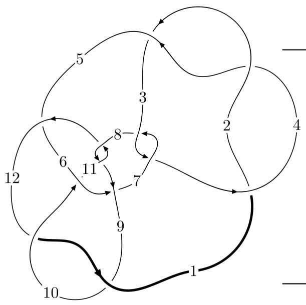
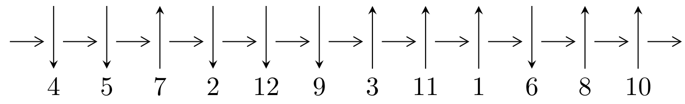
$12a_{0818}$ ($K12a_{0818}$)



A knot diagram[1]

Linearized knot diagam



Solving Sequence

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

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

$$\begin{aligned}
I_1^u = \langle & 4.70557 \times 10^{47} u^{41} + 1.02379 \times 10^{48} u^{40} + \cdots + 2.35995 \times 10^{48} b - 1.46322 \times 10^{48}, \\
& - 2.68217 \times 10^{48} u^{41} - 8.92209 \times 10^{48} u^{40} + \cdots + 6.29321 \times 10^{48} a - 9.88859 \times 10^{49}, \\
& u^{42} + 4u^{41} + \cdots + 65u + 16 \rangle \\
I_2^u = \langle & 431u^{34} a - 1267u^{34} + \cdots + 287a - 903,\ -3u^{34} a + 24u^{34} + \cdots + 3a + 14,\ u^{35} + 4u^{34} + \cdots + 3u + 1 \rangle \\
I_3^u = \langle & 16a^3 + b + 3a - 6,\ 4a^4 - 3a^3 + a^2 - 2a + 1,\ u - 1 \rangle \\
I_4^u = \langle & b - 1,\ -2u^3 - 2u^2 + 2a + 2u + 3,\ u^5 + u^4 - 2u^3 - u^2 + u - 1 \rangle \\
I_5^u = \langle & -a^5 + 2a^4 + 8a^3 - 27a^2 + 11b + 20a + 4,\ a^6 - 5a^5 + 9a^4 - 4a^3 - 2a^2 + a + 1,\ u - 1 \rangle
\end{aligned}$$

* 5 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 127 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. $\boldsymbol{I_1^u = \langle 4.71 \times 10^{47} u^{41} + 1.02 \times 10^{48} u^{40} + \cdots + 2.36 \times 10^{48} b - 1.46 \times 10^{48},\ -2.68 \times 10^{48} u^{41} - 8.92 \times 10^{48} u^{40} + \cdots + 6.29 \times 10^{48} a - 9.89 \times 10^{49},\ u^{42} + 4u^{41} + \cdots + 65u + 16 \rangle}$

