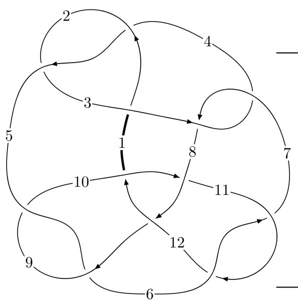
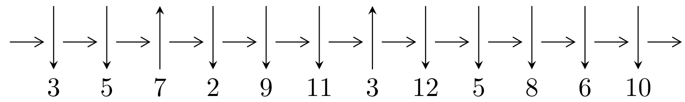
$12n_{0201}$ $(K12n_{0201})$



A knot diagram[1]

Linearized knot diagam



Solving Sequence

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

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

$$\begin{aligned}
I_1^u = \langle & 5.14997 \times 10^{27} u^{29} + 1.82430 \times 10^{28} u^{28} + \cdots + 1.93982 \times 10^{29} b + 5.49324 \times 10^{27}, \\
& 4.70210 \times 10^{29} u^{29} + 1.55178 \times 10^{30} u^{28} + \cdots + 1.61005 \times 10^{31} a + 6.19868 \times 10^{31}, \\
& u^{30} + 5u^{29} + \cdots - 172u - 16 \rangle \\
I_2^u = \langle & -5u^4 a^3 - 6u^4 a^2 + \cdots - 20a + 39,\ 6u^4 a^2 + 6u^4 a + \cdots + 5a - 50,\ u^5 + u^4 - 3u^3 - 2u^2 + 2u - 1 \rangle \\
I_3^u = \langle & -u^{14} - 5u^{13} - 6u^{12} + 9u^{11} + 26u^{10} + 10u^9 - 21u^8 - 15u^7 + 6u^6 - 7u^5 - 19u^4 + 2u^3 + 15u^2 + b + 3u - 3, \\
& 3u^{14} + 15u^{13} + \cdots + a + 3, \\
& u^{15} + 5u^{14} + 6u^{13} - 9u^{12} - 25u^{11} - 7u^{10} + 22u^9 + 10u^8 - 11u^7 + 7u^6 + 18u^5 - 6u^4 - 15u^3 + 4u - 1 \rangle \\
I_4^u = \langle & a^2 + 2b - a + 2,\ a^3 + 2a + 1,\ u - 1 \rangle \\
I_5^u = \langle & -13u^5 a^3 - 13u^5 a^2 + \cdots + a + 2,\ u^5 a^3 - 3u^5 a^2 + \cdots - 31a + 33,\ u^6 + u^5 - 2u^4 + 2u^2 - 2u - 1 \rangle \\
I_6^u = \langle & -a^3 + b - 2a + 1,\ a^4 - a^3 + 2a^2 - 2a + 1,\ u - 1 \rangle
\end{aligned}$$

* 6 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 96 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. $\boldsymbol{I_1^u =}$
$\boldsymbol{\langle 5.15\times10^{27}u^{29}+1.82\times10^{28}u^{28}+\cdots+1.94\times10^{29}b+5.49\times10^{27},\ 4.70\times10^{29}u^{29}+1.55\times10^{30}u^{28}+\cdots+1.61\times10^{31}a+6.20\times10^{31},\ u^{30}+5u^{29}+\cdots-172u-16\rangle}$

