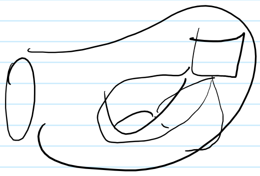
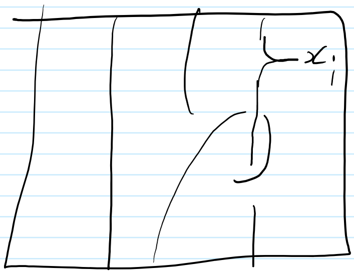
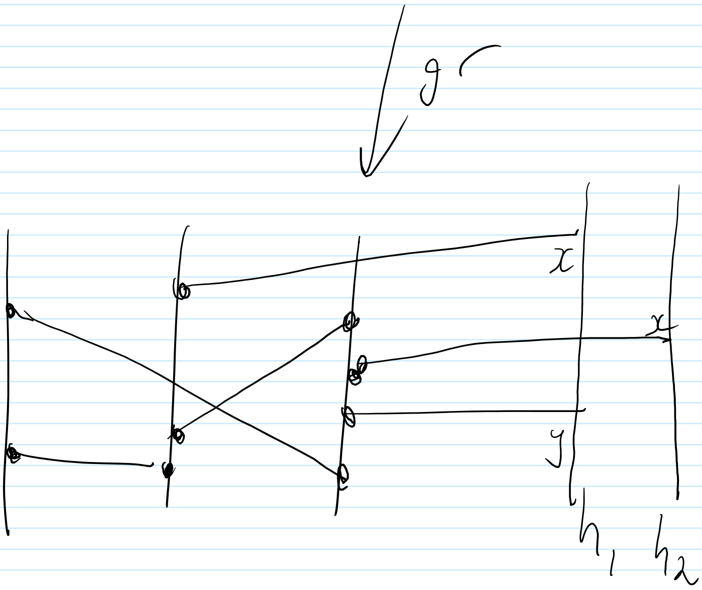
Conversation with Habiro

May 14, 2017 5:47 AM

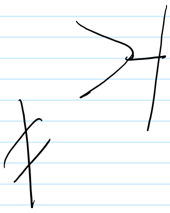
$\Sigma \times I \qquad \Sigma\times\{0\} \longrightarrow \Sigma\times\{1\}$

