

γ	$\text{tr}(\gamma)$	$\dim(\text{HH}_0(A, A_{\gamma w}))$	$\dim(\text{HH}_0(A, A_{\gamma \lambda_i})_{C_W(\lambda_i)})$
S and $S^3 = -S$	0	$\lambda_i \rightsquigarrow 1$ if $\lambda_i \equiv 0 \pmod{4}$ $\lambda_i \rightsquigarrow 4$ if $\lambda_i \equiv 2 \pmod{4}$ $\lambda_i \rightsquigarrow 2$ else	$\lambda_i \rightsquigarrow 1$ if $\lambda_i \equiv 0 \pmod{4}$ $\lambda_i \rightsquigarrow$ Monica's formula else
$E_+ = TS$ and $E_- = (TS)^{-1}$	1	$\lambda_i \rightsquigarrow 1$ if $\lambda_i \equiv 0 \pmod{3}$ $\lambda_i \rightsquigarrow 3$ else	$\lambda_i \rightsquigarrow 1$ if $\lambda_i \equiv 0 \pmod{3}$ $\lambda_i \rightsquigarrow$ Monica's formula else
$-E_+$ and $-E_-$	-1	$\lambda_i \rightsquigarrow 1$ if $\lambda_i \equiv 0, 1, 5 \pmod{6}$ $\lambda_i \rightsquigarrow 4$ if $\lambda_i \equiv 3 \pmod{6}$ $\lambda_i \rightsquigarrow 3$ else	$\lambda_i \rightsquigarrow 1$ if $\lambda_i \equiv 0 \pmod{6}$ $\lambda_i \rightsquigarrow$ Monica's formula else
$S^4 = \text{Id}$	2	$\lambda_i \rightsquigarrow 1$	1
$S^2 = -\text{Id}$	-2	<i>odd</i> $\lambda_i \rightsquigarrow 4$ <i>even</i> $\lambda_i \rightsquigarrow 1$	<i>odd</i> $\lambda_i \rightsquigarrow$ Monica's formula <i>even</i> $\lambda_i \rightsquigarrow 1$
T^m for $m \in \mathbb{Z}_0$	2	$\lambda_i \rightsquigarrow m \lambda_i$	$ m \lambda_i$
$-T^m$ for $m \in \mathbb{Z}_0$	-2	$\lambda_i \rightsquigarrow 4$	<i>odd</i> $\lambda_i \rightsquigarrow$ Monica's formula <i>even</i> $\lambda_i \rightsquigarrow m \lambda_i$
<i>regular</i>	$ \text{tr}(\gamma) > 2$	$\lambda_i \rightsquigarrow \text{tr}(\text{Id} - \gamma^{\lambda_i}) $	Monica's formula

References

- [1] Patrick Kinnear. Skein dimensions of mapping tori of the 2-torus. 2024.