

# Scala Inline

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**Abstract.** [1]

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## 1 Translation

The syntax of our core language is the following:

Terms:

$$\begin{aligned} t &::= t \ t \mid \lambda x : \tau. t \mid x[\tau] \cdots [\tau] \mid \mathbf{let} \ x : \sigma = t \ \mathbf{in} \ t \mid \mathbf{fix} \ t \mid x \\ v &::= \lambda x : \tau. t \mid c \\ c &::= \mathbf{true} \mid \mathbf{false} \mid 0 \mid 1 \mid \dots \end{aligned}$$

Types:

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

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.