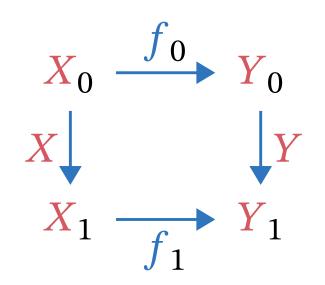
**Definition** (Arrow category). Given any category **C**, its *arrow category* **Arr**(**C**) is the category in which:

- 1. Objects: An object  $X \in \mathbf{Arr}(\mathbf{A})$  is a morphism  $X : X_0 \to X_1$  of  $\mathbf{C}$ ;
- 2. Morphisms: A morphism  $f: X \to Y$  in Arr(C) is a commutative square



in **C**;

3. Composition: Composition in Arr(C) is given by playing commutative squares side by side.