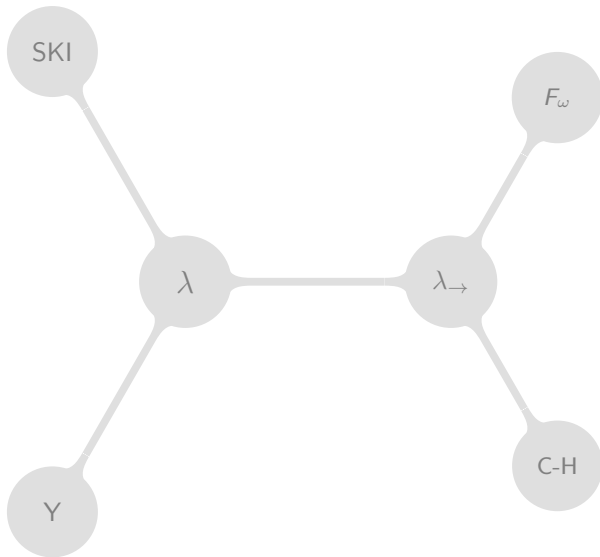# Introduction to Lambda Calculus
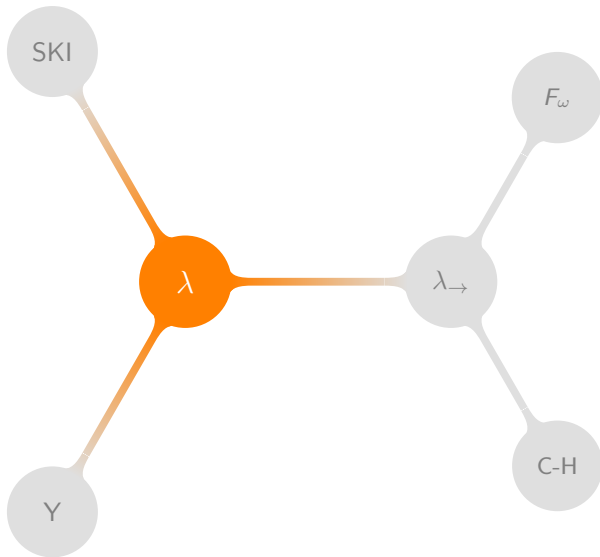
Maciek Makowski (@mmakowski)

10th August 2014

The Plan

Basic Lambda Calculus
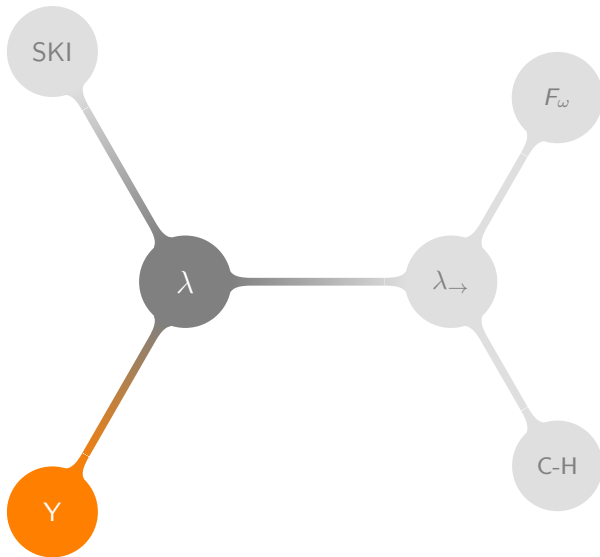
Syntax

$$\langle term \rangle ::= x \qquad \qquad \text{(variable)}$$
$$\mid \quad (\lambda x.\langle term \rangle) \qquad \text{(abstraction)}$$
$$\mid \quad (\langle term \rangle \ \langle term \rangle) \qquad \text{(application)}$$

where $x \in \mathbb{X}$ – the set of variables

Syntax

TODO: examples

Programming in Lambda Calculus

Simple Types