

$$\begin{array}{c}
\frac{}{\Vdash \emptyset} \text{ (empty)} \quad \frac{\Vdash \Gamma \quad \Gamma \text{ is affine}}{\Gamma \vdash \mathbb{U}_i : \mathbb{U}_{i+1}} \text{ (univ)} \quad \frac{\Gamma \vdash A : \mathbb{U}_i}{\Gamma \vdash A : \mathbb{U}_{i+1}} \text{ (hier)} \\
\\
\frac{\Gamma \vdash A : \mathbb{U}_i}{\Vdash \Gamma, x : A} \text{ (ext)} \quad \frac{\Vdash \Gamma, x : A \quad \Gamma \text{ is affine}}{\Gamma, x : A \vdash x : A} \text{ (var)} \\
\\
\frac{\Gamma \vdash A : \mathbb{U}_i \quad \Delta [x : A] \vdash B : \mathbb{U}_i}{\Gamma, \Delta \vdash \Pi(x : A). B : \mathbb{U}_i} (\Pi) \\
\\
\frac{\Gamma, x : A \vdash e : B}{\Gamma \vdash \lambda x. e : \Pi(x : A). B} (\Pi_i) \\
\\
\frac{\Gamma \vdash e_1 : \Pi(x : A). B \quad \Delta \vdash e_2 : A}{\Gamma, \Delta \vdash e_1 @ e_2 : B\{x := e_1\}} (\Pi_e) \\
\\
\frac{\Gamma \vdash A : \mathbb{U}_i \quad \Delta [x : A] \vdash B : \mathbb{U}_i}{\Gamma, \Delta \vdash \Sigma(x : A). B : \mathbb{U}_i} (\Sigma) \\
\\
\frac{\Gamma \vdash e_1 : A \quad \Delta \vdash e_2 : B\{x := e_1\}}{\Gamma, \Delta \vdash (e_1, e_2) : \Sigma(x : A). B} (\Sigma_i) \\
\\
\frac{\Gamma \vdash e_1 : \Sigma(x : A). B \quad \Delta, x : A, y : B \vdash e_2 : C\{z := (x, y)\}}{\Gamma, \Delta \vdash \text{let } (x, y) = e_1 \text{ in } e_2 : C\{z := e_1\}} (\Sigma_e) \\
\\
\frac{\Vdash \Gamma}{\Gamma \vdash \top : \mathbb{U}_i} (\top) \quad \frac{}{\vdash \text{unit} : \top} (\top_i) \\
\\
\frac{\Gamma, x : A \vdash e : A \quad \Gamma \text{ is relevant}}{\Gamma \vdash \text{rec } x. e : A} \text{ (rec)} \\
\\
\frac{\Gamma \vdash e : A \quad B \text{ is affine}}{\Gamma, x : B \vdash e : A} \text{ (wkg)} \quad \frac{\Gamma, x : B, y : B \vdash e : A \quad B \text{ is relevant}}{\Gamma, x : B \vdash e\{y := x\} : A} \text{ (ctr)}
\end{array}$$