamma})$$

$$\dots \rightarrow \hat{H}^{-1}(G, A) \rightarrow \hat{H}^{-1}(G, B) \rightarrow \hat{H}^{-1}(G, C) \rightarrow \hat{H}^0(G, A) \rightarrow \dots$$

$$\prod_{z \in \mathbb{C}} f(z)^{\text{ord}_z f} = \prod_{z \in \mathbb{C}} g(z)^{\text{ord}_z g}$$

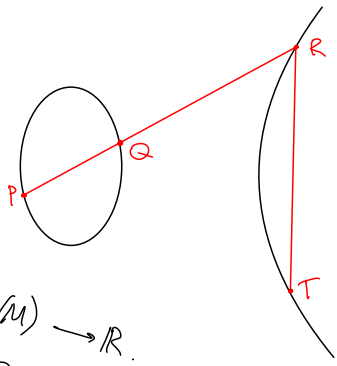
$$H^1(\mathcal{U}; \mathbb{R}) \cong H^1_{\text{an}}(U; \mathbb{R})$$

$$H^0(\mathbb{P}^n, \mathcal{O}_{\mathbb{P}^n}(H)) \rightarrow H^0(V, \mathcal{O}_V(H)) \rightarrow H^1(\mathbb{P}^n, \mathcal{O}_{\mathbb{P}^n}(H-V))$$

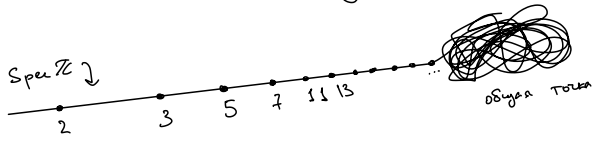
$$\sum_{p \in \mathbb{C}} \text{ord}_p(f) = 0.$$

$$0 \rightarrow \mathbb{Z} \rightarrow \mathcal{O} \xrightarrow{\omega} \mathcal{O}^* \rightarrow 0$$

$$\int_M H^2(M) \otimes H_c^{n-2}(M) \rightarrow \mathbb{R}.$$



$$H^2(G; \mathbb{Z}^*) \cong \mathbb{Z}/n\mathbb{Z}$$



$$t \mapsto [1 : t : \dots : t^n]$$