Scala Inline

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Abstract. [1]

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1 Translation

The syntax of our core language is the following:

Terms:

$$t ::= t\ t \mid \lambda x : \tau.t \mid x[\tau] \cdots [\tau] \mid \mathbf{let}\, x : \sigma = t\, \mathbf{in}\ t \mid \mathbf{fix}\ t \mid x$$
$$v ::= \lambda x : \tau.t \mid c$$
$$c ::= \mathbf{true} \mid \mathbf{false} \mid 0 \mid 1 \mid \ldots$$

Types:

$$\sigma ::= \tau \mid \forall X.\sigma$$
$$\tau ::= X \mid \tau \Rightarrow \tau \mid \iota$$
$$\iota ::= \mathbf{Bool} \mid \mathbf{Int}$$

Extensions to the calculus like **if**, and arithmetic operations are straightforward so we use them freely in our examples.

References

1. Eugene Burmako and Martin Odersky. Scala Macros, a Technical Report. In *Third International Valentin Turchin Workshop on Metacomputation*, 2012.