5 Overview

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