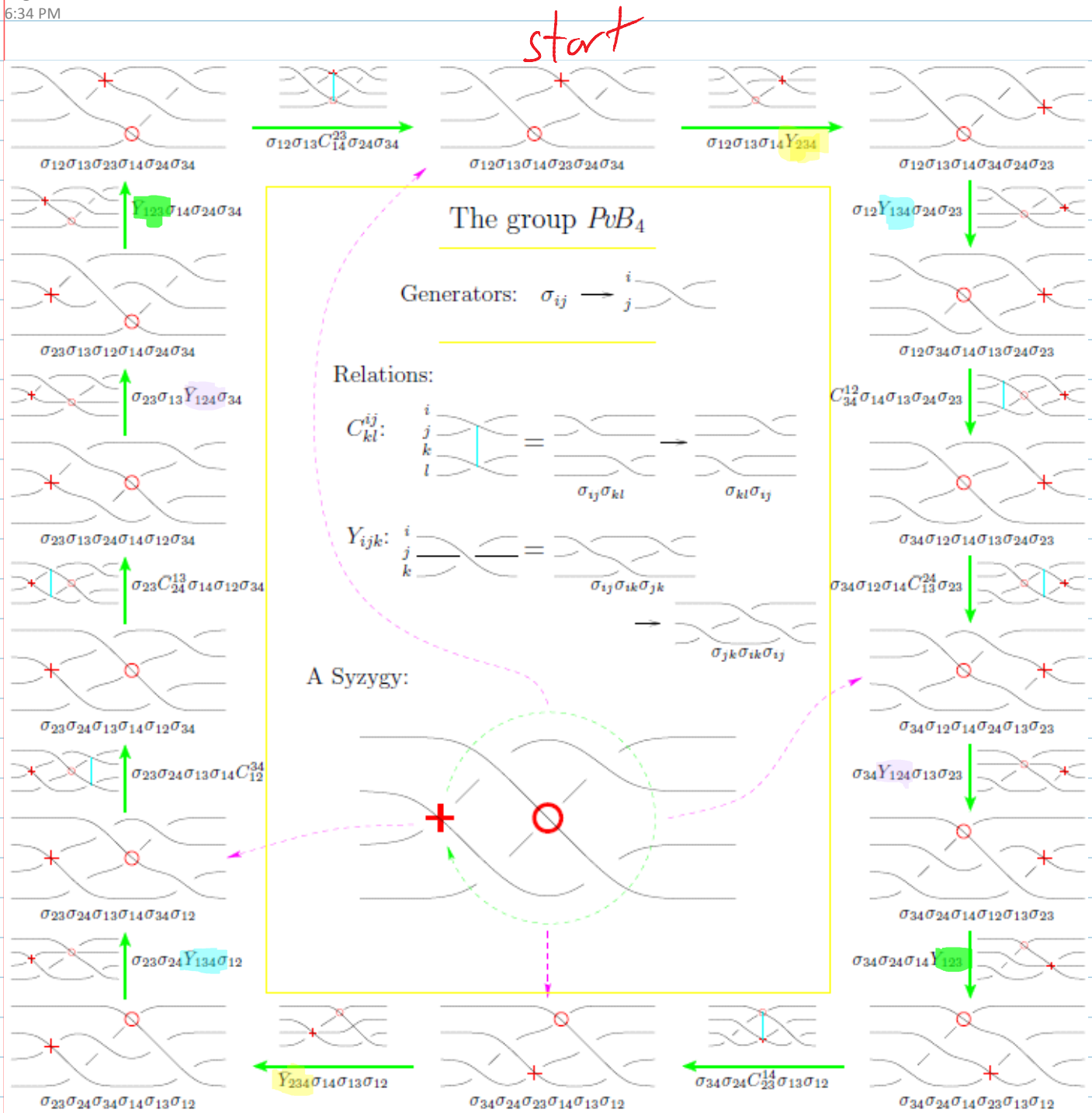


# An Algebraic Syzygy from a Topological One

August-16-11  
6:34 PM

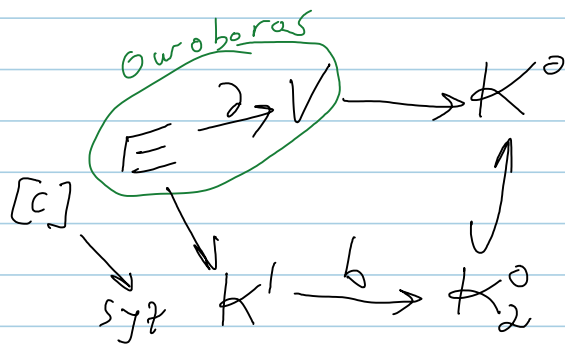


$\Downarrow$  under  $\sigma \mapsto \bar{\sigma} + 1$ , looking in degree 3

$$2^{bc} ([a_{12} + a_{13} + a_{14}, \eta_{234}] + \dots) = 0$$

Ouroboros to Syzygi: | Task. Find a const. element of

*nwoboras*



This I can do but the machine that does it is different.

element of  
 $\ker(I \otimes \mathbb{R}_2 \oplus \mathbb{R}_2 \otimes I \rightarrow I^{\otimes 3})$   
 should be:

- +b[\eta[2,3,4], +a[1,2] + a[1,3] + a[1,4]],
- b[\eta[1,3,4], -a[1,2] + a[2,3] + a[2,4]],
- +b[\eta[1,2,4], -a[1,3] - a[2,3] + a[3,4]],
- b[\eta[1,2,3], -a[1,4] - a[2,4] - a[3,4]],
- b[\gamma[1,2,3,4], a[1,3] + a[1,4] + a[2,3] + a[2,4]],
- +b[\gamma[1,3,2,4], a[1,2] + a[1,4] - a[2,3] + a[3,4]],
- b[\gamma[1,4,2,3], a[1,2] + a[1,3] - a[2,4] - a[3,4]]