$vars,\ n,\ a,\ x,\ y,\ z,\ w,\ m,\ o$
$ivar,\ i,\ k,\ j,\ l$
$const,\ b$

$X,\ Y,\ Z$	$::=$		
	$\vert$	I	Unit
	$\vert$	$X \trianglerighteq Y$	Associative Non-commutative tensor
	$\vert$	$X \rightharpoonup Y$	Left implication
	$\vert$	$Y \leftharpoonup X$	Right implication
	$\vert$	$\mathsf{F}\,A$	Right adjoint
$A,\ B,\ C$	$::=$		
	$\vert$	J	Unit
	$\vert$	$A \triangleright B$	Associative Non-commutative tensor
	$\vert$	$A \rightharpoonup B$	Left implication
	$\vert$	$B \leftharpoonup A$	Right implication
	$\vert$	$\mathsf{G}\,X$	Right adjoint
Γ	$::=$		
	$\vert$	$.$	
	$\vert$	A	
	$\vert$	Γ_1, Γ_2	
	$\vert$	(Γ)	
	$\vert$	Γ	
Δ	$::=$		
	$\vert$	$.$	
	$\vert$	X	
	$\vert$	Δ_1, Δ_2	
	$\vert$	(Δ)	
	$\vert$	Δ	

$\boxed{\Delta \vdash_{\mathcal{A}} X}$

$$\frac{}{X \vdash_{\mathcal{A}} X}\ \textsc{A\_var}$$

$$\frac{}{. \vdash_{\mathcal{A}} I}\ \textsc{A\_Ir}$$

$$\frac{\Delta \vdash_{\mathcal{A}} X}{\Delta, I \vdash_{\mathcal{A}} X}\ \textsc{A\_Il}$$

$$\frac{\Delta_1 \vdash_{\mathcal{A}} X \quad \Delta_2 \vdash_{\mathcal{A}} Y}{\Delta_1, \Delta_2 \vdash_{\mathcal{A}} X \trianglerighteq Y}\ \textsc{A\_Tr}$$

$$\frac{X, Y \vdash_{\mathcal{A}} Z}{X \trianglerighteq Y \vdash_{\mathcal{A}} Z}\ \textsc{A\_Tl}$$

$$\frac{\Delta, X \vdash_{\mathcal{A}} Y}{\Delta \vdash_{\mathcal{A}} X \rightharpoonup Y}\ \textsc{A\_IRr}$$

$$\frac{\Delta_1 \vdash_{\mathcal{A}} X \quad \Delta_2, Y \vdash_{\mathcal{A}} Z}{\Delta_1, \Delta_2, X \rightharpoonup Y \vdash_{\mathcal{A}} Z}\ \textsc{A\_IRl}$$

$$\frac{\Delta, X, Y \vdash_{\mathcal{A}} Z \quad \Delta \neq \emptyset}{\Delta, X \trianglerighteq Y \vdash_{\mathcal{A}} Z}\ \textsc{A\_Assocl}$$

$$\frac{X, Y, \Delta \vdash_{\mathcal{A}} Z \quad \Delta \neq \emptyset}{X \trianglerighteq Y, \Delta \vdash_{\mathcal{A}} Z} \quad \text{A\_AssocR}$$

$$\frac{\Delta; . \vdash_{\mathcal{L}} A}{\Delta \vdash_{\mathcal{A}} \mathsf{F}\, A} \quad \text{A\_FR}$$

$\boxed{\Delta; \Gamma \vdash_{\mathcal{L}} A}$

$$\frac{}{.; A \vdash_{\mathcal{L}} A} \quad \text{L\_var}$$

$$\frac{}{.; . \vdash_{\mathcal{L}} J} \quad \text{L\_JR}$$

$$\frac{\Delta; \Gamma \vdash_{\mathcal{L}} A}{\Delta; \Gamma, J \vdash_{\mathcal{L}} A} \quad \text{L\_JL}$$

$$\frac{\Delta; \Gamma \vdash_{\mathcal{L}} A}{\Delta, I; \Gamma \vdash_{\mathcal{L}} A} \quad \text{L\_IL}$$

$$\frac{\Delta_1; \Gamma_1 \vdash_{\mathcal{L}} A \quad \Delta_2; \Gamma_2 \vdash_{\mathcal{L}} B}{\Delta_1, \Delta_2; \Gamma_1, \Gamma_2 \vdash_{\mathcal{L}} A \rhd B} \quad \text{L\_TR}$$

$$\frac{\Delta; A, B \vdash_{\mathcal{L}} C}{\Delta; A \rhd B \vdash_{\mathcal{L}} C} \quad \text{L\_TL}$$

$$\frac{X, Y; \Gamma \vdash_{\mathcal{L}} C}{X \trianglerighteq Y; \Gamma \vdash_{\mathcal{L}} C} \quad \text{L\_ATL}$$

$$\frac{\Delta, X, Y; \Gamma \vdash_{\mathcal{L}} A \quad \Delta \neq \emptyset}{\Delta, X \trianglerighteq Y; \Gamma \vdash_{\mathcal{L}} A} \quad \text{L\_AssocL}$$

$$\frac{X, Y, \Delta; \Gamma \vdash_{\mathcal{L}} A \quad \Delta \neq \emptyset}{X \trianglerighteq Y, \Delta; \Gamma \vdash_{\mathcal{L}} A} \quad \text{L\_AssocR}$$

$$\frac{\Delta; \Gamma, A \vdash_{\mathcal{L}} B}{\Delta; \Gamma \vdash_{\mathcal{L}} A \rightharpoonup B} \quad \text{L\_IRR}$$

$$\frac{\Delta_1; \Gamma_1 \vdash_{\mathcal{L}} A \quad \Delta_2; \Gamma_2, B \vdash_{\mathcal{L}} C}{\Delta_1, \Delta_2; \Gamma_1, \Gamma_2, A \rightharpoonup B \vdash_{\mathcal{L}} C} \quad \text{L\_IRL}$$

$$\frac{\Delta_1 \vdash_{\mathcal{A}} X \quad \Delta_2, Y; \Gamma \vdash_{\mathcal{L}} A}{\Delta_1, \Delta_2, X \rightharpoonup Y; \Gamma \vdash_{\mathcal{L}} A} \quad \text{L\_AIRL}$$

$$\frac{\Delta \vdash_{\mathcal{A}} X}{\Delta; . \vdash_{\mathcal{L}} \mathsf{G}\, X} \quad \text{L\_GR}$$

$$\frac{\Delta, X; \Gamma \vdash_{\mathcal{L}} A}{\Delta; \Gamma, \mathsf{G}\, X \vdash_{\mathcal{L}} A} \quad \text{L\_GL}$$

$$\frac{\Delta; \Gamma, A \vdash_{\mathcal{L}} B}{\Delta, \mathsf{F}\, A; \Gamma \vdash_{\mathcal{L}} B} \quad \text{L\_FL}$$

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Definition rules:         25 good    0 bad
Definition rule clauses: 46 good    0 bad
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