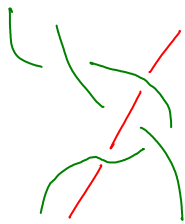


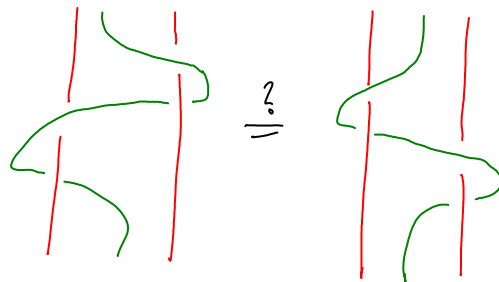
Study $A^1 F_B + B^1 F_A$

Question. What's the braid theory of n red & n green strands, such that the reds are transparent to each other and the greens are transparent to each other?

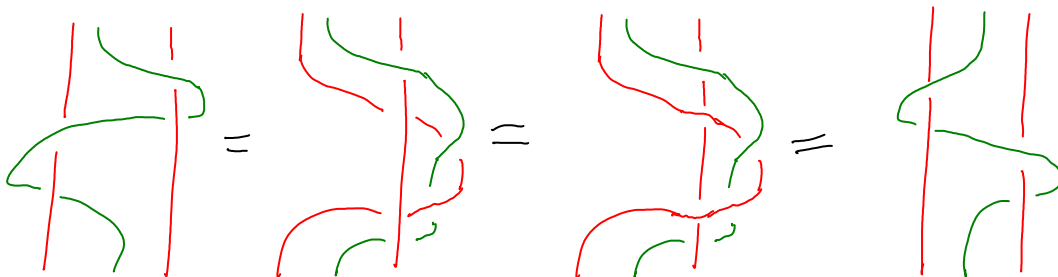


is trivial.

Answer - it is Abelian on n^2 generators.



Indeed,



Suppose $\alpha: [0,1]=I \rightarrow X$ is continuous and $\alpha(0) \neq \alpha(1)$.

Is there an injective $\beta: I \rightarrow X$ with $\beta(0) = \alpha(0)$ & $\beta(1) = \alpha(1)$?



Is there a practical algorithm for rectangle placement?

Specifically, I need to place $n=O(50)$ rectangles R_i on $O(2)$ pages P_i of fixed proportions. I'm

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allowed one overall scaling factor, and I want it to be minimal. I want the program to fit in 20 lines of code and work reasonably well; it doesn't have to produce the optimal solution, but it should come close to it.

There should be some resemblance between the order in which the rectangles are given and their placement on the pages.