

sheaf of sections of a holomorphic vector bundle — for $E \rightarrow M$ a holomorphic vector bundle and $V \subset M$ a subvariety, the kernel of the restriction map $\mathcal{O}_M(E) \rightarrow \mathcal{O}_V(E)$ is the sheaf of sections of a vector bundle $\Leftrightarrow V$ is of codimension 1 in M — and so we cannot get a direct grip on them using our technique of harmonic theory.

\mathbb{F} $E \rightarrow M$ holomorphic vector bundle
 $V \subset M$ subvariety.

(\Leftrightarrow) V is of codimension 1 in $M \Rightarrow V$ is a hypersurface of $M \Rightarrow V$ is a divisor of M .

\Rightarrow By P138 ~ P139 again, we have an exact sequence

$$0 \rightarrow \mathcal{O}_M(E \otimes [-V]) \rightarrow \mathcal{O}_M(E) \xrightarrow{\gamma} \mathcal{O}_V(E|_V) \rightarrow 0$$

$\Rightarrow \mathcal{O}_M(E \otimes [-V]) = \ker \gamma$ by Grauert & Remmert
 P90

(\Rightarrow) Assume V is smooth. I don't know now. 1993
 2.9. Sometime later, it will be made clear. \Rightarrow
 (Maybe, \exists a clue in Coherent Analytic Sheaves)

The theory of coherent sheaves will be discussed in Chapter 5.

Another approach to the problem might be to emulate the proof of the proposition on P.161 and do an induction on the dimension of M — for example, if we could find a smooth hypersurface $V \subset M$ containing x and y , then to show the map (*) surjective, we would only have to prove it for $L|_V$ on V and show that the restriction map