(i) Arc colorings

$$a_3 = \begin{pmatrix}1\\0\end{pmatrix}$$
$$a_5 = \begin{pmatrix}0\\u\end{pmatrix}$$
$$a_2 = \begin{pmatrix}1\\-u^2\end{pmatrix}$$
$$a_1 = \begin{pmatrix}-u^2+1\\-u^2\end{pmatrix}$$
$$a_4 = \begin{pmatrix}u\\-u^3+u\end{pmatrix}$$
$$a_{10} = \begin{pmatrix}-0.0292047u^{29}-0.0963807u^{28}+\cdots+15.3253u-3.84999\\-0.0265487u^{29}-0.0940447u^{28}+\cdots+5.13027u-0.0283182\end{pmatrix}$$
$$a_9 = \begin{pmatrix}-0.0292047u^{29}-0.0963807u^{28}+\cdots+15.3253u-3.84999\\0.0239871u^{29}+0.113617u^{28}+\cdots-2.94099u-0.822600\end{pmatrix}$$
$$a_6 = \begin{pmatrix}-0.0333701u^{29}-0.154719u^{28}+\cdots+4.11599u+2.89975\\-0.0107619u^{29}-0.0419176u^{28}+\cdots+0.102195u+0.142700\end{pmatrix}$$
$$a_{12} = \begin{pmatrix}0.0442756u^{29}+0.200796u^{28}+\cdots-3.91736u-2.44196\\-0.00562573u^{29}-0.00670684u^{28}+\cdots-1.22478u-0.441173\end{pmatrix}$$
$$a_8 = \begin{pmatrix}0.0525283u^{29}+0.229276u^{28}+\cdots+1.10359u-4.04234\\0.0233792u^{29}+0.0945798u^{28}+\cdots+0.173151u-0.289600\end{pmatrix}$$
$$a_7 = \begin{pmatrix}0.0291491u^{29}+0.134696u^{28}+\cdots+0.930435u-3.75274\\0.0233792u^{29}+0.0945798u^{28}+\cdots+0.173151u-0.289600\end{pmatrix}$$
$$a_{11} = \begin{pmatrix}0.168494u^{29}+0.707380u^{28}+\cdots-22.8757u-5.50128\\-0.00570701u^{29}-0.0157006u^{28}+\cdots+0.569930u-0.316142\end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= -0.406284u^{29}-1.66706u^{28}+\cdots+56.3610u-5.50399$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{30}+27u^{29}+\cdots+35696u+256$
c_2, c_4	$u^{30}-5u^{29}+\cdots+172u-16$
c_3, c_7	$u^{30}-6u^{29}+\cdots+736u+128$
c_5, c_6, c_9 c_{11}	$u^{30}+10u^{28}+\cdots+u-1$
c_8	$u^{30}+24u^{29}+\cdots+34816u+2048$
c_{10}, c_{12}	$u^{30}-u^{29}+\cdots-2u+1$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{30} - 43y^{29} + \cdots - 1144368896y + 65536$
c_2, c_4	$y^{30} - 27y^{29} + \cdots - 35696y + 256$
c_3, c_7	$y^{30} + 12y^{29} + \cdots - 289792y + 16384$
c_5, c_6, c_9 c_{11}	$y^{30} + 20y^{29} + \cdots - 5y + 1$
c_8	$y^{30} + 12y^{29} + \cdots - 46137344y + 4194304$
c_{10}, c_{12}	$y^{30} - 23y^{29} + \cdots - 40y + 1$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.185580 + 0.944093I$ $a = -1.001730 + 0.055927I$ $b = -1.130640 - 0.094807I$	$-0.96646 - 3.13608I$	$-4.74984 + 4.49793I$
$u = 0.185580 - 0.944093I$ $a = -1.001730 - 0.055927I$ $b = -1.130640 + 0.094807I$	$-0.96646 + 3.13608I$	$-4.74984 - 4.49793I$
$u = 1.09059$ $a = -0.312198$ $b = -1.15451$	-2.10768	1.10790
$u = -0.640861 + 0.910736I$ $a = 0.987047 - 0.263529I$ $b = 0.763609 - 0.165945I$	$6.62408 + 4.56917I$	$-5.77654 - 9.05645I$
$u = -0.640861 - 0.910736I$ $a = 0.987047 + 0.263529I$ $b = 0.763609 + 0.165945I$	$6.62408 - 4.56917I$	$-5.77654 + 9.05645I$
$u = 0.412058 + 1.046100I$ $a = 1.320550 - 0.089510I$ $b = 1.142840 + 0.316503I$	$2.28381 - 11.34220I$	$-5.85157 + 7.46971I$
$u = 0.412058 - 1.046100I$ $a = 1.320550 + 0.089510I$ $b = 1.142840 - 0.316503I$	$2.28381 + 11.34220I$	$-5.85157 - 7.46971I$
$u = -0.858059 + 0.076225I$ $a = 0.40465 - 1.62711I$ $b = 0.221594 - 0.481448I$	$8.06685 + 5.26278I$	$9.69455 - 9.24591I$
$u = -0.858059 - 0.076225I$ $a = 0.40465 + 1.62711I$ $b = 0.221594 + 0.481448I$	$8.06685 - 5.26278I$	$9.69455 + 9.24591I$
$u = 0.697419 + 0.488961I$ $a = -0.219398 + 0.713511I$ $b = -0.189158 - 0.686223I$	$-3.18199 - 1.29456I$	$-12.77780 - 2.70196I$

Solutions to I^u_1	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.697419 - 0.488961I$ $a = -0.219398 - 0.713511I$ $b = -0.189158 + 0.686223I$	$-3.18199 + 1.29456I$	$-12.77780 + 2.70196I$
$u = -0.980322 + 0.821398I$ $a = -0.268522 + 0.673529I$ $b = -0.414628 + 0.219363I$	$5.73142 + 1.70454I$	$-14.08727 - 0.46304I$
$u = -0.980322 - 0.821398I$ $a = -0.268522 - 0.673529I$ $b = -0.414628 - 0.219363I$	$5.73142 - 1.70454I$	$-14.08727 + 0.46304I$
$u = 0.983080 + 0.840486I$ $a = -0.207226 - 0.993870I$ $b = -0.217086 - 0.194262I$	$0.63688 + 4.93892I$	$-8.17431 - 4.19554I$
$u = 0.983080 - 0.840486I$ $a = -0.207226 + 0.993870I$ $b = -0.217086 + 0.194262I$	$0.63688 - 4.93892I$	$-8.17431 + 4.19554I$
$u = 0.529897 + 0.387033I$ $a = 0.760579 + 0.099172I$ $b = 0.272048 - 0.498030I$	$-0.616430 - 1.153860I$	$-7.46498 + 5.62168I$
$u = 0.529897 - 0.387033I$ $a = 0.760579 - 0.099172I$ $b = 0.272048 + 0.498030I$	$-0.616430 + 1.153860I$	$-7.46498 - 5.62168I$
$u = 1.329220 + 0.243682I$ $a = 0.323500 + 0.469369I$ $b = 1.88537 - 0.37732I$	$-4.25514 - 1.03783I$	$-6.94488 + 3.56711I$
$u = 1.329220 - 0.243682I$ $a = 0.323500 - 0.469369I$ $b = 1.88537 + 0.37732I$	$-4.25514 + 1.03783I$	$-6.94488 - 3.56711I$
$u = -1.46779 + 0.42678I$ $a = 0.428034 - 0.659397I$ $b = 1.77991 - 0.18253I$	$-6.26616 + 8.18280I$	$-7.69035 - 5.49765I$

