

KAL meeting 151116

Monday, November 9, 2015 10:10 AM

The \Zhe story?

"What you don't know comes back to haunt you"

A genre of theorems:

1. Dehn-Nielsen: $M_{g,1} = \text{Aut}_Z(\pi)$

2. Johnson

$$(T_k): \bigoplus_{k \geq 1} \frac{M_{g,1}(k)}{M_{g,1}(k+1)} \hookrightarrow \bigoplus_{k \geq 1} \text{Dec}_w^k(\widehat{L}(H))$$

image unknown!

3. Kawazumi/Kuno: $\widehat{\mathbb{Q}\pi} \xrightarrow{\cong} \text{Dec}_Z(\widehat{\mathbb{Q}\pi})$

4. Artin's Thm

$$P_u B_n \xrightarrow{\sim} \text{BC-Aut}_Z(F_n) \quad \} = \pi x_i$$

alternatively:

$$P_u B_n \xrightarrow{a} P_w B_n \xrightarrow{b} \mathbb{Q} P_w B_{n+1} \text{ "exact"}$$

$$b(B) = B\} - \}B.$$

5. Dunno: $P_u T_n \xrightarrow{a} P_w T_n \xrightarrow{b} \mathbb{Q} P_w T_{n+1} ?$

6. Dunno: (horizontal / general:)

$$A^u(n) \xrightarrow{\alpha} A^w(n) \xrightarrow[\text{or an expression}]{\square // \otimes b} A^w \otimes A^w_{z\text{-prim}} \left(\begin{matrix} \uparrow \cup \uparrow h \\ \uparrow \\ \uparrow z \end{matrix} \right).$$

7. $A^u_{\text{primitree}(pt)}(n) \xrightarrow{\alpha} A^w_{pt}(n) \xrightarrow{\beta} FL$

pf of τ , discussion of 6.