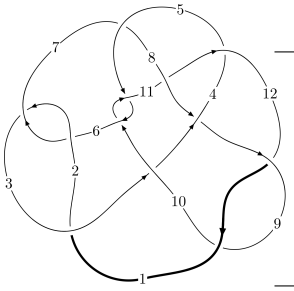
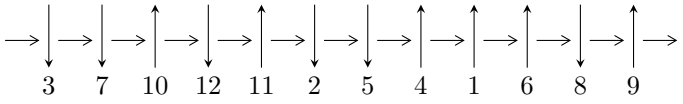
$12a_{0662}$ $(K12a_{0662})$



A knot diagram[1]

Linearized knot diagam



Solving Sequence

$$\underset{c_6}{2,6} \xrightarrow{} \underset{c_2}{7} \xrightarrow{} \underset{c_1}{3} \to \underset{c_5}{1,11} \xrightarrow{} \underset{c_7}{5} \xrightarrow{} \underset{c_{10}}{8} \to \underset{c_3}{10} \to \underset{c_9}{4} \xrightarrow{} \underset{c_{12}}{9} \to 12 \twoheadrightarrow c_4, c_8, c_{11}$$

Ideals for irreducible components[2]of $X_{\mathbf{par}}$

$$\begin{aligned} I_1^u = \langle & -1.04261 \times 10^{439} u^{151} - 3.12955 \times 10^{439} u^{150} + \cdots + 2.44939 \times 10^{439} b + 4.79597 \times 10^{441}, \\ & - 1.78662 \times 10^{442} u^{151} - 2.88167 \times 10^{442} u^{150} + \cdots + 8.98925 \times 10^{441} a + 2.77990 \times 10^{444}, \\ & u^{152} + u^{151} + \cdots - 1379u + 367 \rangle \\ I_2^u = \langle & -26479u^{31} + 2745u^{30} + \cdots + 5497b - 38311, \\ & - 1129966u^{31} + 188660u^{30} + \cdots + 159413a - 2101975,\ u^{32} - 8u^{30} + \cdots + 3u + 1 \rangle \end{aligned}$$

* 2 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 184 representations.

[1]The image of knot diagram is generated by the software "**Draw programme**" developed by Andrew Bartholomew(`http://www.layer8.co.uk/maths/draw/index.htm#Running-draw`), where we modified some parts for our purpose(`https://github.com/CATsTAILs/LinksPainter`).

[2]All coefficients of polynomials are rational numbers. But the coefficients are sometimes approximated in decimal forms when there is not enough margin.

I. $\boldsymbol{I_1^u = \langle -1.04 \times 10^{439} u^{151} - 3.13 \times 10^{439} u^{150} + \cdots + 2.45 \times 10^{439} b + 4.80 \times 10^{441},\ -1.79 \times 10^{442} u^{151} - 2.88 \times 10^{442} u^{150} + \cdots + 8.99 \times 10^{441} a + 2.78 \times 10^{444},\ u^{152} + u^{151} + \cdots - 1379u + 367 \rangle}$

(i) Arc colorings

$$a_2 = \begin{pmatrix} 0 \\ u \end{pmatrix}$$

$$a_6 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$

$$a_7 = \begin{pmatrix} 1 \\ u^2 \end{pmatrix}$$

$$a_3 = \begin{pmatrix} -u \\ -u^3 + u \end{pmatrix}$$

$$a_1 = \begin{pmatrix} u^3 \\ u^5 - u^3 + u \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} 1.98751u^{151} + 3.20568u^{150} + \cdots + 893.382u - 309.247 \\ 0.425661u^{151} + 1.27769u^{150} + \cdots + 879.144u - 195.803 \end{pmatrix}$$

$$a_5 = \begin{pmatrix} -2.24943u^{151} - 3.02574u^{150} + \cdots - 2033.70u + 757.468 \\ 2.06070u^{151} + 3.85778u^{150} + \cdots + 748.892u - 227.347 \end{pmatrix}$$

$$a_8 = \begin{pmatrix} -0.362640u^{151} + 1.75754u^{150} + \cdots - 1835.38u + 869.212 \\ -1.07197u^{151} - 1.99089u^{150} + \cdots - 638.367u + 196.579 \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} 1.56185u^{151} + 1.92800u^{150} + \cdots + 14.2386u - 113.444 \\ 0.425661u^{151} + 1.27769u^{150} + \cdots + 879.144u - 195.803 \end{pmatrix}$$

$$a_4 = \begin{pmatrix} -4.72164u^{151} - 10.0286u^{150} + \cdots - 5128.46u + 1430.34 \\ -2.42859u^{151} - 5.41972u^{150} + \cdots - 2029.05u + 490.243 \end{pmatrix}$$

$$a_9 = \begin{pmatrix} 2.83491u^{151} + 4.20931u^{150} + \cdots + 917.177u - 418.112 \\ 0.252785u^{151} + 0.661844u^{150} + \cdots + 229.065u - 46.6930 \end{pmatrix}$$

