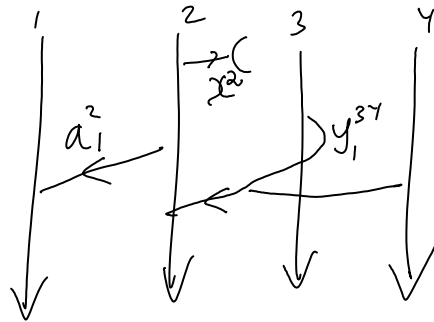


A minimalist w-Alexander algebra

August-13-08
8:46 PM

Idea



all tails are
above (behind) all
heads; the \cdot product
only places heads;

an m_K^{ij} product needs
to be defined and will be tough.

Relations

* $y_i^{jk} = -y_i^{ki}$ (hence $y_i^{ji} = 0$)

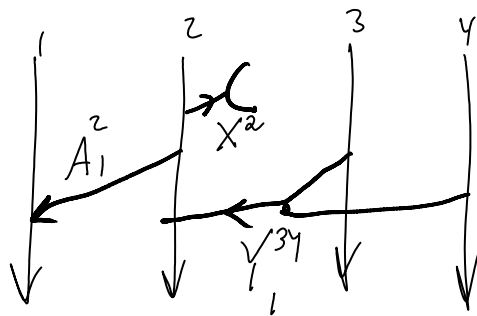
* The x^i 's are central; a 's and y 's
commute unless their heads (their lower
indices) are the same.

* $[a_i^j, a_i^k] = y_i^{jk}$ $[a_i^j, y_i^{kl}] = x_i^j y_i^{kl}$

* $[y_i^{jk}, y_i^{lm}] = 0$

* $x_i^{[j} y_i^{kl]} = 0$

Globalize:



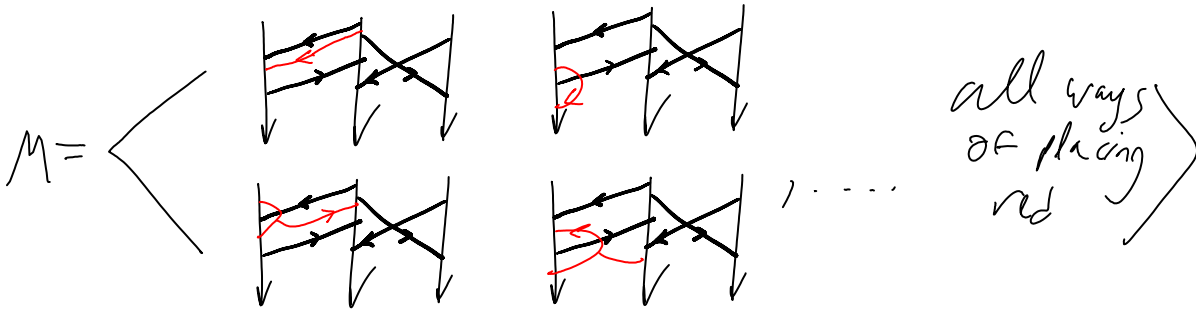
Relations:

* $y_i^{jk} y_i^{kj} = 1$ hence $y_i^{ji} = 1$

* The x^i 's are central; A 's and y 's
commute unless their heads are the
same

* $[A_i^j, y_i^{kl}] =$

$$* [Y_i^{jk}, Y_i^{lm}] = 0$$



plenty of slide relations such as

$$= \pm X_i^{\pm 1}$$