

Invariance in the Lambda Calculus through Explicit Substitutions

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14-06-2025

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What is computation?

A property of problems or functions to be solved by some mechanical process. The main method of studying said mechanical process is done through a *machine model*.

Turing Machines, λ -calculus and Invariance

Models of computation developed at the start of the 20th century to solve -Hilbert's problems-.

- Turing Machines, Alan Turing (1936) -cite-
- λ -calculus, Alonzo Church (1930-1940) -cite-

These two models, and a third that we will not discuss here, represent the same group of functions. This came to define the idea of computation.

Equivalence and Invariance of Models