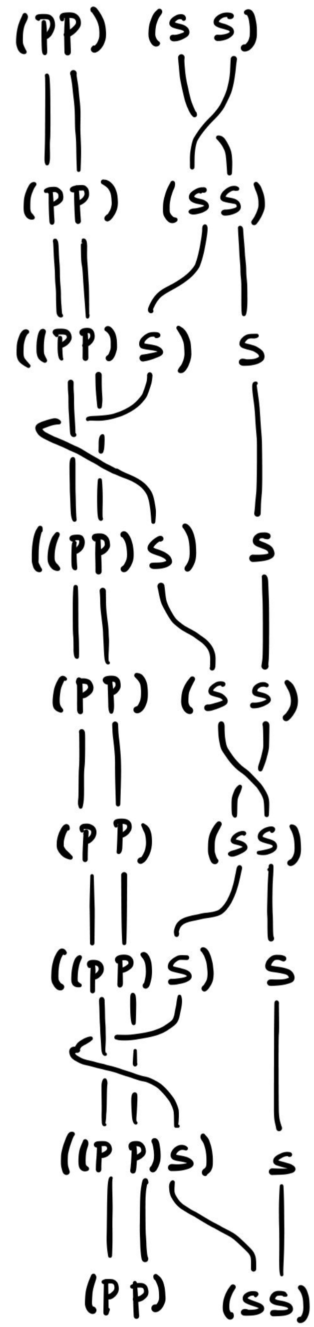
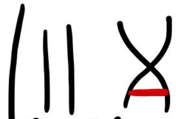
2023/10/13

strand-doubling eq.

should be $=$



$1 - \frac{1}{2}\Big($  $\Big)$

$\Delta_p\left(\Phi_{(ps)s}\right)$

$Z(\alpha)\big|_{x \to x_2,\, y \to y_2}$

$\Delta_p\left(\Phi_{(ps)s}^{-1}\right)$

$1 + \frac{1}{2}\Big($  $\Big)$

$\Delta_p\left(\Phi_{(ps)s}\right)$

$Z(\alpha)\big|_{x \to x_1,\, y \to y_1}$

$\Delta_p\left(\Phi_{(ps)s}^{-1}\right)$

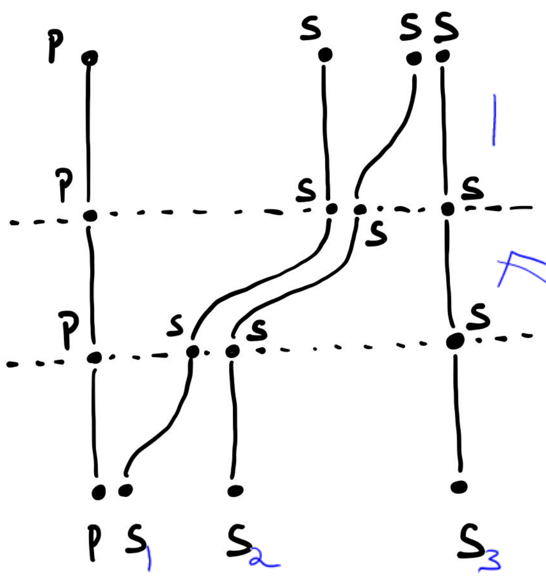
$\Delta_s\big(Z(\alpha)\big)$

(plus, similar eq for β)

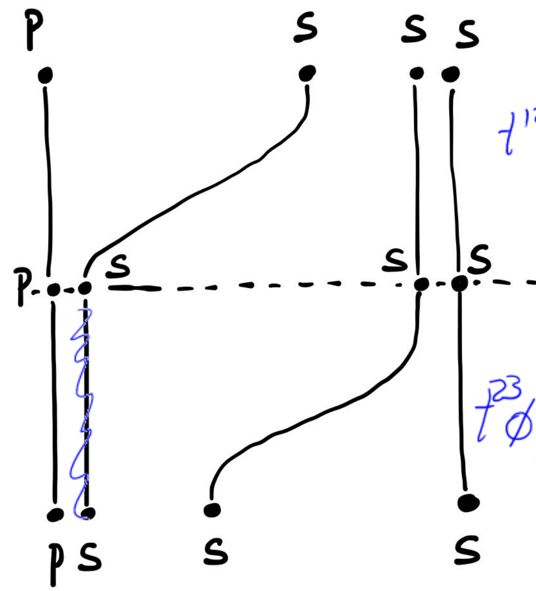
Q.

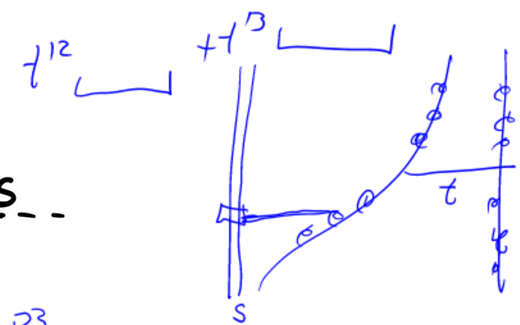
What is $\Phi_{(ps)s}$?

pentagon eq. for pss :

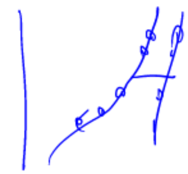


$=$





$t^{23}\phi[x_2 x_3 \bar{x}_2 \bar{x}_3]$



$$\Phi_{(ps)s} \cdot \Delta_s\left(\Phi_{(ps)s}\right)_{12\to(12)3} \cdot \Phi_{(ss)s} \quad \Delta_p\left(\Phi_{(ps)s}\right)_{pp\to ps} \cdot \Delta_s\left(\Phi_{(ps)s}\right)_{12\to 1(23)}$$

$\Phi_{(ss)s} = 1$

$$\Phi \approx \phi[x_1, x_2, \bar{x}_1, \bar{x}_2]\, t^{12} + t^{13}\phi[x_1+x_2, x_3, \bar{x}_1+\bar{x}_2, \bar{x}_3] + t^{23}\phi[x_1+x_2, x_3, x_1+\bar{x}_2, \bar{x}_3]$$