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -1.46779 - 0.42678I$ $a = 0.428034 + 0.659397I$ $b = 1.77991 + 0.18253I$	$-6.26616 - 8.18280I$	$-7.69035 + 5.49765I$
$u = -1.57146 + 0.14677I$ $a = 0.578643 + 0.350914I$ $b = 2.02947 + 0.31224I$	$-10.76200 + 3.67525I$	$-12.88309 - 1.54091I$
$u = -1.57146 - 0.14677I$ $a = 0.578643 - 0.350914I$ $b = 2.02947 - 0.31224I$	$-10.76200 - 3.67525I$	$-12.88309 + 1.54091I$
$u = 1.56632 + 0.22150I$ $a = -0.528754 - 0.726360I$ $b = -1.94785 - 0.95867I$	$-0.77063 - 8.39049I$	$-8.00000 + 5.59781I$
$u = 1.56632 - 0.22150I$ $a = -0.528754 + 0.726360I$ $b = -1.94785 + 0.95867I$	$-0.77063 + 8.39049I$	$-8.00000 - 5.59781I$
$u = -1.54411 + 0.40410I$ $a = -0.646501 + 0.789954I$ $b = -2.35333 + 0.65826I$	$-3.9951 + 16.5974I$	$-8.00000 - 7.96952I$
$u = -1.54411 - 0.40410I$ $a = -0.646501 - 0.789954I$ $b = -2.35333 - 0.65826I$	$-3.9951 - 16.5974I$	$-8.00000 + 7.96952I$
$u = -1.64278 + 0.07145I$ $a = -0.548824 - 0.489947I$ $b = -1.50370 - 0.48413I$	$-9.12603 - 2.01137I$	$-11.51571 + 3.04989I$
$u = -1.64278 - 0.07145I$ $a = -0.548824 + 0.489947I$ $b = -1.50370 + 0.48413I$	$-9.12603 + 2.01137I$	$-11.51571 - 3.04989I$
$u = -0.0869836$ $a = -5.20191$ $b = -0.522412$	-0.887138	-11.1170

II. $\boldsymbol{I_2^u = \langle -5u^4a^3 - 6u^4a^2 + \cdots - 20a + 39,\ 6u^4a^2 + 6u^4a + \cdots + 5a - 50,\ u^5 + u^4 - 3u^3 - 2u^2 + 2u - 1 \rangle}$

(i) Arc colorings

$$a_3 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$

$$a_5 = \begin{pmatrix} 0 \\ u \end{pmatrix}$$

$$a_2 = \begin{pmatrix} 1 \\ -u^2 \end{pmatrix}$$

$$a_1 = \begin{pmatrix} -u^2 + 1 \\ -u^2 \end{pmatrix}$$

$$a_4 = \begin{pmatrix} u \\ -u^3 + u \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} a \\ 0.172414a^3u^4 + 0.206897a^2u^4 + \cdots + 0.689655a - 1.34483 \end{pmatrix}$$

$$a_9 = \begin{pmatrix} a \\ 0.172414a^3u^4 + 0.206897a^2u^4 + \cdots + 0.689655a - 1.34483 \end{pmatrix}$$

$$a_6 = \begin{pmatrix} -a^2u \\ -0.448276a^3u^4 - 1.13793a^2u^4 + \cdots + 0.206897a + 0.896552 \end{pmatrix}$$

$$a_{12} = \begin{pmatrix} -0.206897a^3u^4 - 0.448276a^2u^4 + \cdots + 1.17241a + 4.41379 \\ -0.551724a^3u^4 - 0.862069a^2u^4 + \cdots + 0.793103a + 3.10345 \end{pmatrix}$$

$$a_8 = \begin{pmatrix} -1 \\ -u^3 + 2u - 1 \end{pmatrix}$$

$$a_7 = \begin{pmatrix} u^3 - 2u \\ -u^3 + 2u - 1 \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} -0.172414a^3u^4 - 0.206897a^2u^4 + \cdots + 1.31034a + 1.34483 \\ -0.310345a^3u^4 - 0.172414a^2u^4 + \cdots - 0.241379a - 1.37931 \end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= -\frac{20}{29}u^4a^3 - \frac{24}{29}u^4a^2 + \cdots + \frac{36}{29}a - \frac{18}{29}$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$(u^5+7u^4+17u^3+14u^2+1)^4$
c_2, c_4	$(u^5-u^4-3u^3+2u^2+2u+1)^4$
c_3, c_7	$(u^5+3u^4+6u^3+7u^2+4u+2)^4$
c_5, c_6, c_9 c_{11}	$u^{20}+u^{19}+\cdots-88u+43$
c_8	$(u^2-u+1)^{10}$
c_{10}, c_{12}	$u^{20}-3u^{19}+\cdots-204u+61$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$(y^5 - 15y^4 + 93y^3 - 210y^2 - 28y - 1)^4$
c_2, c_4	$(y^5 - 7y^4 + 17y^3 - 14y^2 - 1)^4$
c_3, c_7	$(y^5 + 3y^4 + 2y^3 - 13y^2 - 12y - 4)^4$
c_5, c_6, c_9 c_{11}	$y^{20} + 9y^{19} + \cdots + 8424y + 1849$
c_8	$(y^2 + y + 1)^{10}$
c_{10}, c_{12}	$y^{20} - 7y^{19} + \cdots + 49640y + 3721$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_2^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.331409 + 0.386277I$ $a = 1.34411 + 1.58943I$ $b = 1.46009 + 0.56077I$	$4.56162 + 0.89106I$	$-2.71808 + 2.59039I$
$u = 0.331409 + 0.386277I$ $a = 2.21697 + 1.44611I$ $b = 1.55827 - 1.58798I$	$4.56162 - 3.16871I$	$-2.71808 + 9.51860I$
$u = 0.331409 + 0.386277I$ $a = -2.71697 - 0.58008I$ $b = -0.264187 + 0.240329I$	$4.56162 - 3.16871I$	$-2.71808 + 9.51860I$
$u = 0.331409 + 0.386277I$ $a = -1.84411 - 2.45545I$ $b = -0.94003 + 1.23377I$	$4.56162 + 0.89106I$	$-2.71808 + 2.59039I$
$u = 0.331409 - 0.386277I$ $a = 1.34411 - 1.58943I$ $b = 1.46009 - 0.56077I$	$4.56162 - 0.89106I$	$-2.71808 - 2.59039I$
$u = 0.331409 - 0.386277I$ $a = 2.21697 - 1.44611I$ $b = 1.55827 + 1.58798I$	$4.56162 + 3.16871I$	$-2.71808 - 9.51860I$
$u = 0.331409 - 0.386277I$ $a = -2.71697 + 0.58008I$ $b = -0.264187 - 0.240329I$	$4.56162 + 3.16871I$	$-2.71808 - 9.51860I$
$u = 0.331409 - 0.386277I$ $a = -1.84411 + 2.45545I$ $b = -0.94003 - 1.23377I$	$4.56162 - 0.89106I$	$-2.71808 - 2.59039I$
$u = 1.49784$ $a = -0.736571 + 0.258832I$ $b = -2.15778 + 0.06792I$	$-3.58001 - 2.02988I$	$-8.28576 + 3.46410I$
$u = 1.49784$ $a = -0.736571 - 0.258832I$ $b = -2.15778 - 0.06792I$	$-3.58001 + 2.02988I$	$-8.28576 - 3.46410I$