$$a_{12} = \begin{pmatrix} 1.76807u^{151} + 5.52351u^{150} + \cdots - 1817.01u + 740.392 \\ 0.240114u^{151} + 0.0307253u^{150} + \cdots + 1184.40u - 370.130 \end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= -9.05646u^{151} - 13.2640u^{150} + \cdots + 563.221u + 212.918$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{152} + 63u^{151} + \cdots + 4922785u + 134689$
c_2, c_6	$u^{152} - u^{151} + \cdots + 1379u + 367$
c_3	$u^{152} + u^{151} + \cdots + 589492u + 19909$
c_4	$u^{152} + 4u^{151} + \cdots + 5694u + 7057$
c_5, c_{10}	$u^{152} + u^{151} + \cdots - 226661u + 18163$
c_7	$u^{152} - 9u^{151} + \cdots - 50u + 1$
c_8	$u^{152} - 4u^{151} + \cdots + 22u + 1$
c_9, c_{12}	$u^{152} - 3u^{151} + \cdots - 2650u + 223$
c_{11}	$u^{152} + 7u^{151} + \cdots + 59968u + 7903$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{152} + 61y^{151} + \cdots + 143171208307y + 18141126721$
c_2, c_6	$y^{152} - 63y^{151} + \cdots - 4922785y + 134689$
c_3	$y^{152} - 27y^{151} + \cdots - 116608221282y + 396368281$
c_4	$y^{152} + 38y^{151} + \cdots + 3402431974y + 49801249$
c_5, c_{10}	$y^{152} + 105y^{151} + \cdots - 5729591991y + 329894569$
c_7	$y^{152} - 5y^{151} + \cdots - 68y + 1$
c_8	$y^{152} - 8y^{151} + \cdots - 22y + 1$
c_9, c_{12}	$y^{152} - 119y^{151} + \cdots - 2364476y + 49729$
c_{11}	$y^{152} - 39y^{151} + \cdots - 5965053662y + 62457409$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.976618+0.216947I$ $a=-0.10966-2.80122I$ $b=\ \ 0.02771-1.44061I$	$-7.74674+0.74291I$	0
$u=-0.976618-0.216947I$ $a=-0.10966+2.80122I$ $b=\ \ 0.02771+1.44061I$	$-7.74674-0.74291I$	0
$u=-0.865113+0.510791I$ $a=-0.91463+2.22114I$ $b=-0.08851+1.63090I$	$-1.47039+2.06741I$	0
$u=-0.865113-0.510791I$ $a=-0.91463-2.22114I$ $b=-0.08851-1.63090I$	$-1.47039-2.06741I$	0
$u=\ \ 0.572612+0.830099I$ $a=\ \ 0.342921-0.154395I$ $b=-0.540329-1.235470I$	$-0.28796+5.49864I$	0
$u=\ \ 0.572612-0.830099I$ $a=\ \ 0.342921+0.154395I$ $b=-0.540329+1.235470I$	$-0.28796-5.49864I$	0
$u=-0.804913+0.577587I$ $a=\ \ 1.36576-1.94031I$ $b=-1.00500-1.39736I$	$2.90265-0.91653I$	0
$u=-0.804913-0.577587I$ $a=\ \ 1.36576+1.94031I$ $b=-1.00500+1.39736I$	$2.90265+0.91653I$	0
$u=-1.007170+0.071305I$ $a=-0.66068+2.50970I$ $b=-0.16176+1.55220I$	$-8.06070-0.34368I$	0
$u=-1.007170-0.071305I$ $a=-0.66068-2.50970I$ $b=-0.16176-1.55220I$	$-8.06070+0.34368I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.862567 + 0.483048I$ $a = 1.66883 + 0.68631I$ $b = -0.224587 + 1.223930I$	$-1.62821 - 1.97022I$	0
$u = 0.862567 - 0.483048I$ $a = 1.66883 - 0.68631I$ $b = -0.224587 - 1.223930I$	$-1.62821 + 1.97022I$	0
$u = -0.745359 + 0.636841I$ $a = 0.502927 - 0.311138I$ $b = -0.772595 - 0.278417I$	$2.57935 + 0.80193I$	0
$u = -0.745359 - 0.636841I$ $a = 0.502927 + 0.311138I$ $b = -0.772595 + 0.278417I$	$2.57935 - 0.80193I$	0
$u = 0.851678 + 0.564295I$ $a = -0.740309 + 0.501044I$ $b = 0.530138 + 1.114300I$	$2.45684 + 3.76901I$	0
$u = 0.851678 - 0.564295I$ $a = -0.740309 - 0.501044I$ $b = 0.530138 - 1.114300I$	$2.45684 - 3.76901I$	0
$u = -0.919952 + 0.329313I$ $a = -1.173450 - 0.011749I$ $b = 0.100577 - 0.324560I$	$-2.58832 + 3.84915I$	0
$u = -0.919952 - 0.329313I$ $a = -1.173450 + 0.011749I$ $b = 0.100577 + 0.324560I$	$-2.58832 - 3.84915I$	0
$u = 0.864184 + 0.552906I$ $a = 2.26119 + 2.71298I$ $b = -0.379127 + 1.199260I$	$2.42176 - 8.23014I$	0
$u = 0.864184 - 0.552906I$ $a = 2.26119 - 2.71298I$ $b = -0.379127 - 1.199260I$	$2.42176 + 8.23014I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.849802 + 0.580022I$ $a = -1.25646 - 2.10652I$ $b = 0.180753 - 1.091820I$	$3.69053 - 3.19749I$	0
$u = 0.849802 - 0.580022I$ $a = -1.25646 + 2.10652I$ $b = 0.180753 + 1.091820I$	$3.69053 + 3.19749I$	0
$u = 0.850752 + 0.584637I$ $a = 0.074575 - 1.074680I$ $b = -0.449062 - 0.991318I$	$3.68435 - 1.42902I$	0
$u = 0.850752 - 0.584637I$ $a = 0.074575 + 1.074680I$ $b = -0.449062 + 0.991318I$	$3.68435 + 1.42902I$	0
$u = 0.639559 + 0.812305I$ $a = 0.277848 + 0.749378I$ $b = -1.131630 - 0.010331I$	$7.08155 + 7.79782I$	0
$u = 0.639559 - 0.812305I$ $a = 0.277848 - 0.749378I$ $b = -1.131630 + 0.010331I$	$7.08155 - 7.79782I$	0
$u = -0.950501 + 0.161280I$ $a = 0.455484 + 0.011996I$ $b = 0.708579 + 0.554908I$	$0.83341 + 7.86376I$	0
$u = -0.950501 - 0.161280I$ $a = 0.455484 - 0.011996I$ $b = 0.708579 - 0.554908I$	$0.83341 - 7.86376I$	0
$u = 0.660685 + 0.804281I$ $a = -0.460261 - 0.955987I$ $b = 0.803987 - 0.508923I$	$7.04453 + 0.84251I$	0
