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HomGrp($F_2, SL(2)(\mathbb{R})$)

Let

$$F_2 = \langle a, b \rangle$$

be the free group with two generators. We consider

$$\text{HomGrp}(F_2, SL(2)(\mathbb{R}))$$

which is homeomorphic to $SL(2)(\mathbb{R}) \times SL(2)(\mathbb{R})$.

Definition.

$$\begin{aligned} \text{tr}_{m,n} : \text{HomGrp}(F_2, SL(2)(\mathbb{R})) &\rightarrow \mathbb{R} \\ \rho &\mapsto \text{tr}(\rho(a^m b^n)) \end{aligned}$$

Let $\rho_1, \rho_2 \in \text{HomGrp}(F_2, SL(2)(\mathbb{R}))$ such that they agree on

$$\text{tr}_{1,0}, \text{tr}_{0,1}, \text{tr}_{1,-1}$$

Then there is a $A \in SL(2)(\mathbb{R})$ such that

$$\rho_1 = A\rho_2 A^{-1}$$

[1]

Current note has 0 direct children and 0 total descendants.

- stem
 - SL R 2
 - HomGrp($F_2, SL(2)(\mathbb{R})$)

And it has 1 siblings.

- stem
 - SL R 2
 - HomGrp($F_2, SL(2)(\mathbb{R})$)