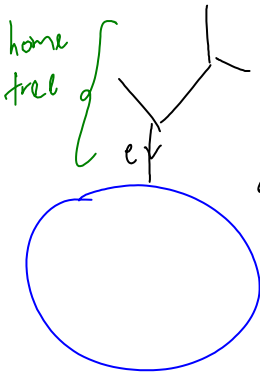


Goal 1 get rid of trees.

(not a nice thing  
to write while  
flying over the  
Sahara Desert)



wants to vanish because applying STU around e, the two sides are equal if all else on the way is ignored.

If the other stuff on the way belongs to other trees, the "cost" is diagrams with as many trees and with the home tree shrunk.

- Problems
1. Struts.
  2. Branches of the home tree itself.

The one-tree case. This should be easy - what is it as a statement about  $Lien$ ?

Question Is  $[t_{down}, t_{down}] = t_{down}$ ?

Idea - perhaps it will be better to work on the side of the leaves.



Question - what does "closing the loop" means in the differential-operators interpretation?

Goal 2 understand wheels. Is every wheel the divergence of a tree?  
Is every invariant function the divergence of

an invariant vector field?

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$$\left| \begin{array}{c} \text{---} \circlearrowleft \text{---} \\ \text{---} \end{array} \right| = \left| \begin{array}{c} \leftarrow \\ \rightarrow \end{array} \right| - \left| \begin{array}{c} \rightarrow \\ \leftarrow \end{array} \right| - \left| \begin{array}{c} \leftarrow \\ \rightarrow \end{array} \right| + \left| \begin{array}{c} \rightarrow \\ \leftarrow \end{array} \right| = 0 \text{ mod links.}$$