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 1.49784$ $a = 0.236571 + 0.607193I$ $b = 1.35362 + 1.32492I$	$-3.58001 - 2.02988I$	$-8.28576 + 3.46410I$
$u = 1.49784$ $a = 0.236571 - 0.607193I$ $b = 1.35362 - 1.32492I$	$-3.58001 + 2.02988I$	$-8.28576 - 3.46410I$
$u = -1.58033 + 0.28256I$ $a = -0.950991 - 0.218765I$ $b = -2.22328 - 0.39754I$	$-8.52888 + 9.02707I$	$-9.13904 - 7.01094I$
$u = -1.58033 + 0.28256I$ $a = -0.723737 + 0.541697I$ $b = -2.02311 + 0.30398I$	$-8.52888 + 4.96731I$	$-9.13904 - 0.08273I$
$u = -1.58033 + 0.28256I$ $a = 0.450991 - 0.647260I$ $b = 2.26931 - 0.79527I$	$-8.52888 + 9.02707I$	$-9.13904 - 7.01094I$
$u = -1.58033 + 0.28256I$ $a = 0.223737 + 0.324328I$ $b = 0.967085 + 0.252556I$	$-8.52888 + 4.96731I$	$-9.13904 - 0.08273I$
$u = -1.58033 - 0.28256I$ $a = -0.950991 + 0.218765I$ $b = -2.22328 + 0.39754I$	$-8.52888 - 9.02707I$	$-9.13904 + 7.01094I$
$u = -1.58033 - 0.28256I$ $a = -0.723737 - 0.541697I$ $b = -2.02311 - 0.30398I$	$-8.52888 - 4.96731I$	$-9.13904 + 0.08273I$
$u = -1.58033 - 0.28256I$ $a = 0.450991 + 0.647260I$ $b = 2.26931 + 0.79527I$	$-8.52888 - 9.02707I$	$-9.13904 + 7.01094I$
$u = -1.58033 - 0.28256I$ $a = 0.223737 - 0.324328I$ $b = 0.967085 - 0.252556I$	$-8.52888 - 4.96731I$	$-9.13904 + 0.08273I$

III.
$$\boldsymbol{I_3^u = \langle -u^{14}-5u^{13}+\cdots+b-3,\ 3u^{14}+15u^{13}+\cdots+a+3,\ u^{15}+5u^{14}+\cdots+4u-1\rangle}$$

(i) Arc colorings

$$a_3 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$
$$a_5 = \begin{pmatrix} 0 \\ u \end{pmatrix}$$
$$a_2 = \begin{pmatrix} 1 \\ -u^2 \end{pmatrix}$$
$$a_1 = \begin{pmatrix} -u^2+1 \\ -u^2 \end{pmatrix}$$
$$a_4 = \begin{pmatrix} u \\ -u^3+u \end{pmatrix}$$
$$a_{10} = \begin{pmatrix} -3u^{14}-15u^{13}+\cdots+10u-3 \\ u^{14}+5u^{13}+\cdots-3u+3 \end{pmatrix}$$
$$a_9 = \begin{pmatrix} -3u^{14}-15u^{13}+\cdots+10u-3 \\ 3u^{14}+13u^{13}+\cdots-24u^2+3 \end{pmatrix}$$
$$a_6 = \begin{pmatrix} 4u^{14}+19u^{13}+\cdots-5u+9 \\ 2u^{14}+11u^{13}+\cdots-7u^2-7u \end{pmatrix}$$
$$a_{12} = \begin{pmatrix} u^{12}+4u^{11}+3u^{10}-8u^9-14u^8-u^7+9u^6-2u^4+9u^3+6u^2-4u-3 \\ -2u^{14}-7u^{13}+\cdots+16u^2-3u \end{pmatrix}$$
$$a_8 = \begin{pmatrix} -u^{12}-3u^{11}+\cdots+4u-1 \\ 2u^{14}+8u^{13}+\cdots-8u^2+3u \end{pmatrix}$$
$$a_7 = \begin{pmatrix} -2u^{14}-8u^{13}+\cdots+u-1 \\ 2u^{14}+8u^{13}+\cdots-8u^2+3u \end{pmatrix}$$
$$a_{11} = \begin{pmatrix} -3u^{14}-15u^{13}+\cdots+10u-2 \\ 2u^{14}+9u^{13}+\cdots-3u+3 \end{pmatrix}$$