$u = 0.660685 - 0.804281I$ $a = -0.460261 + 0.955987I$ $b = 0.803987 + 0.508923I$	$7.04453 - 0.84251I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.950182 + 0.465480I$ $a = 0.094286 + 0.516746I$ $b = 0.296626 + 0.481035I$	$-1.71761 - 1.68861I$	0
$u = 0.950182 - 0.465480I$ $a = 0.094286 - 0.516746I$ $b = 0.296626 - 0.481035I$	$-1.71761 + 1.68861I$	0
$u = -0.406856 + 0.845498I$ $a = -0.032963 - 0.295662I$ $b = 0.56540 - 1.31168I$	$-2.50384 - 8.49483I$	0
$u = -0.406856 - 0.845498I$ $a = -0.032963 + 0.295662I$ $b = 0.56540 + 1.31168I$	$-2.50384 + 8.49483I$	0
$u = -0.887774 + 0.582678I$ $a = 0.935153 + 0.083120I$ $b = 1.22014 - 1.26923I$	$2.63555 + 5.53579I$	0
$u = -0.887774 - 0.582678I$ $a = 0.935153 - 0.083120I$ $b = 1.22014 + 1.26923I$	$2.63555 - 5.53579I$	0
$u = -0.818657 + 0.450572I$ $a = -3.28553 + 1.87639I$ $b = -0.059830 + 0.982360I$	$1.74623 - 4.46561I$	0
$u = -0.818657 - 0.450572I$ $a = -3.28553 - 1.87639I$ $b = -0.059830 - 0.982360I$	$1.74623 + 4.46561I$	0
$u = 0.823901 + 0.681823I$ $a = -1.19203 - 1.20702I$ $b = -0.12432 - 1.63512I$	$2.85259 - 2.62751I$	0
$u = 0.823901 - 0.681823I$ $a = -1.19203 + 1.20702I$ $b = -0.12432 + 1.63512I$	$2.85259 + 2.62751I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.926283$ $a = 0.854247$ $b = 0.760609$	-1.61290	0
$u = -0.977472 + 0.473192I$ $a = 0.938151 - 0.165156I$ $b = -0.011295 + 0.587086I$	$1.20459 + 8.18013I$	0
$u = -0.977472 - 0.473192I$ $a = 0.938151 + 0.165156I$ $b = -0.011295 - 0.587086I$	$1.20459 - 8.18013I$	0
$u = -0.649188 + 0.876413I$ $a = -0.238761 + 0.471482I$ $b = 0.736869 + 0.099610I$	$7.68334 + 0.25660I$	0
$u = -0.649188 - 0.876413I$ $a = -0.238761 - 0.471482I$ $b = 0.736869 - 0.099610I$	$7.68334 - 0.25660I$	0
$u = -0.805819 + 0.748960I$ $a = 0.105328 - 1.206030I$ $b = -0.634172 + 0.360662I$	$5.12004 + 4.30665I$	0
$u = -0.805819 - 0.748960I$ $a = 0.105328 + 1.206030I$ $b = -0.634172 - 0.360662I$	$5.12004 - 4.30665I$	0
$u = 0.939555 + 0.575189I$ $a = -0.274937 + 1.214310I$ $b = -1.53346 + 0.18549I$	$0.35184 - 6.84298I$	0
$u = 0.939555 - 0.575189I$ $a = -0.274937 - 1.214310I$ $b = -1.53346 - 0.18549I$	$0.35184 + 6.84298I$	0
$u = 0.458825 + 0.763650I$ $a = -1.047300 + 0.514506I$ $b = 0.037737 + 1.087970I$	$1.08065 + 4.08048I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.458825 - 0.763650I$ $a = -1.047300 - 0.514506I$ $b = 0.037737 - 1.087970I$	$1.08065 - 4.08048I$	0
$u = 0.539514 + 0.699005I$ $a = 0.206542 - 0.079255I$ $b = 0.536198 + 1.293110I$	$-3.17732 + 1.39405I$	0
$u = 0.539514 - 0.699005I$ $a = 0.206542 + 0.079255I$ $b = 0.536198 - 1.293110I$	$-3.17732 - 1.39405I$	0
$u = 0.703112 + 0.534095I$ $a = -0.071455 - 1.308950I$ $b = 1.344760 - 0.215123I$	$1.08035 + 2.31080I$	0
$u = 0.703112 - 0.534095I$ $a = -0.071455 + 1.308950I$ $b = 1.344760 + 0.215123I$	$1.08035 - 2.31080I$	0
$u = -0.537922 + 0.983429I$ $a = 0.048509 + 0.489775I$ $b = -0.54128 + 1.35705I$	$2.81822 - 13.64750I$	0
$u = -0.537922 - 0.983429I$ $a = 0.048509 - 0.489775I$ $b = -0.54128 - 1.35705I$	$2.81822 + 13.64750I$	0
$u = 0.878444$ $a = 0.765301$ $b = 0.512720$	-1.64970	0
$u = -1.009080 + 0.491975I$ $a = -1.03079 + 2.15983I$ $b = 0.87359 + 1.38392I$	$-2.60289 + 6.20359I$	0
$u = -1.009080 - 0.491975I$ $a = -1.03079 - 2.15983I$ $b = 0.87359 - 1.38392I$	$-2.60289 - 6.20359I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.427475 + 1.040220I$ $a = -0.056678 + 0.787178I$ $b = 0.372426 + 1.198790I$	$4.32849 + 3.82697I$	0
$u = 0.427475 - 1.040220I$ $a = -0.056678 - 0.787178I$ $b = 0.372426 - 1.198790I$	$4.32849 - 3.82697I$	0
$u = -0.918955 + 0.650665I$ $a = 0.077171 + 0.811335I$ $b = 0.754789 - 0.079899I$	$2.06466 + 4.23388I$	0
$u = -0.918955 - 0.650665I$ $a = 0.077171 - 0.811335I$ $b = 0.754789 + 0.079899I$	$2.06466 - 4.23388I$	0
$u = 1.063870 + 0.369962I$ $a = 1.31086 + 1.33153I$ $b = 0.42212 + 1.42825I$	$-3.28779 - 0.28143I$	0
$u = 1.063870 - 0.369962I$ $a = 1.31086 - 1.33153I$ $b = 0.42212 - 1.42825I$	$-3.28779 + 0.28143I$	0
$u = -0.669425 + 0.556263I$ $a = 1.39519 - 0.74758I$ $b = -0.769467 - 0.429201I$	$2.53454 - 0.28463I$	0
$u = -0.669425 - 0.556263I$ $a = 1.39519 + 0.74758I$ $b = -0.769467 + 0.429201I$	$2.53454 + 0.28463I$	0
$u = -0.960743 + 0.609210I$ $a = 0.028076 + 0.866700I$ $b = 1.102640 - 0.252664I$	$1.65873 + 5.03382I$	0
$u = -0.960743 - 0.609210I$ $a = 0.028076 - 0.866700I$ $b = 1.102640 + 0.252664I$	$1.65873 - 5.03382I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.475350+1.035040I$ $a=-0.060496-0.461301I$ $b=\ \ 0.452078-0.961673I$	$5.61630-5.52289I$	0
