

least 2.

Let $\sigma_0, \sigma_1, \dots, \sigma_n$ be the set of linearly independent holomorphic sections of $[D_\lambda]$ corresponding to the linear system $|D_\lambda|_{\lambda \in \mathbb{P}^n}$. Let τ be a section of $[E]$ s.t. $E = (\tau=0)$. $\Rightarrow \sigma_i \otimes \tau^{-1} \in H^0(M, \mathcal{O}(D_\lambda - E))$. \Rightarrow Given any divisor $D_{\lambda'} - E$, if we let $\sigma = a_0 \sigma_0 + \dots + a_n \sigma_n$ a section of $[D_\lambda]$ s.t. $(\sigma=0) = D_{\lambda'}$, then $\sigma \otimes \tau^{-1}$ is a section of $[D_{\lambda'} - E]$ s.t. $(\sigma \otimes \tau^{-1}=0) = D_{\lambda'} - E$. $\Rightarrow \{D_{\lambda'} = D_\lambda - E\}$ form a linear system. $\cap D_{\lambda'} = \cap (D_\lambda - E)$ contains no divisor. Otherwise, E can not be the largest divisor s.t. $D_\lambda - E > 0$. $\Rightarrow \cap D_{\lambda'}$ has codimension ≥ 2 . \square

Then we may define a rational map

$$f: M \longrightarrow \mathbb{P}^{n*}$$

by setting

$$f(p) = \{ \lambda : D_{\lambda'} \ni p \} \in \mathbb{P}^{n*};$$

this is well-defined away from the base locus of $\{D_{\lambda'}\}$.

Consider the vector $(\overset{\otimes \tau^{-1}(p)}{\sigma_0(p)}, \dots, \overset{\otimes \tau^{-1}(p)}{\sigma_n(p)}) \in \mathbb{C}^{n+1}$ where $p \notin \cap D_{\lambda'}$.
 $\Rightarrow \{ [a_0, \dots, a_n] \in \mathbb{P}^n \mid a_0 \overset{\otimes \tau^{-1}(p)}{\sigma_0(p)} + \dots + a_n \overset{\otimes \tau^{-1}(p)}{\sigma_n(p)} = 0 \} = H$
 is a hyperplane in \mathbb{P}^n , and, for each $[a_0, \dots, a_n] \in \mathbb{P}^n$,
 $(a_0 \sigma_0 \otimes \tau^{-1} + \dots + a_n \sigma_n \otimes \tau^{-1} = 0) = D_{[a_0, \dots, a_n]} \ni p$.
 $\Rightarrow H = \{ \lambda : D_{\lambda'} \ni p \} \in \mathbb{P}^{n*}$ \square