

*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
	$X \multimap Y$	Left implication
	$Y \multimap X$	Right implication
	$\mathsf{F} A$	Right adjoint

$A, B, C ::=$

	$J$	Unit
	$A \triangleright B$	Non-associative Non-commutative tensor
	$A \multimap B$	Left implication
	$B \multimap A$	Right implication
	$\mathsf{G} X$	Right adjoint

$\Gamma ::=$

	$\cdot$
	$A$
	$\Gamma_1, \Gamma_2$
	$(\Gamma)$
	$\Gamma$

$\Delta ::=$

	$\cdot$
	$X$
	$\Delta_1, \Delta_2$
	$(\Delta)$
	$\Delta$

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

$\frac{}{X \vdash_{\mathcal{A}} X} \text{ A\_VAR}$

$\frac{}{\cdot \vdash_{\mathcal{A}} I} \text{ A\_IR}$

$\frac{\Delta \vdash_{\mathcal{A}} X}{\Delta, I \vdash_{\mathcal{A}} X} \text{ A\_IL}$

$\frac{\Delta_1 \vdash_{\mathcal{A}} X \quad \Delta_2 \vdash_{\mathcal{A}} Y}{\Delta_1, \Delta_2 \vdash_{\mathcal{A}} X \supseteq Y} \text{ A\_TR}$

$\frac{X, Y \vdash_{\mathcal{A}} Z}{X \supseteq Y \vdash_{\mathcal{A}} Z} \text{ A\_TL}$

$\frac{\Delta, X \vdash_{\mathcal{A}} Y}{\Delta \vdash_{\mathcal{A}} X \multimap Y} \text{ A\_IRR}$

$\frac{\Delta_1 \vdash_{\mathcal{A}} X \quad \Delta_2, Y \vdash_{\mathcal{A}} Z}{\Delta_1, \Delta_2, X \multimap Y \vdash_{\mathcal{A}} Z} \text{ A\_IRL}$

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

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

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

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

$$\frac{}{\cdot; A \vdash_{\mathcal{L}} A} \text{ L\_VAR}$$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Definition rules: 25 good 0 bad

Definition rule clauses: 46 good 0 bad