Cyclic Reidemeister Moves / Twisted Circuit Algebras

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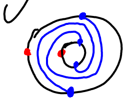
10:07 AM

In u-knots, it is somewhat odd that using braids one can make do without cyclic Reidemeister moves.

HW. Develop a "local" understanding of this, and try to export it to the v and/or f worlds.

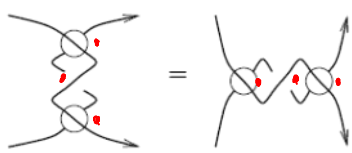
Note. In the v-world, the square of the antipode is not the identity, but rather a conjugate of the identity. So somehow the antipode should look more like g -> g^{-1}x, whose square is g -> x^{-1}gx.

Likely a related issue - the "embedding" of planar algebras into circuit algebra is not an embedding - is not 1-1 - as  is non-trivial in the planar algebra sense yet trivial in the circuit algebra sense.

Q. Is there a notion of "Twisted Circuit Algebras", which contains circuit algebras yet also contains an embedded version of planar algebras?

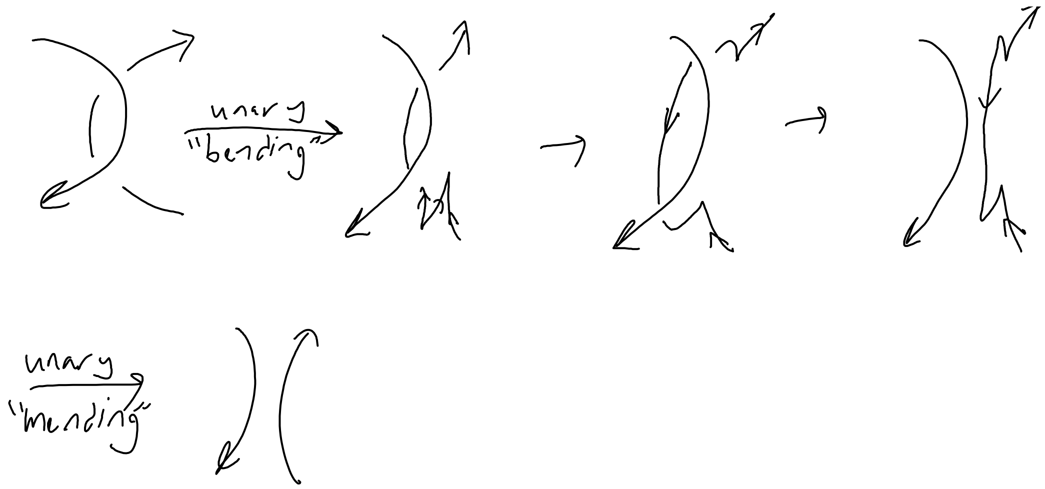
Perhaps, a hybrid where homotopy classes of curves in the "swiss cheese" are used instead of abstract wires? Or is this yet too big?

I'm confused.



An aside from [BHLR]

Had there been disorientations . . . .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