

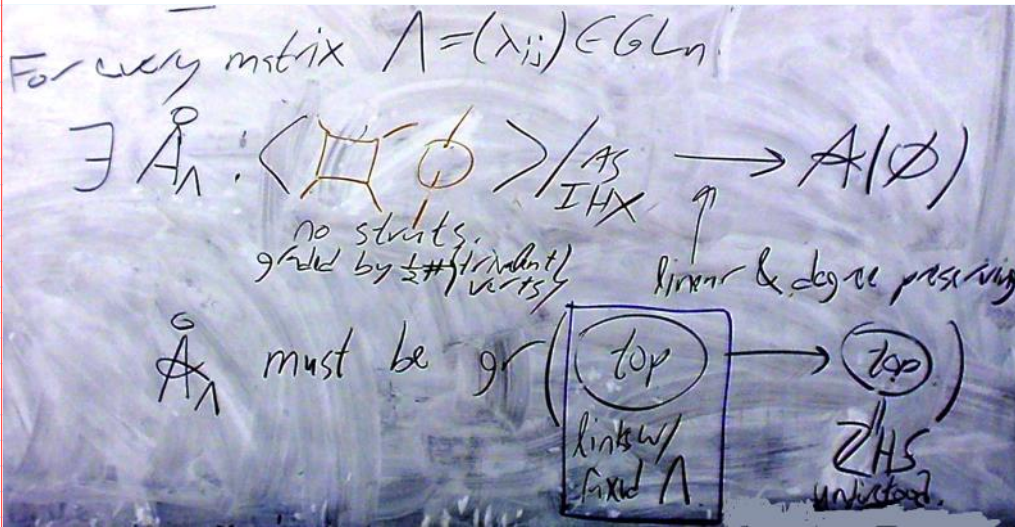
Knot at Lunch for January 26: FT at fixed linking

January-15-15 1:34 PM

Ambition: Do something about Aarhus 1995 in time for Aarhus 2015.

What's missing in Aarhus 95?

Not done!



We need a f.t. theory on the set K_Λ of links w/ linking matrix Λ (or a similar set, within perhaps a 3-manifold background), such that:

1. $\exists Z: K_\Lambda \rightarrow gr K_\Lambda =: A_\Lambda$
2. $A_\Lambda \cong A^{CIC}$ (chordless chord diagrams) or at least, some comparison map exists between A_Λ and A^{CIC} & $\exists \hat{A}_\Lambda: A_\Lambda \rightarrow A(\emptyset)$.
3. \hat{A}_Λ should be gr of a topological map.

From Appoleboim's paper:

<http://front.math.ucdavis.edu/math.GT/9906138>

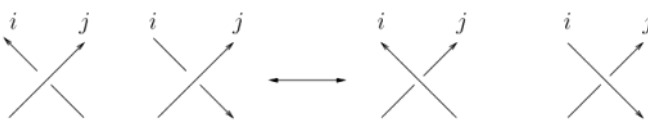


Figure 1. A DD-crossing change

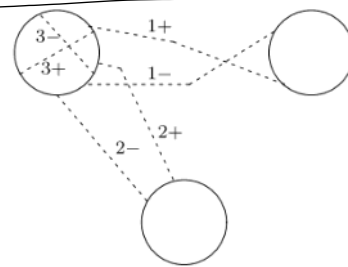


Figure 3. A double dating diagram





Figure 2. A Λ -crossing change

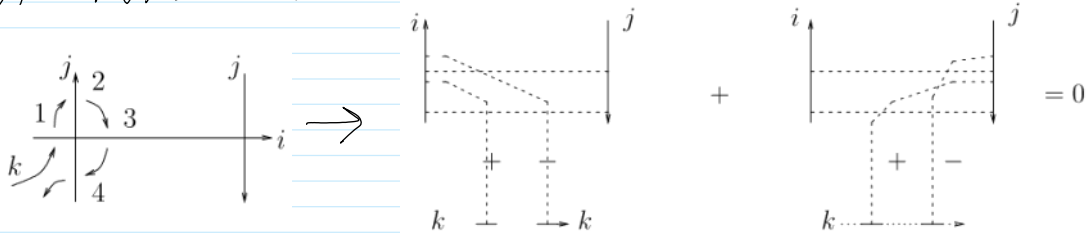


Figure 8. A Λ -diagram

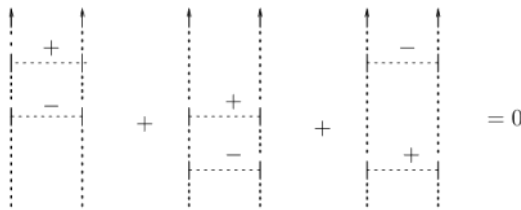
Always keep in mind: There are maps

$$\mathcal{K}^{\Lambda, DD} \rightarrow \mathcal{K} \quad \& \quad \mathcal{A}^{\Lambda, DD} \rightarrow \mathcal{A}$$