(ii) Obstruction class $= 1$

(iii) Cusp Shapes
$= 3u^{14}+15u^{13}+23u^{12}-4u^{11}-48u^{10}-46u^9-7u^8-4u^7-21u^6+4u^5+30u^4+16u^3-4u^2-u-3$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{15} - 13u^{14} + \cdots + 16u - 1$
c_2	$u^{15} + 5u^{14} + \cdots + 4u - 1$
c_3	$u^{15} - u^{14} + \cdots - 8u^2 - 1$
c_4	$u^{15} - 5u^{14} + \cdots + 4u + 1$
c_5, c_{11}	$u^{15} + 7u^{13} + \cdots - u + 1$
c_6, c_9	$u^{15} + 7u^{13} + \cdots - u - 1$
c_7	$u^{15} + u^{14} + \cdots + 8u^2 + 1$
c_8	$u^{15} + 5u^{13} + \cdots + u - 1$
c_{10}, c_{12}	$u^{15} + u^{14} + \cdots + 5u^2 + 1$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{15} - 17y^{14} + \cdots - 8y - 1$
c_2, c_4	$y^{15} - 13y^{14} + \cdots + 16y - 1$
c_3, c_7	$y^{15} + 3y^{14} + \cdots - 16y - 1$
c_5, c_6, c_9 c_{11}	$y^{15} + 14y^{14} + \cdots + 3y - 1$
c_8	$y^{15} + 10y^{14} + \cdots + y - 1$
c_{10}, c_{12}	$y^{15} - y^{14} + \cdots - 10y - 1$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_3^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.796754 + 0.693348I$ $a = -0.847137 + 0.671365I$ $b = -0.497650 - 0.022952I$	$6.79252 + 3.72902I$	$-3.12247 - 0.91109I$
$u = -0.796754 - 0.693348I$ $a = -0.847137 - 0.671365I$ $b = -0.497650 + 0.022952I$	$6.79252 - 3.72902I$	$-3.12247 + 0.91109I$
$u = 0.930890 + 0.056485I$ $a = -0.285629 + 1.354480I$ $b = 4.78949 + 1.58588I$	$3.42636 + 1.92079I$	$-18.2159 - 15.3647I$
$u = 0.930890 - 0.056485I$ $a = -0.285629 - 1.354480I$ $b = 4.78949 - 1.58588I$	$3.42636 - 1.92079I$	$-18.2159 + 15.3647I$
$u = 0.401039 + 0.815529I$ $a = -0.507179 + 0.227656I$ $b = -0.692924 - 0.171185I$	$-2.12132 - 2.26307I$	$-9.68770 + 3.58355I$
$u = 0.401039 - 0.815529I$ $a = -0.507179 - 0.227656I$ $b = -0.692924 + 0.171185I$	$-2.12132 + 2.26307I$	$-9.68770 - 3.58355I$
$u = -0.989330 + 0.711734I$ $a = 0.287415 - 0.801453I$ $b = 0.343746 - 0.514545I$	$6.20548 + 1.67451I$	$3.16227 - 0.38526I$
$u = -0.989330 - 0.711734I$ $a = 0.287415 + 0.801453I$ $b = 0.343746 + 0.514545I$	$6.20548 - 1.67451I$	$3.16227 + 0.38526I$
$u = 1.36474$ $a = 0.285599$ $b = 1.95225$	-4.46149	-9.01920
$u = -1.46931 + 0.07528I$ $a = -0.353185 + 1.029040I$ $b = -1.57621 + 0.50876I$	$-1.37277 + 3.16303I$	$-7.59589 - 1.64203I$

Solutions to I_3^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -1.46931 - 0.07528I$ $a = -0.353185 - 1.029040I$ $b = -1.57621 - 0.50876I$	$-1.37277 - 3.16303I$	$-7.59589 + 1.64203I$
$u = -1.56575 + 0.31338I$ $a = 0.532385 - 0.260435I$ $b = 1.78333 - 0.18434I$	$-8.65053 + 6.60987I$	$-9.62356 - 4.91898I$
$u = -1.56575 - 0.31338I$ $a = 0.532385 + 0.260435I$ $b = 1.78333 + 0.18434I$	$-8.65053 - 6.60987I$	$-9.62356 + 4.91898I$
$u = 0.306844 + 0.131865I$ $a = 2.53053 + 3.22263I$ $b = 0.87409 - 1.42027I$	$4.53074 - 2.24627I$	$-3.40718 + 0.47377I$
$u = 0.306844 - 0.131865I$ $a = 2.53053 - 3.22263I$ $b = 0.87409 + 1.42027I$	$4.53074 + 2.24627I$	$-3.40718 - 0.47377I$

IV. $\boldsymbol{I_4^u = \langle a^2 + 2b - a + 2,\ a^3 + 2a + 1,\ u - 1\rangle}$

(i) Arc colorings

$$a_3 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$
$$a_5 = \begin{pmatrix} 0 \\ 1 \end{pmatrix}$$
$$a_2 = \begin{pmatrix} 1 \\ -1 \end{pmatrix}$$
$$a_1 = \begin{pmatrix} 0 \\ -1 \end{pmatrix}$$
$$a_4 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$
$$a_{10} = \begin{pmatrix} a \\ -\frac{1}{2}a^2 + \frac{1}{2}a - 1 \end{pmatrix}$$
$$a_9 = \begin{pmatrix} a \\ -\frac{1}{2}a^2 - \frac{1}{2}a - 1 \end{pmatrix}$$
$$a_6 = \begin{pmatrix} -a^2 \\ \frac{1}{2}a^2 + \frac{1}{2} \end{pmatrix}$$
$$a_{12} = \begin{pmatrix} -a^2 \\ -\frac{1}{2}a^2 - \frac{3}{2} \end{pmatrix}$$
$$a_8 = \begin{pmatrix} a^2 - a - 1 \\ 0 \end{pmatrix}$$
$$a_7 = \begin{pmatrix} a^2 - a - 1 \\ 0 \end{pmatrix}$$
$$a_{11} = \begin{pmatrix} -a^2 - 2a - 1 \\ -\frac{1}{2}a^2 + \frac{1}{2}a - 1 \end{pmatrix}$$

(ii) Obstruction class $= 1$

(iii) Cusp Shapes $= -\frac{17}{4}a^2 + \frac{1}{2}a - \frac{97}{4}$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1, c_2	$(u-1)^3$
c_3, c_7	u^3
c_4	$(u+1)^3$
c_5, c_6	u^3+2u-1
c_8	u^3-3u^2+5u-2
c_9, c_{10}, c_{11} c_{12}	u^3+2u+1