$u=-0.475350-1.035040I$ $a=-0.060496+0.461301I$ $b=\ \ 0.452078+0.961673I$	$5.61630+5.52289I$	0
$u=-1.069980+0.399619I$ $a=\ \ 1.48760-1.98942I$ $b=\ \ 0.030102-1.047000I$	$-3.47061-1.39309I$	0
$u=-1.069980-0.399619I$ $a=\ \ 1.48760+1.98942I$ $b=\ \ 0.030102+1.047000I$	$-3.47061+1.39309I$	0
$u=\ \ 0.046085+0.855577I$ $a=-0.239658-0.787458I$ $b=-0.297747-0.177190I$	$4.31998-4.77119I$	0
$u=\ \ 0.046085-0.855577I$ $a=-0.239658+0.787458I$ $b=-0.297747+0.177190I$	$4.31998+4.77119I$	0
$u=-1.150540+0.033163I$ $a=\ \ 0.04175+2.34065I$ $b=\ \ 0.327382+1.370250I$	$-6.47670+4.16409I$	0
$u=-1.150540-0.033163I$ $a=\ \ 0.04175-2.34065I$ $b=\ \ 0.327382-1.370250I$	$-6.47670-4.16409I$	0
$u=-0.764698+0.354028I$ $a=-0.694778-0.393450I$ $b=-1.06922+0.98003I$	$-1.48089-2.58427I$	0
$u=-0.764698-0.354028I$ $a=-0.694778+0.393450I$ $b=-1.06922-0.98003I$	$-1.48089+2.58427I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.931412+0.706267I$ $a=-0.735829+0.157932I$ $b=\ \ 0.813993+0.382368I$	$4.71540+1.23998I$	0
$u=-0.931412-0.706267I$ $a=-0.735829-0.157932I$ $b=\ \ 0.813993-0.382368I$	$4.71540-1.23998I$	0
$u=\ \ 0.479078+0.677748I$ $a=\ \ 0.511177+0.249312I$ $b=-0.215463+1.061590I$	$-1.05102-2.47699I$	0
$u=\ \ 0.479078-0.677748I$ $a=\ \ 0.511177-0.249312I$ $b=-0.215463-1.061590I$	$-1.05102+2.47699I$	0
$u=\ \ 0.462726+0.668814I$ $a=\ \ 0.480800+0.040833I$ $b=\ \ 0.021718-1.074260I$	$-3.50685+0.66121I$	0
$u=\ \ 0.462726-0.668814I$ $a=\ \ 0.480800-0.040833I$ $b=\ \ 0.021718+1.074260I$	$-3.50685-0.66121I$	0
$u=\ \ 1.044590+0.583400I$ $a=-1.75741-1.11724I$ $b=\ \ 0.187605-1.144610I$	$-5.17008-5.51409I$	0
$u=\ \ 1.044590-0.583400I$ $a=-1.75741+1.11724I$ $b=\ \ 0.187605+1.144610I$	$-5.17008+5.51409I$	0
$u=-0.885638+0.811835I$ $a=\ \ 0.609964+0.376082I$ $b=-0.051715-0.915336I$	$5.00003+3.02886I$	0
$u=-0.885638-0.811835I$ $a=\ \ 0.609964-0.376082I$ $b=-0.051715+0.915336I$	$5.00003-3.02886I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 1.030060 + 0.623389I$ $a = 1.33548 + 1.65672I$ $b = -0.62080 + 1.50727I$	$-4.59816 - 6.49408I$	0
$u = 1.030060 - 0.623389I$ $a = 1.33548 - 1.65672I$ $b = -0.62080 - 1.50727I$	$-4.59816 + 6.49408I$	0
$u = 1.195750 + 0.212199I$ $a = 0.089352 - 0.369095I$ $b = -0.197353 - 0.034124I$	$0.013101 + 0.934312I$	0
$u = 1.195750 - 0.212199I$ $a = 0.089352 + 0.369095I$ $b = -0.197353 + 0.034124I$	$0.013101 - 0.934312I$	0
$u = 1.068640 + 0.581893I$ $a = -1.30648 - 2.15328I$ $b = 0.398500 - 1.302870I$	$-1.85136 - 8.54719I$	0
$u = 1.068640 - 0.581893I$ $a = -1.30648 + 2.15328I$ $b = 0.398500 + 1.302870I$	$-1.85136 + 8.54719I$	0
$u = -1.096240 + 0.528676I$ $a = -0.86983 + 1.69195I$ $b = 0.611574 + 0.963903I$	$-1.47654 + 5.76364I$	0
$u = -1.096240 - 0.528676I$ $a = -0.86983 - 1.69195I$ $b = 0.611574 - 0.963903I$	$-1.47654 - 5.76364I$	0
$u = -1.208030 + 0.158012I$ $a = 0.31166 + 2.70295I$ $b = -0.020873 + 1.299230I$	$-4.11234 - 1.67628I$	0
$u = -1.208030 - 0.158012I$ $a = 0.31166 - 2.70295I$ $b = -0.020873 - 1.299230I$	$-4.11234 + 1.67628I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 1.011760 + 0.683000I$ $a = -0.283999 + 0.168373I$ $b = -0.975347 - 0.359499I$	$5.96030 - 6.42997I$	0
$u = 1.011760 - 0.683000I$ $a = -0.283999 - 0.168373I$ $b = -0.975347 + 0.359499I$	$5.96030 + 6.42997I$	0
$u = 0.471037 + 0.610388I$ $a = 0.360659 - 0.851607I$ $b = -0.459416 - 1.141250I$	$-0.10257 + 3.76623I$	0
$u = 0.471037 - 0.610388I$ $a = 0.360659 + 0.851607I$ $b = -0.459416 + 1.141250I$	$-0.10257 - 3.76623I$	0
$u = -0.770484 + 0.026292I$ $a = 0.693935 + 0.382307I$ $b = -0.614336 - 0.339169I$	$1.55723 + 1.68948I$	0
$u = -0.770484 - 0.026292I$ $a = 0.693935 - 0.382307I$ $b = -0.614336 + 0.339169I$	$1.55723 - 1.68948I$	0
$u = 1.027250 + 0.690330I$ $a = 0.053458 - 0.908307I$ $b = 1.270730 - 0.147980I$	$5.8970 - 13.4381I$	0
$u = 1.027250 - 0.690330I$ $a = 0.053458 + 0.908307I$ $b = 1.270730 + 0.147980I$	$5.8970 + 13.4381I$	0
$u = -0.706699 + 1.022180I$ $a = -0.147227 + 0.424050I$ $b = 0.145519 + 0.996926I$	$-0.64713 + 4.08707I$	0
$u = -0.706699 - 1.022180I$ $a = -0.147227 - 0.424050I$ $b = 0.145519 - 0.996926I$	$-0.64713 - 4.08707I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 1.243760 + 0.073901I$ $a = -0.55855 - 2.02986I$ $b = -0.288792 - 1.358460I$	$-8.27641 + 5.84072I$	0
$u = 1.243760 - 0.073901I$ $a = -0.55855 + 2.02986I$ $b = -0.288792 + 1.358460I$	$-8.27641 - 5.84072I$	0
