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

\[ \begin{array}{c}
\begin{array}{c}
\times \\
\end{array}
\end{array} \neq \begin{array}{c}
\begin{array}{c}
\times \\
\end{array}
\end{array} \] but \[ \begin{array}{c}
\begin{array}{c}
\times \\
\end{array} = \begin{array}{c}
\begin{array}{c}
\times \\
\end{array}
\end{array} \] \]

In \( \mathbb{A}^1 \), this becomes \[ \begin{array}{c}
\begin{array}{c}
\times \\
\end{array}
\end{array} = 0 \begin{array}{c}
\begin{array}{c}
\times \\
\end{array}
\end{array} \] (call the quotient \( \mathbb{A}^1/\mathbb{C} \)).

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

It also reads "Co-commutative Lie bialgebras."

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

Only \[ \begin{array}{c}
\begin{array}{c}
\times \\
\end{array}
\end{array} \] is present, and its back legs commute along a skeleton line.

Also, \[ \begin{array}{c}
\begin{array}{c}
\times \\
\end{array}
\end{array} = \begin{array}{c}
\begin{array}{c}
\times \\
\end{array}
\end{array} + \begin{array}{c}
\begin{array}{c}
\times \\
\end{array}
\end{array} \] \]

\( 0 \) if \( A \neq B \) belong to the same component.

\[ \text{F: } x+y \to \log e^y \text{ in } \mathbb{A} \text{ :} \]

\[ \begin{array}{c}
\begin{array}{c}
F \downarrow \\
\end{array}
\end{array} \]

\[ \begin{array}{c}
\begin{array}{c}
F \downarrow \\
\end{array}
\end{array} = \begin{array}{c}
\begin{array}{c}
\end{array}
\end{array} \]
**Question:** Do wheels as below vanish?