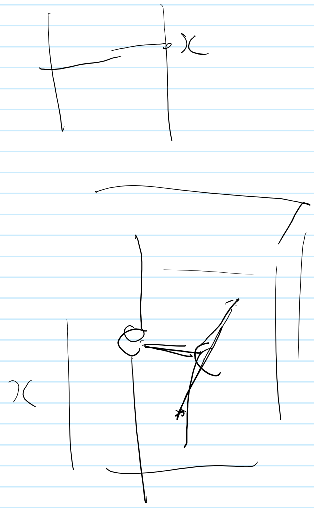




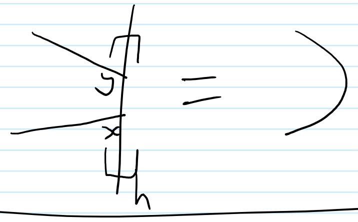


rels

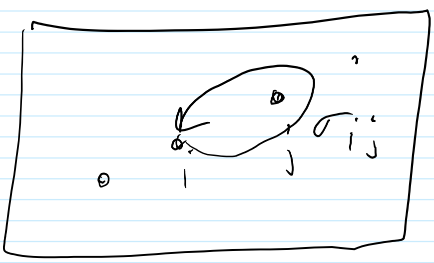


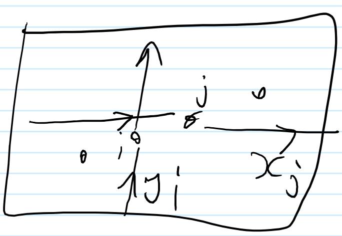


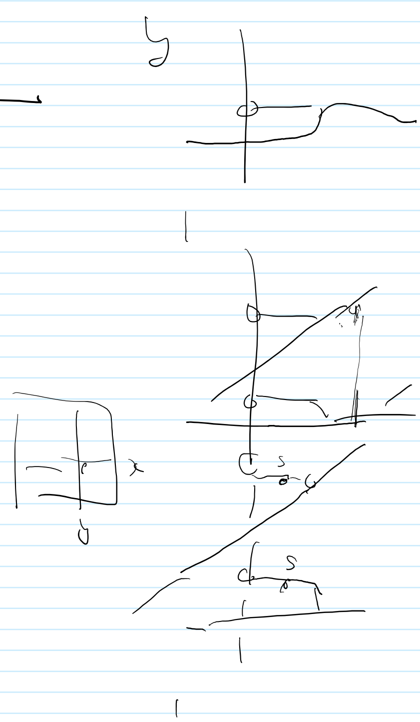
rels: usual 4T &



Braids on $T^2=[0,1]^2/\sim$

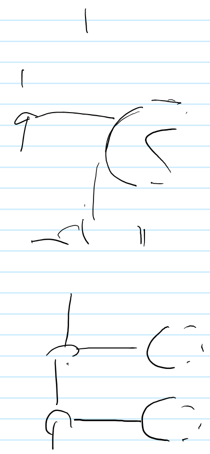




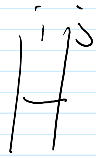


$$[x_i,y_j]=x_iy_jx_i^{-1}y_j^{-1}=(\sigma_{ij})^{\pm1}$$

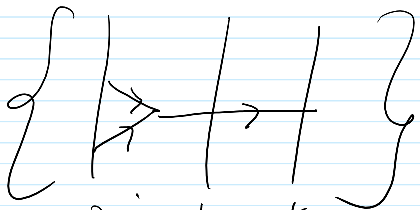
$[x_i, y_j] = x_i y_j x_i^{-1} y_j^{-1} = (\sigma_{ij})^{-1}$

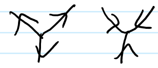


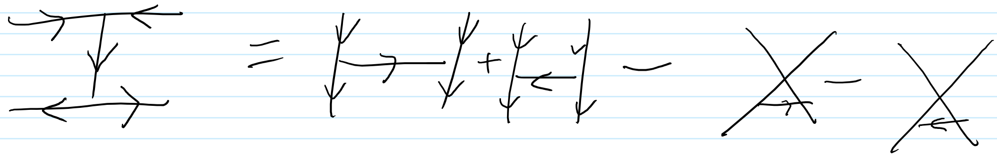
$\sigma_{ij} - 1 = 0$ in $(\mathrm{gr}\, PB_n')_1$

$[\sigma_{ij} - 1]$ in $(\mathrm{gr}\, PB_n')_2 \longrightarrow t_{ij} =$ 

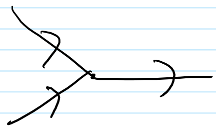
$\mathrm{gr}\, K^v = \mathcal{A}^v =$ "arrow diagrams"

$\mathcal{A}_3^v =$  / STU $\overrightarrow{AS}$ $\overrightarrow{IHX}$

2 in 1 out
1 in 2 out
no 

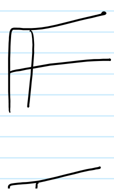


Given a Lie bialgebra $(\mathfrak{g}, b, \delta)$

$\mathfrak{g}^* \longrightarrow \mathfrak{g}$  $\to b$

 $\longrightarrow \delta$

$\mathcal{A}_n^v \to \mathcal{U}(D\mathfrak{g})^{\otimes n}$

$\mathfrak{g} \otimes \mathfrak{g}^* \longrightarrow$ 

$H \otimes H^* \to \mathbb{F}$

$H \sim U(\mathfrak{g}) \qquad H^* \sim U(\mathfrak{g}^*)$