$u = 1.090600 + 0.635158I$ $a = 1.93058 + 1.36640I$ $b = -0.168254 + 1.127970I$	$-0.75512 - 9.40312I$	0
$u = 1.090600 - 0.635158I$ $a = 1.93058 - 1.36640I$ $b = -0.168254 - 1.127970I$	$-0.75512 + 9.40312I$	0
$u = -1.034360 + 0.725967I$ $a = 0.035860 - 0.515236I$ $b = -0.826475 - 0.094139I$	$6.49748 + 5.66621I$	0
$u = -1.034360 - 0.725967I$ $a = 0.035860 + 0.515236I$ $b = -0.826475 + 0.094139I$	$6.49748 - 5.66621I$	0
$u = 1.067790 + 0.684109I$ $a = -1.48351 - 1.52576I$ $b = 0.60610 - 1.31730I$	$-1.78087 - 11.16920I$	0
$u = 1.067790 - 0.684109I$ $a = -1.48351 + 1.52576I$ $b = 0.60610 + 1.31730I$	$-1.78087 + 11.16920I$	0
$u = -1.115660 + 0.628004I$ $a = 1.14931 - 1.85790I$ $b = -0.61624 - 1.45749I$	$-4.6053 + 13.9382I$	0
$u = -1.115660 - 0.628004I$ $a = 1.14931 + 1.85790I$ $b = -0.61624 + 1.45749I$	$-4.6053 - 13.9382I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 1.106070 + 0.667405I$ $a = 0.86430 + 1.28666I$ $b = -0.096832 + 1.181380I$	$-2.38114 - 2.96247I$	0
$u = 1.106070 - 0.667405I$ $a = 0.86430 - 1.28666I$ $b = -0.096832 - 1.181380I$	$-2.38114 + 2.96247I$	0
$u = -0.335561 + 1.288140I$ $a = 0.043317 - 0.657021I$ $b = -0.194413 - 1.116690I$	$1.77309 + 6.88474I$	0
$u = -0.335561 - 1.288140I$ $a = 0.043317 + 0.657021I$ $b = -0.194413 + 1.116690I$	$1.77309 - 6.88474I$	0
$u = 1.330430 + 0.121722I$ $a = 0.07052 - 2.09110I$ $b = 0.303332 - 1.355630I$	$-4.73899 - 11.22810I$	0
$u = 1.330430 - 0.121722I$ $a = 0.07052 + 2.09110I$ $b = 0.303332 + 1.355630I$	$-4.73899 + 11.22810I$	0
$u = -1.135830 + 0.718751I$ $a = -1.21812 + 1.72414I$ $b = 0.57042 + 1.44790I$	$0.9517 + 19.8390I$	0
$u = -1.135830 - 0.718751I$ $a = -1.21812 - 1.72414I$ $b = 0.57042 - 1.44790I$	$0.9517 - 19.8390I$	0
$u = 0.641706 + 0.066496I$ $a = -0.20517 - 1.64497I$ $b = 0.864414 - 0.645608I$	$0.68857 + 2.10355I$	$0. - 3.94558I$
$u = 0.641706 - 0.066496I$ $a = -0.20517 + 1.64497I$ $b = 0.864414 + 0.645608I$	$0.68857 - 2.10355I$	$0. + 3.94558I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-1.161540+0.714210I$ $a=\ \ 0.87176-1.47173I$ $b=-0.530899-1.134910I$	$3.49320+11.79610I$	0
$u=-1.161540-0.714210I$ $a=\ \ 0.87176+1.47173I$ $b=-0.530899+1.134910I$	$3.49320-11.79610I$	0
$u=-0.240566+0.582744I$ $a=\ \ 0.523679+0.256251I$ $b=-0.495624+0.653225I$	$0.82721-1.34235I$	$5.04365+4.25840I$
$u=-0.240566-0.582744I$ $a=\ \ 0.523679-0.256251I$ $b=-0.495624-0.653225I$	$0.82721+1.34235I$	$5.04365-4.25840I$
$u=\ \ 1.338070+0.308757I$ $a=\ \ 0.28460+1.54075I$ $b=-0.012825+1.078030I$	$-2.83409-2.36436I$	0
$u=\ \ 1.338070-0.308757I$ $a=\ \ 0.28460-1.54075I$ $b=-0.012825-1.078030I$	$-2.83409+2.36436I$	0
$u=\ \ 1.182530+0.702549I$ $a=\ \ 1.07612+1.79385I$ $b=-0.386286+1.340960I$	$2.00693-10.07090I$	0
$u=\ \ 1.182530-0.702549I$ $a=\ \ 1.07612-1.79385I$ $b=-0.386286-1.340960I$	$2.00693+10.07090I$	0
$u=-0.554682+0.285078I$ $a=\ \ 2.31767+0.13868I$ $b=-0.338948-0.202228I$	$2.38892-0.23468I$	$4.97576-5.77487I$
$u=-0.554682-0.285078I$ $a=\ \ 2.31767-0.13868I$ $b=-0.338948+0.202228I$	$2.38892+0.23468I$	$4.97576+5.77487I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.322587 + 0.530874I$ $a = 0.459929 + 1.014170I$ $b = 0.393038 + 0.502379I$	$0.26511 - 1.89120I$	$1.41722 + 2.98387I$
$u = 0.322587 - 0.530874I$ $a = 0.459929 - 1.014170I$ $b = 0.393038 - 0.502379I$	$0.26511 + 1.89120I$	$1.41722 - 2.98387I$
$u = -1.25998 + 0.73185I$ $a = -0.829599 + 1.084760I$ $b = 0.045838 + 1.014070I$	$-2.47978 + 2.90692I$	0
$u = -1.25998 - 0.73185I$ $a = -0.829599 - 1.084760I$ $b = 0.045838 - 1.014070I$	$-2.47978 - 2.90692I$	0
$u = 1.09884 + 0.96161I$ $a = -0.683291 - 0.914299I$ $b = 0.121174 - 1.288090I$	$-0.97027 - 3.80685I$	0
$u = 1.09884 - 0.96161I$ $a = -0.683291 + 0.914299I$ $b = 0.121174 + 1.288090I$	$-0.97027 + 3.80685I$	0
$u = 0.456728 + 0.116700I$ $a = -3.55119 + 0.05805I$ $b = -0.454594 - 0.970457I$	$1.43103 - 3.00743I$	$-4.75841 + 2.23933I$
$u = 0.456728 - 0.116700I$ $a = -3.55119 - 0.05805I$ $b = -0.454594 + 0.970457I$	$1.43103 + 3.00743I$	$-4.75841 - 2.23933I$
$u = -1.52623 + 0.17082I$ $a = 0.24299 - 1.77972I$ $b = -0.035262 - 1.194020I$	$-3.36742 - 0.16093I$	0
$u = -1.52623 - 0.17082I$ $a = 0.24299 + 1.77972I$ $b = -0.035262 + 1.194020I$	$-3.36742 + 0.16093I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.158281 + 0.427989I$		
$a = 1.086780 - 0.042665I$	$-0.68140 - 3.01480I$	$-2.32087 + 2.32409I$
$b = -0.521113 + 1.108420I$		
$u = 0.158281 - 0.427989I$		
$a = 1.086780 + 0.042665I$	$-0.68140 + 3.01480I$	$-2.32087 - 2.32409I$
$b = -0.521113 - 1.108420I$		

