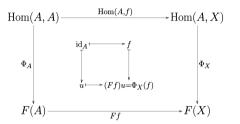
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What you needa know about Yoneda

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Seminar on Functional Programming and Logic, Summer Semester 2025

Motivation

- ► A common sentiment in many cultures is the idea that people are defined by how they interact with their surroundings.
- "Tell me your company, and I will tell you what you are." 1
- ► The Yoneda Lemma is the result of applying this way of thinking to mathematical objects within the extremely general setting of *Category Theory*.

¹Quoted as a proverb in *Don Quixote*

Categories

A category is defined as a class of objects together with a class of morphisms (sometimes called arrows)

- Each morphism f : A → B relates some source object A to some target object B.
- ► Two morphisms $f: A \rightarrow B$ and $g: B \rightarrow C$ can be composed into a morphism $g \circ f: A \rightarrow C$
- ▶ $h \circ (g \circ f) = (h \circ g) \circ f$ (Composition is associative)

