angent vectors $\{\omega_\alpha\}$ for $T_x^{*\prime}$, we can find a smooth hyperplane section V_α of M through x, such that ω_α is not in the kernel of the natural projection map $T_x^{*\prime}(M) \longrightarrow T_x^{*\prime}(V_\alpha)$.

「 For a given cotangent vector $\omega_\alpha \in T_x^{*\prime}$, we can find a smooth hyperplane section V_α of M through x, s.t ω_α is not in the kernel of the natural projection map $T_x^{*\prime}(M) \longrightarrow T_x^{*\prime}(V_\alpha)$.

First of all, consider the linear system of hyperplane sections of $M \subset \mathbb{P}^N$ containing x.

$\Rightarrow$ By the same argument as above, generic hyperplane sections $H \cap M$ are smooth for all $y \in H \cap M$.

For generic hyperplane sections V, $V = H' \cap M$, ω_α is not in the kernel of the natural projection map $T_x^{*\prime}(M) \longrightarrow T_x^{*\prime}(V)$.

$\Rightarrow \{H\} \cap \{H'\} = \{H''\}$.

$\Rightarrow V_\alpha = V' = H'' \cap M$ is smooth s.t ω_α is not in the kernel of the natural projection map $T_x^{*\prime}(M) \to T_x^{*\prime}(V')$. 」

Then by induction we can find m_α such that for $m > m_\alpha$, the differential map

$$H^0(V_\alpha, \mathcal{J}_x(E \otimes L^m)) \longrightarrow T_x^{*\prime}(V_\alpha) \otimes (E \otimes L^m)_x$$

is surjective.

「 Since $\dim V_\alpha = \dim M - 1 < \dim M$, by induction, the differential map is surjective. 」