2. For any connected manifold of positive dimension

$$K^{-1}(Y) = [Y; G^{-\infty}(X)]$$ Y any compact manifold

$$G^{-\infty}(X) = \{ P : C^\infty(X) \to C^\infty(X),\ P = Id + A,$$
$$A \in \Psi^{-\infty}(X),\ \exists\ (Id+A)^{-1} = P^{-1} \}.$$

$$\det : Id + \Psi^{-\infty}(X) \to \mathbb{C}$$

$$\det(P) \neq 0 \iff P \in G^{-\infty}(X)$$

all class characters

$$K^{-1}(Y) \longrightarrow H^{\text{odd}}(Y)$$

$$c_1^*(f) = \frac{1}{2\pi i} d \log \det f$$
$$= \frac{1}{2\pi i} \operatorname{Tr}(f^{-1} d_y f)$$

similar formula for higher classes