II. $\boldsymbol{I_2^u = \langle -26479u^{31} + 2745u^{30} + \cdots + 5497b - 38311,\ -1.13 \times 10^6 u^{31} + 1.89 \times 10^5 u^{30} + \cdots + 1.59 \times 10^5 a - 2.10 \times 10^6,\ u^{32} - 8u^{30} + \cdots + 3u + 1\rangle}$

(i) Arc colorings

$$a_2 = \begin{pmatrix} 0 \\ u \end{pmatrix}$$

$$a_6 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$

$$a_7 = \begin{pmatrix} 1 \\ u^2 \end{pmatrix}$$

$$a_3 = \begin{pmatrix} -u \\ -u^3 + u \end{pmatrix}$$

$$a_1 = \begin{pmatrix} u^3 \\ u^5 - u^3 + u \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} 7.08829u^{31} - 1.18347u^{30} + \cdots + 10.7329u + 13.1857 \\ 4.81699u^{31} - 0.499363u^{30} + \cdots + 10.6927u + 6.96944 \end{pmatrix}$$

$$a_5 = \begin{pmatrix} 5.06478u^{31} - 3.60217u^{30} + \cdots + 5.91296u + 6.17980 \\ u^{31} - 7u^{29} + \cdots - u - 1 \end{pmatrix}$$

$$a_8 = \begin{pmatrix} 1.50828u^{31} - 3.22222u^{30} + \cdots + 14.2575u + 5.80456 \\ -0.690847u^{31} - 1.07743u^{30} + \cdots + 7.17233u + 3.37171 \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} 2.27130u^{31} - 0.684104u^{30} + \cdots + 0.0401598u + 6.21628 \\ 4.81699u^{31} - 0.499363u^{30} + \cdots + 10.6927u + 6.96944 \end{pmatrix}$$

$$a_4 = \begin{pmatrix} -13.0576u^{31} + 8.38066u^{30} + \cdots - 39.4981u - 23.8923 \\ -1.49838u^{31} + 1.52009u^{30} + \cdots - 7.76350u - 3.44705 \end{pmatrix}$$

$$a_9 = \begin{pmatrix} 2.06651u^{31} + 0.244610u^{30} + \cdots + 0.721792u + 6.60355 \\ 4.07169u^{31} - 0.584074u^{30} + \cdots + 8.63086u + 6.44935 \end{pmatrix}$$

$$a_{12} = \begin{pmatrix} 0.758345u^{31} + 2.62563u^{30} + \cdots + 7.30234u + 8.45269 \\ 1.76754u^{31} - 0.405632u^{30} + \cdots + 2.84489u + 2.15999 \end{pmatrix}$$

