# δaa relations

July-15-15   11:26 PM
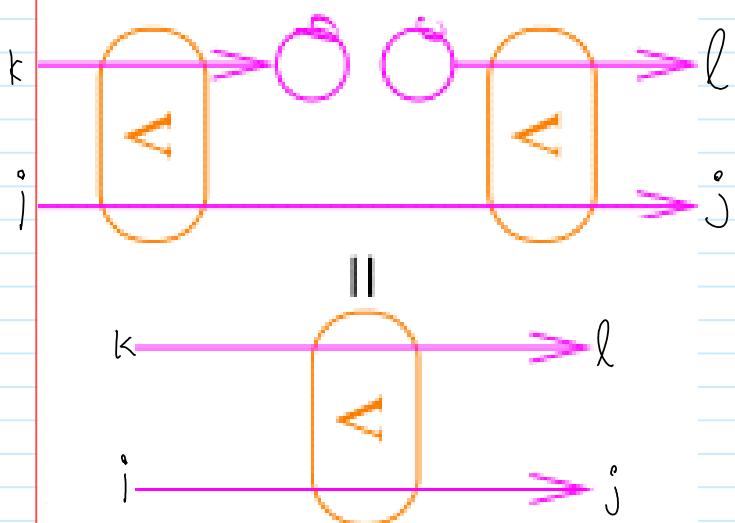
"The swinging relation".

There are also descendents of 6T & locality.

$$\delta a_{ij}a_{kl} - \delta a_{il}a_{jk} = \pm(\dot{b}_k c_l a_{ij} - \dot{b}_i c_l a_{kj} - \dot{b}_k c_j a_{il} + \dot{b}_i c_j a_{kl})$$

$$a_{12}a_{34} \sim a_{14}a_{32}$$

Can be used to sort heads when tails are apart.

Are there 3-strand specializations?

— the tails may be on the same strand — in the presence of a c, tails anyway commute.

The same-head $ij \to k$ specialization:

$$\pm(\delta b_i a_{jk} - \delta b_j a_{ik}) = \delta(a_{ik}a_{jk} - a_{jk}a_{ik})$$

this I already know.... (but it still needs an implementation).
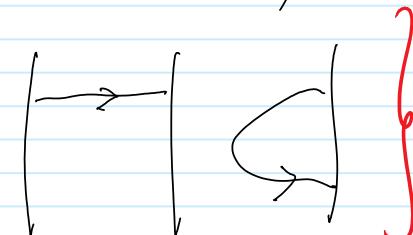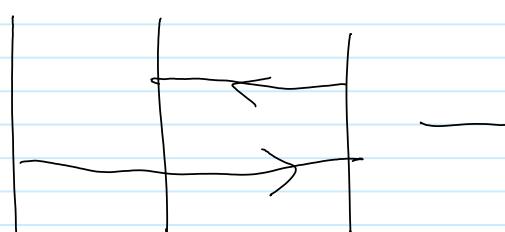
That's a reduction beyond $S^2 \otimes S^2$

$$\vdash\!\!\!\longrightarrow\!\dashv \qquad | \quad | \!\!\longrightarrow\! \dashv \; \biggr\} \; {}^{xy\to 0}_{\quad} S^2 \otimes S^2 \, \Big]_0$$
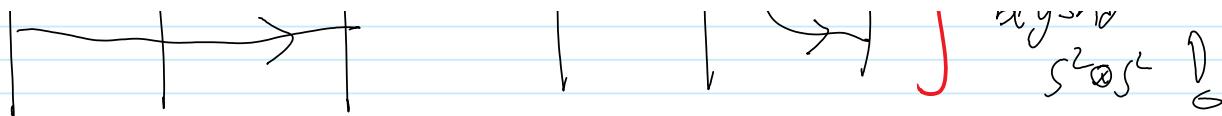
..... all a-a commutators (incl. t-h) have simpler data counter parts.

<u>Aside</u> what is $\mathcal{O}_2 A^\vee \,{}_0^{?}$ (I should have known this long ago....).

I need a good section $S^2 V \otimes S^2 V \longrightarrow A^{2DV}/_{16} \Big]_0$

(or arbitrary: "Put tails below heads, average over connections".)