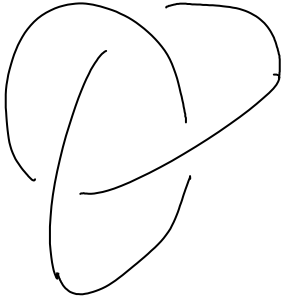


Commutator Calculus

January-19-11
9:48 AM



$$[x, y] := x^{-1}y^{-1}xy$$

$$a = c^{-1}bc = b \cdot [b, c]$$

$$b = a^{-1}ca = c[c, a]$$

$$c = a[a, b]$$

$$a = t\alpha \quad b = t\beta \quad c = t\gamma \Rightarrow$$

$$t\alpha = t\beta[t, \gamma][\beta, t] \text{ etc.}$$

$$\alpha - \beta = T(\gamma - \beta)$$

Are there interesting groups of the form $(A, \alpha A_2) \rtimes A_3$?

Are these "~~nilpotent~~ groups" ?

solvable ?