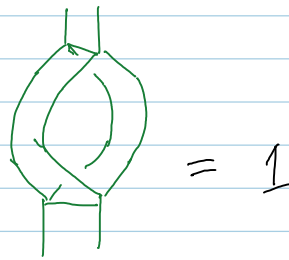
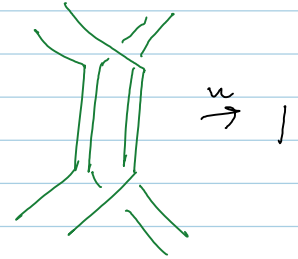


Equations are certainly interpretations are speculative.

Bob?  $V^{-1}V = I$



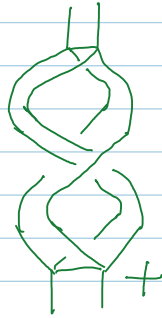
$V \cdot V^{-1} = I$



Twist.  $V \cdot \oplus = R_{12} V^{21}$

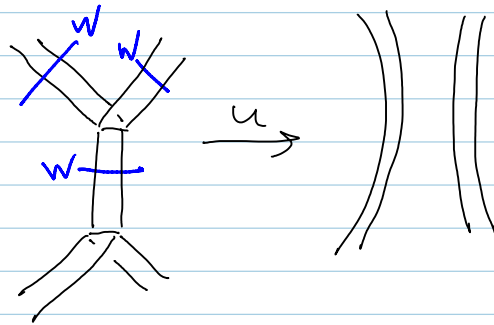
or  $\oplus = V^{-1} R_{12} V^{21}$

or  $V^{21} = R_{12}^{-1} V \oplus$

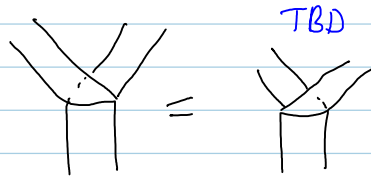
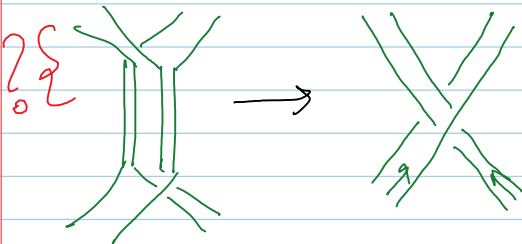


Mnemonic:  
"V = R<sup>1/2</sup>"

Unitarity.  $V \cdot V^* = I$



Flip.  $V \cdot S(V) = R_{12}$ , so  $V^{-1} = S(V) R_{12}^{-1}$  and  $S(V) = V^{-1} R_{12}$

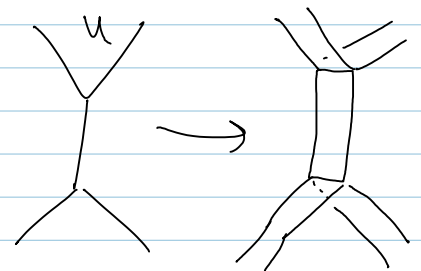


$\Phi$

$\Phi = V^{-12,3} V^{-12} V^{23} V^{1123}$

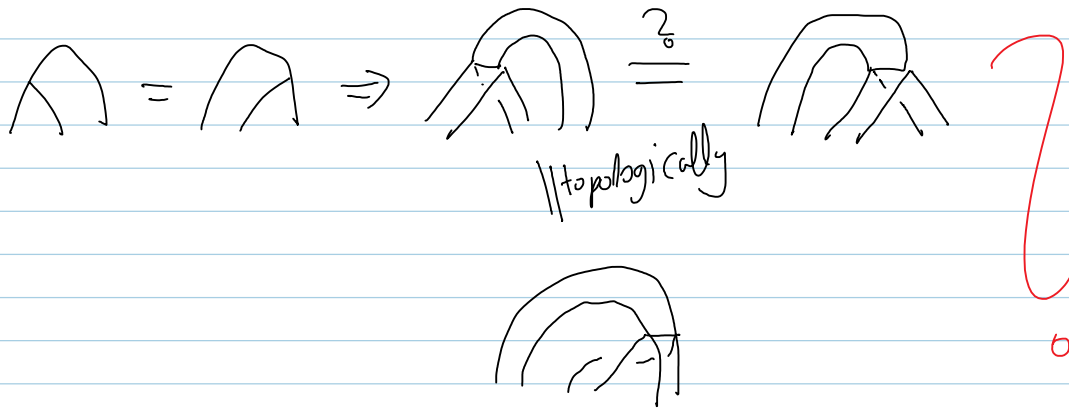


unzip.



Note: Maybe already in the u-world there are two types

of vertices, + & -, that differ just by a  $\oplus \in$   
 They would be twist-equivalent in the Drinfeld sense, yet they'd look different given caps.



Also, how do  $w$ -framings come in?

More precisely, how do framings interact with vertices and unzips?

$$S(V^2) = S(R_{12}^{-1} V \oplus) = \oplus S(V) R_{12}^{-1} = \oplus V^{-1} R_{12} R_{12}^{-1} = \oplus V^{-1}$$

News! The "top delete" equation is about managing

$a(\delta)$  where even the  $w$ -vertices are chiral.