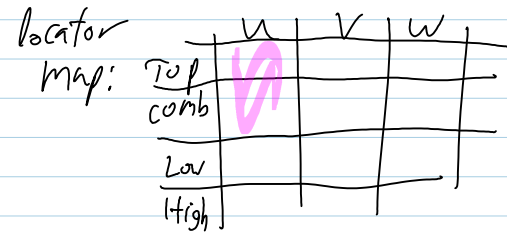


September-23-09  
6:38 PM

0. Picture today at 9:55!

1. Review [Framed knots, from now & here]


$$0 \rightarrow \mathcal{V}_{n-1} \rightarrow \mathcal{V}_n \rightarrow \mathcal{W}_n \rightarrow 0$$



$\mathcal{W}_n \subset \mathcal{D}_n^*$ ; The Fundamental Thm:

$$\mathcal{W}_n = \mathcal{A}_n^*, \text{ where } \mathcal{A}_n = \mathcal{D}_n / \mathcal{LT}$$

There's also  $\mathcal{A}^*$

2. ,  $b: \mathcal{D}' \rightarrow \mathcal{D} = \mathcal{D}^0, \mathcal{A} = \mathcal{D} / b\mathcal{D}'$

3. Computing  $\mathcal{A}_{0-3}$  following

<http://www.math.toronto.edu/~drorbn/classes/0001/KnotTheory/ChordDiagrams/ChordDiagrams.pdf>

4.

m	0	1	2	3	4	5	6	7	8	9	10	11	12
$\dim \mathcal{A}_m^r$	1	0	1	1	3	4	9	14	27	44	80	132	232
$\dim \mathcal{A}_m$	1	1	2	3	6	10	19	33	60	104	184	316	548
$\dim \mathcal{P}_m$	0	1	1	1	2	3	5	8	12	18	27	39	55

5.  $\mathcal{A} := \mathcal{D} / \mathcal{LT}$  is a commutative & co-commutative bialgebra.