(ii) Obstruction class $= 1$

(iii) Cusp Shapes $= \frac{6294202}{159413}u^{31} - \frac{3055909}{159413}u^{30} + \cdots + \frac{12713037}{159413}u + \frac{8598992}{159413}$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{32} - 16u^{31} + \cdots - 13u + 1$
c_2	$u^{32} - 8u^{30} + \cdots - 3u + 1$
c_3	$u^{32} - 6u^{30} + \cdots - 4u + 1$
c_4	$u^{32} - u^{31} + \cdots + 15u^2 + 1$
c_5	$u^{32} + 12u^{30} + \cdots + 5u + 1$
c_6	$u^{32} - 8u^{30} + \cdots + 3u + 1$
c_7	$u^{32} + 2u^{31} + \cdots - 8u + 1$
c_8	$u^{32} - u^{31} + \cdots - 4u + 1$
c_9	$u^{32} - 14u^{30} + \cdots - 44u + 11$
c_{10}	$u^{32} + 12u^{30} + \cdots - 5u + 1$
c_{11}	$u^{32} - 6u^{30} + \cdots + 2u + 1$
c_{12}	$u^{32} - 14u^{30} + \cdots + 44u + 11$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{32}+8y^{31}+\cdots+7y+1$
c_2, c_6	$y^{32}-16y^{31}+\cdots-13y+1$
c_3	$y^{32}-12y^{31}+\cdots-14y+1$
c_4	$y^{32}+9y^{31}+\cdots+30y+1$
c_5, c_{10}	$y^{32}+24y^{31}+\cdots+49y+1$
c_7	$y^{32}-6y^{31}+\cdots-12y+1$
c_8	$y^{32}-5y^{31}+\cdots+10y+1$
c_9, c_{12}	$y^{32}-28y^{31}+\cdots-2508y+121$
c_{11}	$y^{32}-12y^{31}+\cdots-2y+1$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.615368 + 0.789600I$ $a = 0.087021 + 0.668309I$ $b = -0.318506 + 0.829126I$	$0.18681 - 4.02306I$	$4.02027 + 5.71072I$
$u = 0.615368 - 0.789600I$ $a = 0.087021 - 0.668309I$ $b = -0.318506 - 0.829126I$	$0.18681 + 4.02306I$	$4.02027 - 5.71072I$
$u = 0.772369 + 0.562912I$ $a = -1.40093 - 1.44470I$ $b = 1.09438 - 0.98325I$	$2.47144 + 1.25345I$	$-1.40853 - 6.35420I$
$u = 0.772369 - 0.562912I$ $a = -1.40093 + 1.44470I$ $b = 1.09438 + 0.98325I$	$2.47144 - 1.25345I$	$-1.40853 + 6.35420I$
$u = 1.035230 + 0.238946I$ $a = 1.33854 + 1.77837I$ $b = 0.13899 + 1.44826I$	$-3.18191 - 0.80406I$	$-5.79125 + 4.03239I$
$u = 1.035230 - 0.238946I$ $a = 1.33854 - 1.77837I$ $b = 0.13899 - 1.44826I$	$-3.18191 + 0.80406I$	$-5.79125 - 4.03239I$
$u = 0.907928 + 0.205440I$ $a = 0.08277 + 2.84353I$ $b = 0.03127 + 1.51234I$	$-7.41909 - 0.89346I$	$3.55183 + 9.59848I$
$u = 0.907928 - 0.205440I$ $a = 0.08277 - 2.84353I$ $b = 0.03127 - 1.51234I$	$-7.41909 + 0.89346I$	$3.55183 - 9.59848I$
$u = -1.054870 + 0.175754I$ $a = 0.133477 - 0.465569I$ $b = -0.356101 - 0.370766I$	$-0.294687 - 0.470796I$	$-2.75341 - 2.35111I$
$u = -1.054870 - 0.175754I$ $a = 0.133477 + 0.465569I$ $b = -0.356101 + 0.370766I$	$-0.294687 + 0.470796I$	$-2.75341 + 2.35111I$

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.933212 + 0.586055I$ $a = -0.468986 + 0.710022I$ $b = -1.158080 - 0.677112I$	$1.93402 - 5.84401I$	$-0.76424 + 11.45101I$
$u = 0.933212 - 0.586055I$ $a = -0.468986 - 0.710022I$ $b = -1.158080 + 0.677112I$	$1.93402 + 5.84401I$	$-0.76424 - 11.45101I$
$u = 0.250514 + 0.823648I$ $a = 0.588258 - 1.181840I$ $b = 0.210478 - 0.985969I$	$2.54752 - 5.98225I$	$2.43276 + 4.77208I$
$u = 0.250514 - 0.823648I$ $a = 0.588258 + 1.181840I$ $b = 0.210478 + 0.985969I$	$2.54752 + 5.98225I$	$2.43276 - 4.77208I$
$u = -1.022740 + 0.503434I$ $a = -1.10903 + 2.00116I$ $b = 0.749499 + 1.176570I$	$-2.15467 + 6.28202I$	$1.82594 - 11.38717I$
$u = -1.022740 - 0.503434I$ $a = -1.10903 - 2.00116I$ $b = 0.749499 - 1.176570I$	$-2.15467 - 6.28202I$	$1.82594 + 11.38717I$
$u = 0.875991 + 0.758352I$ $a = 0.276975 - 0.871930I$ $b = -0.024633 + 0.244289I$	$6.16423 - 2.86880I$	$9.14034 + 2.25780I$
$u = 0.875991 - 0.758352I$ $a = 0.276975 + 0.871930I$ $b = -0.024633 - 0.244289I$	$6.16423 + 2.86880I$	$9.14034 - 2.25780I$
$u = -0.628826 + 0.552150I$ $a = 1.59454 - 0.63781I$ $b = 0.504831 - 1.154620I$	$2.10078 + 3.61681I$	$2.05377 - 7.56854I$
$u = -0.628826 - 0.552150I$ $a = 1.59454 + 0.63781I$ $b = 0.504831 + 1.154620I$	$2.10078 - 3.61681I$	$2.05377 + 7.56854I$