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_2, c_4	$(y-1)^3$
c_3, c_7	y^3
c_5, c_6, c_9 c_{10}, c_{11}, c_{12}	$y^3 + 4y^2 + 4y - 1$
c_8	$y^3 + y^2 + 13y - 4$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_4^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 1.00000$ $a = 0.22670 + 1.46771I$ $b = 0.164742 + 0.401127I$	$7.79580 - 5.13794I$	$-15.1998 - 2.0943I$
$u = 1.00000$ $a = 0.22670 - 1.46771I$ $b = 0.164742 - 0.401127I$	$7.79580 + 5.13794I$	$-15.1998 + 2.0943I$
$u = 1.00000$ $a = -0.453398$ $b = -1.32948$	-2.43213	-25.3500

V. $I_5^u = \langle -13u^5a^3 - 13u^5a^2 + \cdots + a + 2,\ u^5a^3 - 3u^5a^2 + \cdots - 31a + 33,\ u^6 + u^5 - 2u^4 + 2u^2 - 2u - 1\rangle$

(i) Arc colorings

$$a_3 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$

$$a_5 = \begin{pmatrix} 0 \\ u \end{pmatrix}$$

$$a_2 = \begin{pmatrix} 1 \\ -u^2 \end{pmatrix}$$

$$a_1 = \begin{pmatrix} -u^2 + 1 \\ -u^2 \end{pmatrix}$$

$$a_4 = \begin{pmatrix} u \\ -u^3 + u \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} a \\ 1.18182a^3u^5 + 1.18182a^2u^5 + \cdots - 0.0909091a - 0.181818 \end{pmatrix}$$

$$a_9 = \begin{pmatrix} a \\ 1.18182a^3u^5 + 1.18182a^2u^5 + \cdots - 0.0909091a - 0.181818 \end{pmatrix}$$

$$a_6 = \begin{pmatrix} -a^2u \\ 0.909091a^3u^5 - 1.09091a^2u^5 + \cdots - 0.454545a + 1.09091 \end{pmatrix}$$

$$a_{12} = \begin{pmatrix} 1.09091a^3u^5 - 0.909091a^2u^5 + \cdots - 0.545455a + 2.90909 \\ -2.45455a^3u^5 - 2.45455a^2u^5 + \cdots + 0.727273a - 0.545455 \end{pmatrix}$$

$$a_8 = \begin{pmatrix} -u^5 + 2u^3 - 2u^2 - u + 3 \\ u^5 - u^3 + u^2 - u \end{pmatrix}$$

$$a_7 = \begin{pmatrix} -2u^5 + 3u^3 - 3u^2 + 3 \\ u^5 - u^3 + u^2 - u \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} 0.454545a^3u^5 - 0.545455a^2u^5 + \cdots - 2.72727a + 5.54545 \\ -0.181818a^3u^5 + 0.818182a^2u^5 + \cdots + 0.0909091a + 0.181818 \end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= \frac{4}{11}u^5a^3 + \frac{48}{11}u^5a^2 + \cdots + \frac{20}{11}a - \frac{70}{11}$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$(u^6+5u^5+8u^4+6u^3+8u^2+8u+1)^4$
c_2, c_4	$(u^6-u^5-2u^4+2u^2+2u-1)^4$
c_3, c_7	$(u^3-u^2+2u-1)^8$
c_5, c_6, c_9 c_{11}	$u^{24}+u^{23}+\cdots-14u+67$
c_8	$(u^2-u+1)^{12}$
c_{10}, c_{12}	$u^{24}-7u^{23}+\cdots-122u+61$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$(y^6 - 9y^5 + 20y^4 + 14y^3 - 16y^2 - 48y + 1)^4$
c_2, c_4	$(y^6 - 5y^5 + 8y^4 - 6y^3 + 8y^2 - 8y + 1)^4$
c_3, c_7	$(y^3 + 3y^2 + 2y - 1)^8$
c_5, c_6, c_9 c_{11}	$y^{24} + 21y^{23} + \cdots + 24192y + 4489$
c_8	$(y^2 + y + 1)^{12}$
c_{10}, c_{12}	$y^{24} + 5y^{23} + \cdots - 37820y + 3721$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_5^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.592989 + 0.847544I$ $a = 0.929183 - 0.410221I$ $b = 0.885713 - 0.329153I$	$-1.37919 - 0.79824I$	$-7.50976 - 0.48465I$
$u = 0.592989 + 0.847544I$ $a = -1.026620 - 0.271921I$ $b = -0.997939 - 0.570659I$	$-1.37919 - 4.85801I$	$-7.50976 + 6.44355I$
$u = 0.592989 + 0.847544I$ $a = 0.515331 - 1.058190I$ $b = 0.1116080 - 0.0764541I$	$-1.37919 - 4.85801I$	$-7.50976 + 6.44355I$
$u = 0.592989 + 0.847544I$ $a = 0.478377 + 0.632485I$ $b = 0.117869 - 0.114876I$	$-1.37919 - 0.79824I$	$-7.50976 - 0.48465I$
$u = 0.592989 - 0.847544I$ $a = 0.929183 + 0.410221I$ $b = 0.885713 + 0.329153I$	$-1.37919 + 0.79824I$	$-7.50976 + 0.48465I$
$u = 0.592989 - 0.847544I$ $a = -1.026620 + 0.271921I$ $b = -0.997939 + 0.570659I$	$-1.37919 + 4.85801I$	$-7.50976 - 6.44355I$
$u = 0.592989 - 0.847544I$ $a = 0.515331 + 1.058190I$ $b = 0.1116080 + 0.0764541I$	$-1.37919 + 4.85801I$	$-7.50976 - 6.44355I$
$u = 0.592989 - 0.847544I$ $a = 0.478377 - 0.632485I$ $b = 0.117869 + 0.114876I$	$-1.37919 + 0.79824I$	$-7.50976 + 0.48465I$
$u = 1.13416$ $a = 0.385031 + 0.931825I$ $b = -0.34379 + 5.37612I$	$2.75839 - 2.02988I$	$-0.98049 + 3.46410I$
$u = 1.13416$ $a = 0.385031 - 0.931825I$ $b = -0.34379 - 5.37612I$	$2.75839 + 2.02988I$	$-0.98049 - 3.46410I$

