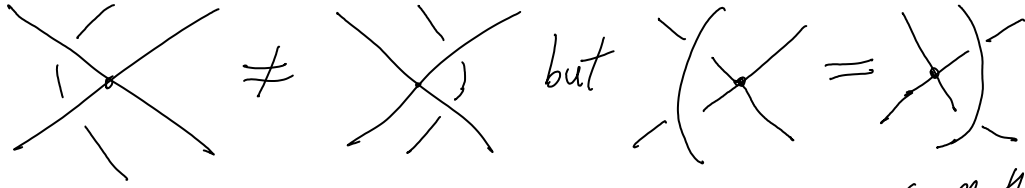
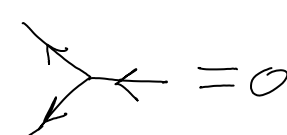


These are virtual knots modulo just one of the naive relations:




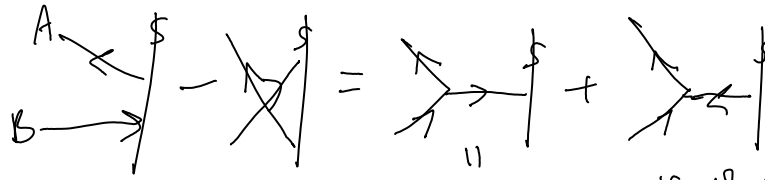
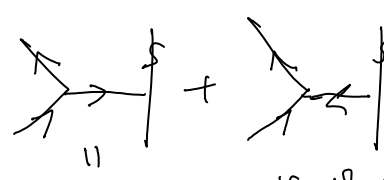

In \vec{A}^t , this becomes  = 0 (call the quotient \vec{A}^{cc})

It is also (expectedly) invisible to the upper fundamental group.

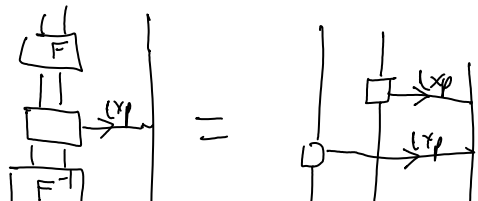
It also reads "co-commutative Lie bialgebras."

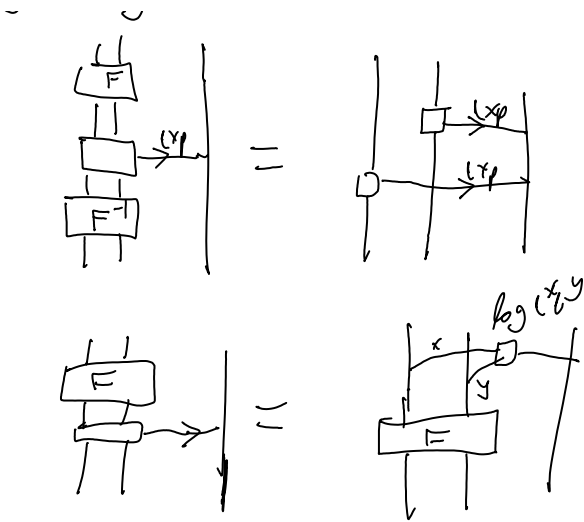
Given all this, perhaps I should forget all about automorphisms of free groups?

only  is present, and its back legs commute along a skeleton line.

Also,  =  +  if A & B belong to the same component.

$F: x+y \mapsto \log e^x e^y$ in \vec{A}^{cc} :





Question: Do wheels as below vanish?

