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$H^{1,1}(M) \cap H^2(M, \mathbb{Z})$ is represented by analytic cycles and $H^{n-1,n-1}(M) \cap H^{2n-2}(M, \mathbb{Z})$ is represented by analytic cycles by P164. $\Rightarrow$ By Poincare duality, since

$$H^2(M, \mathbb{Z}) \otimes H^{2n-2}(M, \mathbb{Z}) \longrightarrow \mathbb{Z} \text{ is nondegenerate}$$

, by the observation on P32, the intersection pairing between divisors and curves on M is nondegenerate.

Refer to the result on P64.

$V = \{ \eta_D \in H^{1,1}(M) : Q(\eta_D, \eta_E) = 0 \}$

$\Rightarrow \exists$ D divisor on M s.t $D \cdot E = 0$ and $D \cdot D = d > 0$.

We will show that such a divisor D can not exist. First, since E has strictly positive intersection number with any effective divisor, neither mD nor $-mD$ can be effective for any $m \neq 0$.

Since E is positive, $\Rightarrow \exists$ k_0 s.t kE is effective for $k \geq k_0$. For by the Kodaira embedding theorem, $\iota_{[kE]} : M \longrightarrow \mathbb{P}^N$ is embedding. $\Rightarrow$

$\iota^*_{[kE]} H = kE$ $\Rightarrow$ kE is represented by $H \cap M$, which implies kE is effective. $\Rightarrow$ $\int_D c_1(kE)$