Solutions to I_5^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 1.13416$ $a = -0.217824 + 1.221440I$ $b = -2.14651 + 1.06279I$	$2.75839 + 2.02988I$	$-0.98049 - 3.46410I$
$u = 1.13416$ $a = -0.217824 - 1.221440I$ $b = -2.14651 - 1.06279I$	$2.75839 - 2.02988I$	$-0.98049 + 3.46410I$
$u = -1.47043 + 0.10268I$ $a = -0.155430 + 0.985327I$ $b = -0.719608 - 0.619193I$	$-1.37919 + 4.85801I$	$-7.50976 - 6.44355I$
$u = -1.47043 + 0.10268I$ $a = 0.848595 - 0.875871I$ $b = 2.24219 - 1.17501I$	$-1.37919 + 4.85801I$	$-7.50976 - 6.44355I$
$u = -1.47043 + 0.10268I$ $a = -0.074026 - 1.295000I$ $b = -0.039244 - 1.020410I$	$-1.37919 + 0.79824I$	$-7.50976 + 0.48465I$
$u = -1.47043 + 0.10268I$ $a = -0.177765 + 0.639970I$ $b = -2.27588 + 0.59891I$	$-1.37919 + 0.79824I$	$-7.50976 + 0.48465I$
$u = -1.47043 - 0.10268I$ $a = -0.155430 - 0.985327I$ $b = -0.719608 + 0.619193I$	$-1.37919 - 4.85801I$	$-7.50976 + 6.44355I$
$u = -1.47043 - 0.10268I$ $a = 0.848595 + 0.875871I$ $b = 2.24219 + 1.17501I$	$-1.37919 - 4.85801I$	$-7.50976 + 6.44355I$
$u = -1.47043 - 0.10268I$ $a = -0.074026 + 1.295000I$ $b = -0.039244 + 1.020410I$	$-1.37919 - 0.79824I$	$-7.50976 - 0.48465I$
$u = -1.47043 - 0.10268I$ $a = -0.177765 - 0.639970I$ $b = -2.27588 - 0.59891I$	$-1.37919 - 0.79824I$	$-7.50976 - 0.48465I$

Solutions to I_5^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.379278$ $a = \ \ 1.80591 + 0.63475I$ $b = \ \ 0.436714 + 0.501880I$	$2.75839 - 2.02988I$	$-0.98049 + 3.46410I$
$u = -0.379278$ $a = \ \ 1.80591 - 0.63475I$ $b = \ \ 0.436714 - 0.501880I$	$2.75839 + 2.02988I$	$-0.98049 - 3.46410I$
$u = -0.379278$ $a = -0.31076 + 3.22443I$ $b = -0.271129 + 0.788683I$	$2.75839 + 2.02988I$	$-0.98049 - 3.46410I$
$u = -0.379278$ $a = -0.31076 - 3.22443I$ $b = -0.271129 - 0.788683I$	$2.75839 - 2.02988I$	$-0.98049 + 3.46410I$

VI. $I_6^u = \langle -a^3 + b - 2a + 1,\ a^4 - a^3 + 2a^2 - 2a + 1,\ u - 1 \rangle$

(i) Arc colorings

$$a_3 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$
$$a_5 = \begin{pmatrix} 0 \\ 1 \end{pmatrix}$$
$$a_2 = \begin{pmatrix} 1 \\ -1 \end{pmatrix}$$
$$a_1 = \begin{pmatrix} 0 \\ -1 \end{pmatrix}$$
$$a_4 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$
$$a_{10} = \begin{pmatrix} a \\ a^3 + 2a - 1 \end{pmatrix}$$
$$a_9 = \begin{pmatrix} a \\ a^3 + a - 1 \end{pmatrix}$$
$$a_6 = \begin{pmatrix} -a^2 \\ -a^3 + a^2 - a + 2 \end{pmatrix}$$
$$a_{12} = \begin{pmatrix} -a^2 \\ -a^3 - a \end{pmatrix}$$
$$a_8 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$
$$a_7 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$
$$a_{11} = \begin{pmatrix} -a^3 - a + 1 \\ a^3 + 2a - 1 \end{pmatrix}$$

(ii) Obstruction class $= 1$

(iii) Cusp Shapes $= 4a^3 + 4a - 12$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1, c_2	$(u-1)^4$
c_3, c_7	u^4
c_4	$(u+1)^4$
c_5, c_6	$u^4 + u^3 + 2u^2 + 2u + 1$
c_8	$(u^2 + u + 1)^2$
c_9, c_{10}, c_{11} c_{12}	$u^4 - u^3 + 2u^2 - 2u + 1$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_2, c_4	$(y-1)^4$
c_3, c_7	y^4
c_5, c_6, c_9 c_{10}, c_{11}, c_{12}	$y^4 + 3y^3 + 2y^2 + 1$
c_8	$(y^2 + y + 1)^2$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_6^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 1.00000$ $a = 0.621744 + 0.440597I$ $b = 0.121744 + 1.306620I$	$1.64493 - 2.02988I$	$-10.00000 + 3.46410I$
$u = 1.00000$ $a = 0.621744 - 0.440597I$ $b = 0.121744 - 1.306620I$	$1.64493 + 2.02988I$	$-10.00000 - 3.46410I$
$u = 1.00000$ $a = -0.121744 + 1.306620I$ $b = -0.621744 + 0.440597I$	$1.64493 + 2.02988I$	$-10.00000 - 3.46410I$
$u = 1.00000$ $a = -0.121744 - 1.306620I$ $b = -0.621744 - 0.440597I$	$1.64493 - 2.02988I$	$-10.00000 + 3.46410I$

