$$i\langle[\Lambda, \Theta]\eta, \eta\rangle + 2\pi\mu(n-p)\|\eta\|^2 = i\langle[\Lambda, 1\otimes\Theta_E]\eta, \eta\rangle$$

$\Rightarrow$ left-hand side $\geq 2\pi\mu(n-p)\|\eta\|^2 > C(n-p)\|\eta\|^2 > C\|\eta\|^2$.

right-hand side $\leq C\|\eta\|^2$.

$\Rightarrow$ Thus only chance for equality is $\eta = 0$.

The Lefschetz Theorem on (1,1)-classes.

As an application of Theorem B, we will complete our picture of the correspondences among divisors, line bundles, and Chern classes on a complex submanifold of projective space. First, we have the

Proposition. Let $M \subset \mathbb{P}^N$ be a submanifold. Then every line bundle on M is of the form $L = [D]$ for some divisor D; i.e.,

$$\mathrm{Pic}(M) \cong \frac{\mathrm{Div}(M)}{\text{linear equivalence}}.$$

pf) To prove this, we have to show that every line bundle on M has a global meromorphic section.

「See P136, if s is a global meromorphic section of L, $L = [(s)]$. 」

To find such a section, let H denote the restriction to M of the hyperplane bundle on $\mathbb{P}^N$.