Annotated Type Rules

Rob Spoel, Mathijs Baaijens

2 Apr 2015

1 Type system

Typing $\boxed{\Gamma \vdash e : \tau}$

$$\frac{}{\Gamma \vdash c : \tau_c} \ [con]$$

$$\frac{\Gamma\,(x) = \tau}{\Gamma \vdash x : \tau} \ [var]$$

$$\frac{\Gamma\,[x \mapsto \tau_x] \vdash e_0 : \tau_0}{\Gamma \vdash fn_\pi x \Rightarrow e_0 : \tau_x \rightarrow \tau_0} \ [fn]$$

$$\frac{\Gamma\,[f \mapsto \tau_x \rightarrow \tau_0]\,[x \mapsto \tau_x] \vdash e_0 : \tau_0}{\Gamma \vdash fun_\pi f\ x \Rightarrow e_0 : \tau_x \rightarrow \tau_0} \ [fun]$$

Figure 1: Typing