¨u
ü $\cdot(M^{2n},\omega)$
J $_U GAùgd - logo[height=2cm]acad-logoacademie_logo2acad-logo$

$(f_t)_{t\in S}: P^1 \to M$
M $\cdot(X^n,\omega)$ä$c_1(K_X)\cdot\omega^{n-1}<0 K_X c_1(K_X)(1,1) T\geq 0$
XäXp
ä
X
äX

$Z \dim_C Z = N \mathcal{D}\subset \mathcal{O}_Z(T_Z)$

$X^{2n} C^\infty Z$

$f: X\hookrightarrow Z C^\infty$

$$f_* T_{X,x} = T_{M,f(x)} \simeq T_{Z,f(x)}/\mathcal{D}_{f(x)}$$

$\forall x\in X, f_*T_{X,x}\oplus \mathcal{D}_{f(x)} = T_{Z,f(x)}.$

$f(X)\cap \mathcal{D}_{sing}=\emptyset$

$\mathcal{D}\subset T_Z f_t: X\hookrightarrow (Z,\mathcal{D}) t\in[0,1](X,J_{f_t})$

$\cdot(Z,\mathcal{D},\alpha)$

- Z
- $\mathcal{D}\subset T_Z$
- $\alpha f: X\hookrightarrow (Z,\mathcal{D})$

(X,J_f)

X

(X,ω)äωä$(Z,\mathcal{D})$

$\cdot Z N\geq 2n n X = C^n/\Lambda n \mathcal{D} Z$

$P^N PGL(N+1,C)$

$S^{2p+1}\times S^{2q+1}$

$\cdot(X,J)(Z,\mathcal{D})\mathcal{D}\subset T_Z J = J_f Z$

$\Gamma^\infty(X,Z,\mathcal{D})$é$f: X\hookrightarrow (Z,\mathcal{D})\mathcal{J}^\infty(X) X$

$Alert f\mapsto J_f, \Gamma^\infty(X,Z,\mathcal{D})\to \mathcal{J}^\infty(X)$

$C^{r+\alpha}$ö

$\cdot J_f \Gamma^\infty(X,Z,\mathcal{D}) f$

$f\mapsto J_f w = u + f_* v: X\to f^*T_Z = f^*\mathcal{D}\oplus f_* TX f$

$\mathcal{D}\overline{\partial} f = \overline{\partial}_{J_f} f \overline{\partial} v = \overline{\partial}_{J_f} v (X,J_f)$

$\cdot f: X\hookrightarrow (Z,\mathcal{D}) f \theta \mathcal{D}:$

$f Alert \overline{\partial} f(x)\in End_{\overline{C}}(T_{X,x}, T_{Z,f(x)}) x\in X;$

$x\in X \eta\in End_{\overline{C}}(T_X)\lambda\in\mathcal{D}_{f(x)}\theta(\overline{\partial} f(x)\cdot\xi,\lambda) = \eta(\xi)\xi\in T_X$

$\mathcal{U} f \Gamma^\infty(X,Z,\mathcal{D})\mathcal{V} J_f \mathcal{J}^\infty(X)$

$rank\,\mathcal{D} = N-n\geq n^2 = \dim End(T_X) N\geq n+n^2$

$n\geq 1 k\geq 4n Z_{n,k} N = 2k+2(k^2+n(k-n))()\mathcal{D}_{n,k}\subset T_{Z_{n,k}} n$

$n(X,J) f: X\hookrightarrow Z^R_{n,k}\mathcal{D}_{n,k} Z_{n,k} J = J_f$

$k = 4n N = 38n^2+8n N = O(n^2)$

$Z_{n,k}$

$\cdot(X,J,\omega)\omega J J^*\omega = \omega\omega(\xi,J\xi)>0(1,1)\beta Z$ä$\mathcal{D}\subset T_Z\beta\mathcal{D}\beta$ä$\mathcal{D}$

$(Z,\mathcal{D},\beta)(X,J,\omega)\dim_C X = n\{\omega\}\in H^2(X,Z) f: X\hookrightarrow (Z,\mathcal{D},\beta)$

$\cdot N_J(\zeta,\eta) = 4\,Re\,[\zeta^{0,1},\eta^{0,1}]^{1,0} = [\zeta,\eta]-[J\zeta,J\eta]+J[\zeta,J\eta]+J[J\zeta,\eta].\theta(Z,\mathcal{D}) J_f f: X\hookrightarrow (Z,\mathcal{D})\forall z\in X\forall\zeta,\eta\in T_z X$ $\Phi(U)$

$(Z,\mathcal{D},\mathcal{S})\mathcal{S} Z Z\mathcal{D}\subset T_Z[\mathcal{S},\mathcal{S}]\subset\mathcal{D}(X,J) n f: X\hookrightarrow (Z,\mathcal{D}) J = J_f Im(\overline{\partial} f)\subset\mathcal{S}\dim Z = O(n^4)$

$\Phi: U\to Z$

$X X\times X U\supset\Delta$