

↓

Univ. cpx of chiral sing. fibers
defined over \mathbb{Z}

$f : M \rightarrow N$ oriented map

DEF
⇔

fibers of $f|_{M-S(f)} : M-S(f) \rightarrow N$
are consistently oriented

↑
sing. pt set of f

↓

$$\mathcal{G}_f : H^k(\text{Univ. cpx}) \rightarrow H^k(N; \mathbb{Z})$$

Sensitive to orientation of
the source manifold.

Oriented τ -cob. invariance holds.