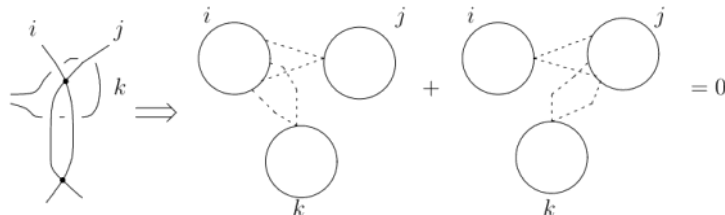
2T-relations:



3T-relations:



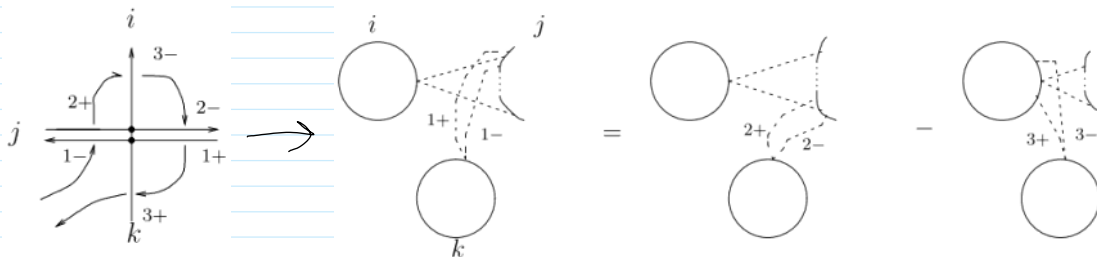
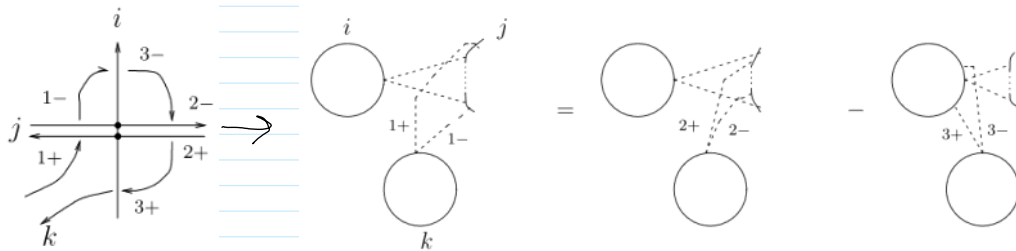
Λ -2T:



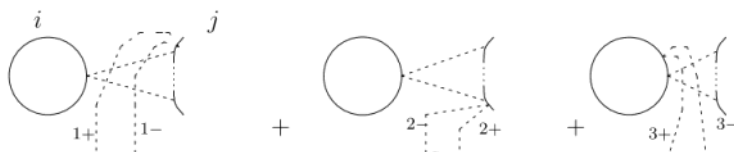
Λ -3T:



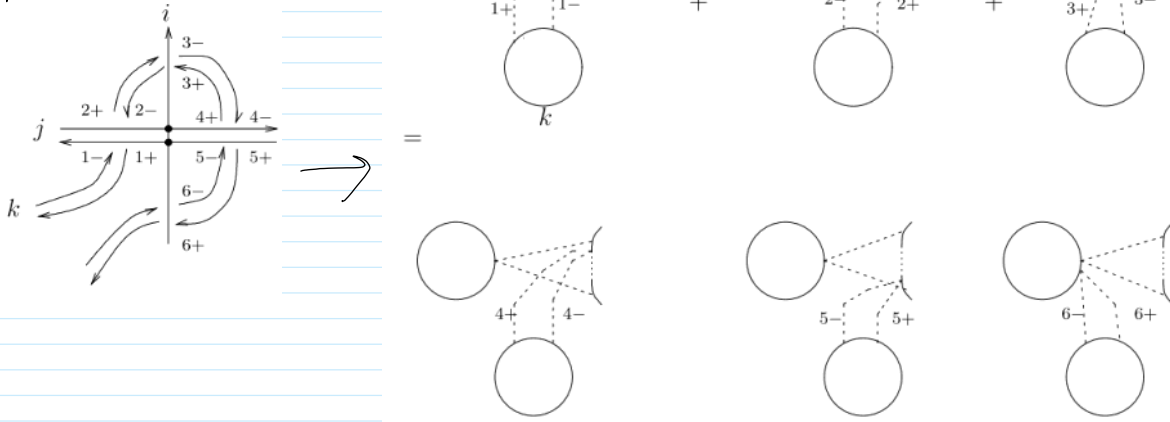
Interchange relations:



Wood Pecker
Relation:



Relation:



Thm The obvious $A^1 \rightarrow A^{DD}$ is an isomorphism.

Verify!

Thm The image of A^1 in A^C is
 $A^{chordless} =: A^{C \setminus C}$