$S = T_\Gamma$ for a piecewise smooth chain Γ.

$\ulcorner$ $S(\varphi) = \int_\Gamma \varphi = \int_M S_\delta \wedge \varphi \qquad \varphi \in A_c^{n-p}(M),\ S_\delta \in A_c^p(M).$

$\Rightarrow$ S_δ is the Poincare-dual of Γ.

$$\int_\Gamma \psi = \int_M S_\delta \wedge \psi = (\pm 1)\int_M \psi \wedge S_\delta = \pm (T \cdot S).$$ $\lrcorner$

In case M is a complex manifold of complex dimension n, the pairing
$$H_{\bar\partial}^{p,q}(M) \otimes H_{\bar\partial}^{n-p,n-q}(M) \longrightarrow \mathbb{C}$$
induces an intersection number on $\bar\partial$-closed currents of complementary type (p,q) and $(n-p, n-q)$.

$\ulcorner$ By $H_{\bar\partial}^{p,q}(M) \cong H^q(\mathcal{D}^{p,*}(M), \bar\partial)$, P 382. $\lrcorner$

In case $p = q$ and T is a real (p,p) current and S a real $(n-p, n-p)$ current, then
$$dT = 0 \iff \bar\partial T = 0,$$
$$dS = 0 \iff \bar\partial S = 0,$$
and the intersection number of closed currents is the same in either the d or $\bar\partial$ sense.

$\ulcorner$ By 386, for real $T \in \mathcal{D}^{p,p}(M)$, $dT = 0 \iff \bar\partial T = 0$

Let T_ϵ be a smooth form in the cohomology class defined by