* Read somewhere about Fourier analysis on Lie

groups.

In particular, Analysis on Lie Groups By Jacques Faraut

* Explore the relationship between w-knots and knot concordance. * Consider Making a handout for Paris, "Harish-Chandra-Duflo implies Kashiwara-Vergne (or maybe Dror's an idiot)."

- Redo the A=grK business.
- Sugar coat "trivalent w-tangles" in a nice 4D language. (Perhaps as "slice tangles"? (probably not Gordon says in 4D all 2-knots are slice))
- Kauffman's and Dye's "arrow polynomial" is worth a good look! What is the underlying algebraic theory? Are there R-matrices in the business? Finite type properties? Hints about framing? Should it be programmed? Possibly the key idea is that "circuit lines" have "sides".
- Come to think of it, is the Kauffman bracket for virtuals an R-matrix invariant? If so, it would be v-finite type.
- A good "Knot Atlas" project should have a "take home" version that will allow for easy mirroring.