

vars, n, a, x, y, z, w, m, o

ivar, i, k, j, l

const, b

X, Y, Z	$::=$		
		I	Unit
		$X \supseteq Y$	Associative Non-commutative tensor
		$X \multimap Y$	Implication
		$\mathsf{F} A$	Right adjoint

A, B, C	$::=$		
		J	Unit
		$A \triangleright B$	Non-associative Non-commutative tensor
		$A \multimap B$	Implication
		$\mathsf{G} X$	Right adjoint

Γ	$::=$	
		\cdot
		A
		Γ_1, Γ_2
		(Γ)
		Γ

Δ	$::=$	
		\cdot
		X
		Δ_1, Δ_2
		(Δ)
		Δ

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

$\overline{X \vdash_{\mathcal{A}} X}$	$\mathsf{A_VAR}$
$\overline{\cdot \vdash_{\mathcal{A}} I}$	$\mathsf{A_IR}$
$\frac{\Delta \vdash_{\mathcal{A}} X}{\Delta, I \vdash_{\mathcal{A}} X}$	$\mathsf{A_IL}$
$\frac{\Delta_1 \vdash_{\mathcal{A}} X \quad \Delta_2 \vdash_{\mathcal{A}} Y}{\Delta_1, \Delta_2 \vdash_{\mathcal{A}} X \supseteq Y}$	$\mathsf{A_TR}$
$\frac{X, Y \vdash_{\mathcal{A}} Z}{X \supseteq Y \vdash_{\mathcal{A}} Z}$	$\mathsf{A_TL}$
$\frac{\Delta, X \vdash_{\mathcal{A}} Y}{\Delta \vdash_{\mathcal{A}} X \multimap Y}$	$\mathsf{A_IRR}$
$\frac{\Delta_1 \vdash_{\mathcal{A}} X \quad \Delta_2, Y \vdash_{\mathcal{A}} Z}{\Delta_1, \Delta_2, X \multimap Y \vdash_{\mathcal{A}} Z}$	$\mathsf{A_IRL}$
$\frac{\Delta, X, Y \vdash_{\mathcal{A}} Z \quad \Delta \neq \emptyset}{\Delta, X \supseteq Y \vdash_{\mathcal{A}} Z}$	$\mathsf{A_ASSOCL}$
$\frac{X, Y, \Delta \vdash_{\mathcal{A}} Z \quad \Delta \neq \emptyset}{X \supseteq Y, \Delta \vdash_{\mathcal{A}} Z}$	$\mathsf{A_ASSOCR}$

$$\frac{\Delta; \cdot \vdash_{\mathcal{L}} A}{\Delta \vdash_{\mathcal{A}} \mathbf{F} A} \quad \text{A_FR}$$

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

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

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

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

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

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

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

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

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

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

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

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

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

$$\frac{\Delta \vdash_{\mathcal{A}} X}{\Delta; \cdot \vdash_{\mathcal{L}} \mathbf{G} X} \quad \text{L_GR}$$

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

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

Definition rules: 25 good 0 bad

Definition rule clauses: 46 good 0 bad