

Updated Syntax :

Types $A, B ::= \text{Unit} \mid A^\theta \rightarrow B \mid A + B \mid A @ \theta \mid \alpha \mid \mu \alpha. A \mid \forall \alpha. A$

Terms $a, b ::= x \mid \text{rec } f \ x.a \mid a \ b \mid \text{box } a \mid \text{unbox } x = a \text{ in } b \mid () \mid \text{inl } a \mid \text{inr } a \mid \text{case } a \text{ of}$
 $\text{inl } x \Rightarrow a_1; \text{inr } x \Rightarrow a_2 \mid \text{roll } a \mid \text{unroll } a \mid \Lambda \alpha. a \mid a[\tau]$

Language Classifiers $\theta ::= \text{L} \mid \text{P}$

Environments $\Delta \Gamma ::= . \mid \Delta \Gamma, x :^\theta A$

$\Delta ::= . \mid \Delta, \alpha$

Values $v ::= x \mid () \mid \text{inl } v \mid \text{inr } v \mid \text{rec } f \ x.a \mid \text{box } v \mid \text{roll } v \mid \Lambda \alpha. t$

TUnivApp

$$\frac{\Delta \Gamma \vdash^L e : \forall \alpha. A \quad \Delta \vdash B \quad \text{neutral}(B)}{\Delta \Gamma \vdash^L e[B] : [B/\alpha]A}$$

TUnivLam

$$\frac{\Delta, \alpha, \Gamma \vdash^\theta e : B}{\Delta \Gamma \vdash^\theta \Lambda \alpha. e : \forall \alpha. B}$$