

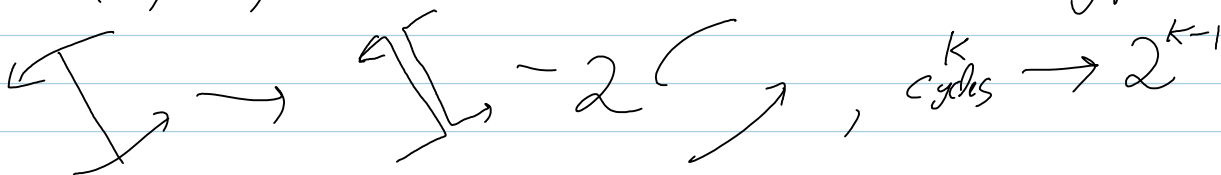
AKT-090922, Hour 6: Jones and its weight system, HOMFLY, Conway, FI, 4T, the Fundamental Theorem

September-21-09
8:50 AM

On board

$$\begin{array}{l}
 q J(\overrightarrow{\lambda}) - q^{-1} J(\overleftarrow{\lambda}) = (q^{1/2} - q^{-1/2}) J(\overrightarrow{\lambda}) \quad \left| \quad V(\underbrace{\overrightarrow{\lambda} \dots \overleftarrow{\lambda}}_{>n}) = 0 \right. \\
 q^{n/2} H(\overrightarrow{\lambda}) - q^{-n/2} H(\overleftarrow{\lambda}) = (q^{1/2} - q^{-1/2}) H(\overrightarrow{\lambda}) \quad \left| \quad V(\underbrace{\overrightarrow{\lambda} \dots \overleftarrow{\lambda}}_n) \text{ is "constant"} \right. \\
 C(\overrightarrow{\lambda}) - C(\overleftarrow{\lambda}) = z C(\overrightarrow{\lambda}) \quad \left| \quad W_n : \left[\begin{array}{c} \text{circle with } n \text{ chords} \\ n\text{-chords} \end{array} \right] \rightarrow A
 \end{array}$$

$$J(k)(e^x) = \sum J_n(k) x^n \Rightarrow J_n \text{ is of type } n.$$



1. Same for HOMFLY, Conway
2. FI, 4T, verify for HOMFLY, Conway.
3. The Fundamental Theorem: "Every w.s. integrates"
4. Framed knots and dropping FI.