

$$\begin{array}{ccccc}
 A \oplus A & \xrightarrow{(f,g)} & X & \xrightarrow[p]{\text{TFib}} & Y \\
 \downarrow (1,1) & \searrow (\partial_0, \partial_1) & & \nearrow & \uparrow h \\
 A & & & & \tilde{A} \\
 & \xleftarrow[\sigma]{\text{Weq}} & & &
 \end{array}$$

A commutative diagram illustrating a relationship between various objects and morphisms. The objects are arranged in three rows:

- Top row: $A \oplus A$, X , and Y .
- Bottom row: A and \tilde{A} .

 The morphisms are:

- A horizontal arrow from $A \oplus A$ to X labeled (f, g) .
- A horizontal arrow from X to Y labeled p above and TFib below.
- A vertical arrow from $A \oplus A$ down to A labeled $(1, 1)$.
- A diagonal arrow from $A \oplus A$ down to \tilde{A} labeled (∂_0, ∂_1) .
- A diagonal arrow from X down to \tilde{A} labeled Cofib .
- A dashed diagonal arrow from Y down to \tilde{A} .
- A vertical arrow from \tilde{A} up to Y labeled h .
- A horizontal arrow from \tilde{A} left to A labeled Weq above and σ below.