

• What do **sing. fibers** serve for?

$$f: M \rightarrow \underline{N} \ni y \rightsquigarrow f^{-1}(y)$$

TARGET

Can serve for constructing

certain invariants in the target.

[$\Sigma(f) \subset M$: set of sing. of type Σ

[$\mathcal{F}(f) \subset N$: set of pts in N over which lies a sing. fiber of type \mathcal{F}

[$\overline{\Sigma(f)}^* \in H^*(M)$ HOMOTOPY INV.

[$\overline{\mathcal{F}(f)}^* \in H^*(N)$ COBORDISM INV.