

# A typed $\lambda$ -calculus, *TL*

## Principles of Programming Languages

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## 1 Preamble

### 1.1 **TODO** Notable references

:TODO:

### 1.2 **TODO** Table of contents

- [Preamble](#)

## 2 Introduction

In this section we extend our previously considered untyped  $\lambda$ -calculus by defining a typing relation, essentially adding type checking (enforcement).

:TODO: Is this appropriate at this stage? We then investigate adding some algebraic type formers to the language. This involves the introduction of a rudimentary form of pattern matching.

## 3 The simply typed $\lambda$ -calculus

:TODO:

## 4 “Simple extensions” to the simply typed $\lambda$ -calculus

:TODO: