

codimension ≥ 2 or more, and so by our general method represents a cohomology class $\eta_{W'}$ in M ; indeed, $\eta_{W'} = \eta_W$ since in each Δ_i

$$W - W' = \partial \left(\{ z : z - t \cdot e_i \in W, 0 \leq t \leq \rho(\|z\|) \} \right)$$

\square W' is real smooth manifold outside W_s .

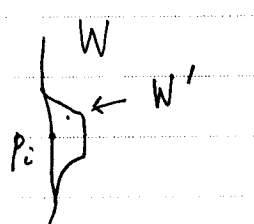
W' is not a complex manifold outside W_s .

$\text{cod } W_s \geq 2 \leftarrow$ real dimension.

\Rightarrow By P 61, if we define a linear functional on $M_{DR}^{2(n-k)}(M)$ by

$$[\varphi] \longmapsto \int_W \varphi,$$

then by Poincaré duality this linear functional determines a cohomology class $\eta_{W'} \in H_{DR}^{2k}(M)$, called the fundamental class of W' .


 $\Rightarrow W - W' = \partial \left(\{ z : z - t \cdot e_i \in W, 0 \leq t \leq \rho(\|z\|) \} \right)$

$$\Rightarrow \int_W \varphi = \int_{W' + \partial K} \varphi = \int_{W'} \varphi + \int_{\partial K} \varphi$$

$$\Rightarrow \int_{\partial K} \varphi \stackrel{\uparrow}{=} 0 = \int_K d\varphi$$

this follows from the proof on P 33, i.e.,

$\partial D_\epsilon \rightarrow 0$ as $\epsilon \rightarrow 0$ since singularities of complex-analytic subvarieties occur only in real codimension ≥ 2 . \square