

Oberwolfach talk

April-19-14 10:12 AM

Idea: "Wednesday in 4D" (though with content converging to Monday combinatorics)

Idea: "A 4D Challenge"

Idea: "Some very good formulas for the Alexander polynomial".

1. The ugly dm formula (and the * formula).
2. Defines an invariant of v-tangles.
3. Why bother - good computationally (show demo), AKT, categorification.
4. The map into 4D tubes and then into B&H.
5. Operations on B&H: *, hm, tm, tha.
6. A word about trees and wheels.
7. A word about BF.

but first figure out all prior art. Also figure out strand doubling.

Talk idea:

"2-chord diagrams"

(go straight from simply knotted 2-knots to $FL(T)^+$ @ $CW(T)$.)

Idea: "Some very good formulas for the Alexander polynomial".

1. Thm $\exists!$ an invariant w/ k m^{as} [use Gassner form].
2. Advantages, Computations. ? "SKBH's"
3. Thm $\exists!$ an invariant of wKBH's --- [B calculus]
4. The relationship between the two.
5. Thm. $\exists!$ an invariant of wKBH's []: $\rightarrow FL^+ \times CW$
6. Computations.
7. \mathcal{C}^3 is a VFTI
8. \mathcal{C}^3 , or at least some of it, seems to extend to all KBH's, using BF. Does it? \cup