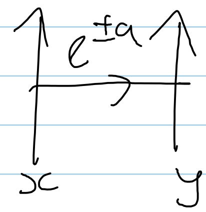
Proof of 1. Trivial for I^{ss}, easy for I^{β}.

Proof of 0.

$$J_y = \frac{\log 1 + c_x \frac{e^{\pm c_x}-1}{c_x}}{c_x \frac{e^{\pm c_x}-1}{c_x}} = \frac{\pm c_x}{e^{\pm c_x}-1}$$

$$\text{So } \begin{array}{c|c} 1 & y \\ \hline x & \frac{e^{\pm c_x}-1}{c_x} \end{array} \mapsto \chi^{ss}\left(\exp \frac{\pm c_x}{e^{\pm c_x}-1} \cdot \frac{e^{\pm c_x}-1}{c_x} a_{xy}\right)$$

$$= \chi^{ss}(\exp \pm a_{xy}) =$$



Proof of 2.

$$I^{\beta}\left(\begin{array}{c|cc} 1 & x & y \\ \hline ts & \alpha & \beta \end{array}\right) = \chi^{ss}\left(\exp \frac{\log 1+\langle\alpha\rangle}{\langle\alpha\rangle}\sum \alpha_{ix} a_{ix} + \frac{\log 1+\langle\beta\rangle}{\langle\beta\rangle}\sum \beta_{iy} a_{iy}\right)$$

<u>Claim</u> In $L^{\beta} = \mathrm{Lie}\langle x, y : [x,y] = c_x y - c_y x\rangle$

$(\deg x, y, c_x, c_y = 1)$ ...