

$$\int_M f^* \psi_N > 0.$$

See p. 18 for the orientation preservice of a holomorphic map. \Rightarrow

On the other hand, for any $q \in N$ we have

$$H^{2n}(N-397, \mathbb{R}) = 0,$$

hence in $N-397$

$$\psi_N = d\varphi$$

for some $\varphi \in A^{2n-1}(N-397)$.

Since $H_n(M-p) = H_n(M-B_\epsilon(p)) = 0$, & $H^n(M-p, \mathbb{R}) \cong \text{Hom}(H_n(M-p), \mathbb{R}) = 0$. \Rightarrow

Then if $q \notin f(M)$,
$$\int_M f^* \psi_N = \int_{\partial M} d f^* \varphi = 0,$$

a contradiction.

By Stokes' theorem

$$\int_M f^* \psi_N = \int_M f^* d\varphi = \int_M d f^* \varphi = \int_{\partial M} f^* \varphi = 0$$

$$f^* \psi_N = f^* d\varphi \quad \text{on } M.$$

$$\begin{array}{ccc} M & \xrightarrow{f} & N-397 \subset N \\ T^*(N-397) & \xrightarrow{f^*} & T^*M \end{array}$$

$$d^* \varphi = \psi_N|_{N-397}.$$

