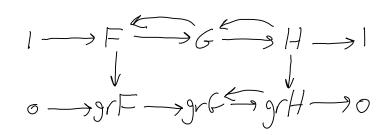
## Expansions for semi-direct products

September-08-09



Can we at least rescue a theorem of the Form "here's A(G) in terms of A(H) & A(F)" out of this?

abc = cba  $[a, b] = aba^{-1}b^{-1}$   $abca^{-1}b^{-1}c^{-1} = abcc^{-1}a^{-1}b^{-1}[ba, c]$  $= [a, b] \cdot [b, [a, c]][a, c][b, c]$ 

 $[ab, c] = abcb^{-1}a^{-1}c^{-1} = a[b]ca^{-1}c^{-1}$   $= [a, [b, c]][b, c]aca^{-1}c^{-1}$  = [a, [b, c]][b, c]acc