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.696235+0.427334I$ $a=\ 0.024540-0.491594I$ $b=-0.795794+0.898211I$	$-0.95883-2.37089I$	$2.28576+1.33523I$
$u=-0.696235-0.427334I$ $a=\ 0.024540+0.491594I$ $b=-0.795794-0.898211I$	$-0.95883+2.37089I$	$2.28576-1.33523I$
$u=-1.111200+0.613834I$ $a=\ 1.58321-1.93450I$ $b=-0.372304-1.181190I$	$0.19464+10.57390I$	$-0.31764-10.42332I$
$u=-1.111200-0.613834I$ $a=\ 1.58321+1.93450I$ $b=-0.372304+1.181190I$	$0.19464-10.57390I$	$-0.31764+10.42332I$
$u=-0.469854+0.518228I$ $a=-2.02531-0.98558I$ $b=\ 0.353040-1.006530I$	$2.23888-5.70366I$	$2.39748+7.68589I$
$u=-0.469854-0.518228I$ $a=-2.02531+0.98558I$ $b=\ 0.353040+1.006530I$	$2.23888+5.70366I$	$2.39748-7.68589I$
$u=-0.624236+0.123767I$ $a=\ 2.59111+0.59544I$ $b=-0.224218+0.468925I$	$2.25602-0.77725I$	$1.95018+5.87317I$
$u=-0.624236-0.123767I$ $a=\ 2.59111-0.59544I$ $b=-0.224218-0.468925I$	$2.25602+0.77725I$	$1.95018-5.87317I$
$u=\ 1.398230+0.067906I$ $a=\ 0.38167+1.91257I$ $b=\ 0.028832+1.217920I$	$-3.30160-1.14573I$	$-2.29360+3.30035I$
$u=\ 1.398230-0.067906I$ $a=\ 0.38167-1.91257I$ $b=\ 0.028832-1.217920I$	$-3.30160+1.14573I$	$-2.29360-3.30035I$

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-1.18088+0.85568I$		
$a=-0.677860+1.044310I$	$-2.78356+3.82658I$	$-7.82967-9.67895I$
$b=\ \ 0.138317+1.145980I$		
$u=-1.18088-0.85568I$		
$a=-0.677860-1.044310I$	$-2.78356-3.82658I$	$-7.82967+9.67895I$
$b=\ \ 0.138317-1.145980I$		

III. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1	$(u^{32}-16u^{31}+\cdots-13u+1)$ $\cdot(u^{152}+63u^{151}+\cdots+4922785u+134689)$
c_2	$(u^{32}-8u^{30}+\cdots-3u+1)(u^{152}-u^{151}+\cdots+1379u+367)$
c_3	$(u^{32}-6u^{30}+\cdots-4u+1)(u^{152}+u^{151}+\cdots+589492u+19909)$
c_4	$(u^{32}-u^{31}+\cdots+15u^2+1)(u^{152}+4u^{151}+\cdots+5694u+7057)$
c_5	$(u^{32}+12u^{30}+\cdots+5u+1)(u^{152}+u^{151}+\cdots-226661u+18163)$
c_6	$(u^{32}-8u^{30}+\cdots+3u+1)(u^{152}-u^{151}+\cdots+1379u+367)$
c_7	$(u^{32}+2u^{31}+\cdots-8u+1)(u^{152}-9u^{151}+\cdots-50u+1)$
c_8	$(u^{32}-u^{31}+\cdots-4u+1)(u^{152}-4u^{151}+\cdots+22u+1)$
c_9	$(u^{32}-14u^{30}+\cdots-44u+11)(u^{152}-3u^{151}+\cdots-2650u+223)$
c_{10}	$(u^{32}+12u^{30}+\cdots-5u+1)(u^{152}+u^{151}+\cdots-226661u+18163)$
c_{11}	$(u^{32}-6u^{30}+\cdots+2u+1)(u^{152}+7u^{151}+\cdots+59968u+7903)$
c_{12}	$(u^{32}-14u^{30}+\cdots+44u+11)(u^{152}-3u^{151}+\cdots-2650u+223)$

IV. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1	$(y^{32}+8y^{31}+\cdots+7y+1)$ $\cdot(y^{152}+61y^{151}+\cdots+143171208307y+18141126721)$
c_2, c_6	$(y^{32}-16y^{31}+\cdots-13y+1)$ $\cdot(y^{152}-63y^{151}+\cdots-4922785y+134689)$
c_3	$(y^{32}-12y^{31}+\cdots-14y+1)$ $\cdot(y^{152}-27y^{151}+\cdots-116608221282y+396368281)$
c_4	$(y^{32}+9y^{31}+\cdots+30y+1)$ $\cdot(y^{152}+38y^{151}+\cdots+3402431974y+49801249)$
c_5, c_{10}	$(y^{32}+24y^{31}+\cdots+49y+1)$ $\cdot(y^{152}+105y^{151}+\cdots-5729591991y+329894569)$
c_7	$(y^{32}-6y^{31}+\cdots-12y+1)(y^{152}-5y^{151}+\cdots-68y+1)$
c_8	$(y^{32}-5y^{31}+\cdots+10y+1)(y^{152}-8y^{151}+\cdots-22y+1)$
c_9, c_{12}	$(y^{32}-28y^{31}+\cdots-2508y+121)$ $\cdot(y^{152}-119y^{151}+\cdots-2364476y+49729)$
c_{11}	$(y^{32}-12y^{31}+\cdots-2y+1)$ $\cdot(y^{152}-39y^{151}+\cdots-5965053662y+62457409)$