Lecture 4 Sketch

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add exercises & refs.

Low algebra and high algebra for

ku/Au "low algebra" universal Part II: $A(\uparrow)$ is "universal representation theory"

⋮

$A(\uparrow\uparrow\ldots\uparrow)$ and ops.

Part III: KTGs & High algebra.

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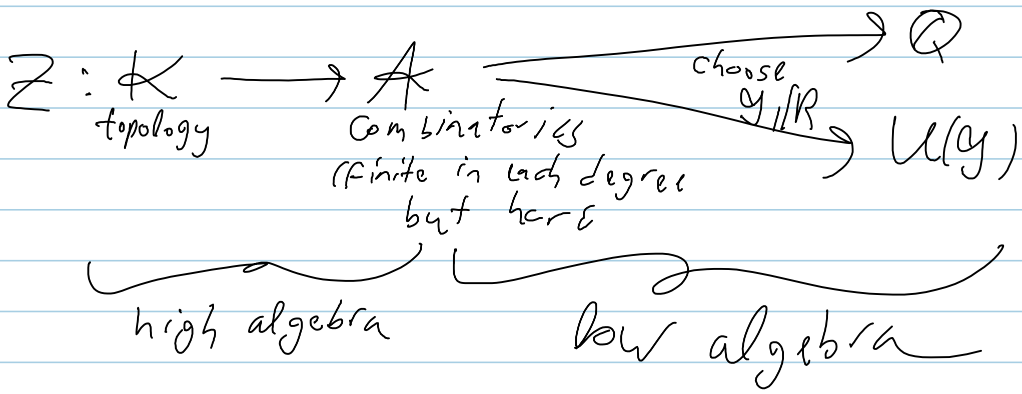
1. Introduction:



2. Very low algebra.

Exercise: gl(N), relation to Conway.

3. Universal enveloping algebras.

* relation w/ rep theory. "universal rep theory"

* Has a co-product [so reps can be tensored].

Exercise: Find a basis to U(2D)

4. Low algebra for $\mathcal{A}(\uparrow_n)$

... so $\mathcal{A}(\uparrow)$ is univ. univ. ag theory.

5. Δ on K, $\mathcal{A}$, U.

6. Homomorphic expansions & high algebra in the abstract.

7. Follow old HUJI handout.

w/ some added boxes:

a. Algebraic knot theory

b. The VI relation

c. The pentagon.

Ref. Dancso-B-N.