VII. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1	$(u-1)^7(u^5+7u^4+17u^3+14u^2+1)^4$ $\cdot((u^6+5u^5+\cdots+8u+1)^4)(u^{15}-13u^{14}+\cdots+16u-1)$ $\cdot(u^{30}+27u^{29}+\cdots+35696u+256)$
c_2	$(u-1)^7(u^5-u^4-3u^3+2u^2+2u+1)^4$ $\cdot((u^6-u^5-2u^4+2u^2+2u-1)^4)(u^{15}+5u^{14}+\cdots+4u-1)$ $\cdot(u^{30}-5u^{29}+\cdots+172u-16)$
c_3	$u^7(u^3-u^2+2u-1)^8(u^5+3u^4+6u^3+7u^2+4u+2)^4$ $\cdot(u^{15}-u^{14}+\cdots-8u^2-1)(u^{30}-6u^{29}+\cdots+736u+128)$
c_4	$(u+1)^7(u^5-u^4-3u^3+2u^2+2u+1)^4$ $\cdot((u^6-u^5-2u^4+2u^2+2u-1)^4)(u^{15}-5u^{14}+\cdots+4u+1)$ $\cdot(u^{30}-5u^{29}+\cdots+172u-16)$
c_5	$(u^3+2u-1)(u^4+u^3+2u^2+2u+1)(u^{15}+7u^{13}+\cdots-u+1)$ $\cdot(u^{20}+u^{19}+\cdots-88u+43)(u^{24}+u^{23}+\cdots-14u+67)$ $\cdot(u^{30}+10u^{28}+\cdots+u-1)$
c_6	$(u^3+2u-1)(u^4+u^3+2u^2+2u+1)(u^{15}+7u^{13}+\cdots-u-1)$ $\cdot(u^{20}+u^{19}+\cdots-88u+43)(u^{24}+u^{23}+\cdots-14u+67)$ $\cdot(u^{30}+10u^{28}+\cdots+u-1)$
c_7	$u^7(u^3-u^2+2u-1)^8(u^5+3u^4+6u^3+7u^2+4u+2)^4$ $\cdot(u^{15}+u^{14}+\cdots+8u^2+1)(u^{30}-6u^{29}+\cdots+736u+128)$
c_8	$((u^2-u+1)^{22})(u^2+u+1)^2(u^3-3u^2+5u-2)(u^{15}+5u^{13}+\cdots+u-1)$ $\cdot(u^{30}+24u^{29}+\cdots+34816u+2048)$
c_9	$(u^3+2u+1)(u^4-u^3+2u^2-2u+1)(u^{15}+7u^{13}+\cdots-u-1)$ $\cdot(u^{20}+u^{19}+\cdots-88u+43)(u^{24}+u^{23}+\cdots-14u+67)$ $\cdot(u^{30}+10u^{28}+\cdots+u-1)$
c_{10}, c_{12}	$(u^3+2u+1)(u^4-u^3+2u^2-2u+1)(u^{15}+u^{14}+\cdots+5u^2+1)$ $\cdot(u^{20}-3u^{19}+\cdots-204u+61)(u^{24}-7u^{23}+\cdots-122u+61)$ $\cdot(u^{30}-u^{29}+\cdots-2u+1)$
c_{11}	$(u^3+2u+1)(u^4-u^3+2u^2-2u+1)(u^{15}+7u^{13}+\cdots-u+1)$ $\cdot(u^{20}+u^{19}+\cdots-88u+43)(u^{24}+u^{23}+\cdots-14u+67)$ $\cdot(u^{30}+10u^{28}+\cdots+u-1)$

VIII. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1	$(y-1)^7(y^5-15y^4+93y^3-210y^2-28y-1)^4$ $\cdot(y^6-9y^5+20y^4+14y^3-16y^2-48y+1)^4$ $\cdot(y^{15}-17y^{14}+\cdots-8y-1)$ $\cdot(y^{30}-43y^{29}+\cdots-1144368896y+65536)$
c_2, c_4	$(y-1)^7(y^5-7y^4+17y^3-14y^2-1)^4$ $\cdot((y^6-5y^5+\cdots-8y+1)^4)(y^{15}-13y^{14}+\cdots+16y-1)$ $\cdot(y^{30}-27y^{29}+\cdots-35696y+256)$
c_3, c_7	$y^7(y^3+3y^2+2y-1)^8(y^5+3y^4+2y^3-13y^2-12y-4)^4$ $\cdot(y^{15}+3y^{14}+\cdots-16y-1)(y^{30}+12y^{29}+\cdots-289792y+16384)$
c_5, c_6, c_9 c_{11}	$(y^3+4y^2+4y-1)(y^4+3y^3+2y^2+1)(y^{15}+14y^{14}+\cdots+3y-1)$ $\cdot(y^{20}+9y^{19}+\cdots+8424y+1849)$ $\cdot(y^{24}+21y^{23}+\cdots+24192y+4489)(y^{30}+20y^{29}+\cdots-5y+1)$
c_8	$((y^2+y+1)^{24})(y^3+y^2+13y-4)(y^{15}+10y^{14}+\cdots+y-1)$ $\cdot(y^{30}+12y^{29}+\cdots-46137344y+4194304)$
c_{10}, c_{12}	$(y^3+4y^2+4y-1)(y^4+3y^3+2y^2+1)(y^{15}-y^{14}+\cdots-10y-1)$ $\cdot(y^{20}-7y^{19}+\cdots+49640y+3721)$ $\cdot(y^{24}+5y^{23}+\cdots-37820y+3721)(y^{30}-23y^{29}+\cdots-40y+1)$