

GROUPS OF VIRTUAL AND FLAT VIRTUAL LINKS

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In the paper [1] for every closed virtual braid was defined a group and proved that this group is an invariant of the corresponding virtual link. To do this we used a representation $VB_n \rightarrow \text{Aut}(F_{n+1})$ of the virtual braid group VB_n into the automorphism group of free group F_{n+1} of rank $n + 1$.

In the present talk we discuss a possibility construct a similar invariant for flat virtual links. We construct some representations $FB_n \rightarrow \text{Aut}(\tilde{F}_{n+2})$ of the flat virtual braid group FB_n into the automorphism group of some quotient \tilde{F}_{n+2} of the free group F_{n+2} .

In [2] was construct a family of groups G_m , $m = 1, 2, \dots$. We prove

Theorem. *The group G_m is the semi-direct product $G_m = H_m \rtimes \mathbb{Z}_2$, where H_m is the semi-direct product of m copies of group $\mathbb{Z}_2 * \mathbb{Z}_2$. In particular, the conjugacy problem is decidable in G_m .*

REFERENCES

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