(i) Arc colorings

$$a_1 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$
$$a_4 = \begin{pmatrix} 0 \\ u \end{pmatrix}$$
$$a_2 = \begin{pmatrix} 1 \\ u^2 \end{pmatrix}$$
$$a_5 = \begin{pmatrix} -u \\ -u^3 + u \end{pmatrix}$$
$$a_3 = \begin{pmatrix} -u^2 + 1 \\ -u^4 + 2u^2 \end{pmatrix}$$
$$a_9 = \begin{pmatrix} 0.426201u^{41} + 1.41773u^{40} + \cdots + 26.1957u + 15.7131 \\ -0.199393u^{41} - 0.433818u^{40} + \cdots - 8.03052u + 0.620022 \end{pmatrix}$$
$$a_{10} = \begin{pmatrix} 0.226808u^{41} + 0.983916u^{40} + \cdots + 18.1651u + 16.3331 \\ -0.199393u^{41} - 0.433818u^{40} + \cdots - 8.03052u + 0.620022 \end{pmatrix}$$
$$a_{12} = \begin{pmatrix} -0.130478u^{41} - 0.589048u^{40} + \cdots - 7.93921u - 10.8045 \\ 0.214517u^{41} + 0.476122u^{40} + \cdots + 8.74596u - 0.0471007 \end{pmatrix}$$
$$a_6 = \begin{pmatrix} 0.00615099u^{41} + 0.0315685u^{40} + \cdots + 2.33674u + 0.767602 \\ 0.0725771u^{41} + 0.173370u^{40} + \cdots + 2.50038u + 1.45174 \end{pmatrix}$$
$$a_7 = \begin{pmatrix} -0.213738u^{41} - 0.514758u^{40} + \cdots - 2.95723u - 3.48358 \\ 0.0448717u^{41} - 0.0100936u^{40} + \cdots - 0.439227u - 0.620256 \end{pmatrix}$$
$$a_{11} = \begin{pmatrix} 0.382659u^{41} + 1.46025u^{40} + \cdots + 24.9207u + 21.9393 \\ 0.0557291u^{41} + 0.360679u^{40} + \cdots + 2.82601u + 7.24218 \end{pmatrix}$$
$$a_8 = \begin{pmatrix} 0.111846u^{41} + 0.317186u^{40} + \cdots + 11.7593u + 0.621293 \\ 0.0138015u^{41} - 0.0198181u^{40} + \cdots - 0.199133u - 0.618692 \end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= 1.14636u^{41} + 3.75809u^{40} + \cdots + 70.7450u + 50.8762$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1, c_2, c_4	$u^{42} - 4u^{41} + \cdots - 65u + 16$
c_3, c_7	$u^{42} + 12u^{40} + \cdots + 800u - 256$
c_5, c_6	$32(32u^{42} - 80u^{41} + \cdots - 4u^2 + 1)$
c_8, c_9, c_{11} c_{12}	$u^{42} - 5u^{41} + \cdots - 9u - 1$
c_{10}	$u^{42} + 6u^{41} + \cdots + 23552u + 4096$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_2, c_4	$y^{42} - 40y^{41} + \cdots - 2401y + 256$
c_3, c_7	$y^{42} + 24y^{41} + \cdots - 54272y + 65536$
c_5, c_6	$1024(1024y^{42} - 12544y^{41} + \cdots - 8y + 1)$
c_8, c_9, c_{11} c_{12}	$y^{42} + 21y^{41} + \cdots - 57y + 1$
c_{10}	$y^{42} - 12y^{41} + \cdots - 370147328y + 16777216$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.382277 + 0.955337I$ $a = -1.66113 + 0.73518I$ $b = 0.53625 - 1.35310I$	$-7.2700 - 13.9728I$	$-5.21740 + 8.75518I$
$u = 0.382277 - 0.955337I$ $a = -1.66113 - 0.73518I$ $b = 0.53625 + 1.35310I$	$-7.2700 + 13.9728I$	$-5.21740 - 8.75518I$
$u = 1.036130 + 0.136384I$ $a = 0.31397 + 1.71197I$ $b = -0.698855 + 0.209140I$	$-0.378272 - 0.672845I$	$8.32593 - 8.18018I$
$u = 1.036130 - 0.136384I$ $a = 0.31397 - 1.71197I$ $b = -0.698855 - 0.209140I$	$-0.378272 + 0.672845I$	$8.32593 + 8.18018I$
$u = -0.176431 + 0.920219I$ $a = -0.089233 + 0.806500I$ $b = 0.260719 - 1.022000I$	$-1.94168 - 4.58363I$	$-2.67478 + 9.67087I$
$u = -0.176431 - 0.920219I$ $a = -0.089233 - 0.806500I$ $b = 0.260719 + 1.022000I$	$-1.94168 + 4.58363I$	$-2.67478 - 9.67087I$
$u = 1.16532$ $a = -0.690948$ $b = 0.111472$	-2.22469	-4.45330
$u = 0.906961 + 0.760300I$ $a = -0.164799 - 0.716064I$ $b = 0.451974 + 1.333990I$	$-8.82177 + 8.14344I$	$-7.68661 - 4.52240I$
$u = 0.906961 - 0.760300I$ $a = -0.164799 + 0.716064I$ $b = 0.451974 - 1.333990I$	$-8.82177 - 8.14344I$	$-7.68661 + 4.52240I$
$u = -1.201200 + 0.145400I$ $a = -0.872305 - 0.102731I$ $b = 0.574673 + 1.022490I$	$-4.65035 + 8.25878I$	$-8.8821 - 11.5403I$

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -1.201200 - 0.145400I$ $a = -0.872305 + 0.102731I$ $b = 0.574673 - 1.022490I$	$-4.65035 - 8.25878I$	$-8.8821 + 11.5403I$
$u = 0.518201 + 1.133520I$ $a = 0.589570 - 0.397152I$ $b = -0.152757 + 1.101360I$	$-4.92726 - 4.44307I$	$-10.0669 + 11.2674I$
$u = 0.518201 - 1.133520I$ $a = 0.589570 + 0.397152I$ $b = -0.152757 - 1.101360I$	$-4.92726 + 4.44307I$	$-10.0669 - 11.2674I$
$u = 0.391460 + 0.629294I$ $a = 2.37670 + 0.71559I$ $b = -1.257320 - 0.163098I$	$1.03974 - 1.89674I$	$-9.71636 + 10.18048I$
$u = 0.391460 - 0.629294I$ $a = 2.37670 - 0.71559I$ $b = -1.257320 + 0.163098I$	$1.03974 + 1.89674I$	$-9.71636 - 10.18048I$
$u = 1.28899$ $a = -0.386397$ $b = -1.24413$	-1.06374	-15.9330
$u = -0.520433 + 0.480903I$ $a = -1.54139 + 0.22846I$ $b = 0.486493 + 1.206120I$	$-3.67601 + 8.64693I$	$-1.18407 - 7.85838I$
$u = -0.520433 - 0.480903I$ $a = -1.54139 - 0.22846I$ $b = 0.486493 - 1.206120I$	$-3.67601 - 8.64693I$	$-1.18407 + 7.85838I$
$u = -1.369360 + 0.103398I$ $a = 1.140050 - 0.314674I$ $b = -1.010040 - 0.754348I$	$-2.55620 + 3.08969I$	0
$u = -1.369360 - 0.103398I$ $a = 1.140050 + 0.314674I$ $b = -1.010040 + 0.754348I$	$-2.55620 - 3.08969I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-1.381130+0.223245I$ $a=-0.587328+0.140475I$ $b=\ \ 0.398228-0.245218I$	$-5.21752+3.92091I$	0
$u=-1.381130-0.223245I$ $a=-0.587328-0.140475I$ $b=\ \ 0.398228+0.245218I$	$-5.21752-3.92091I$	0
$u=-1.46546+0.23954I$ $a=\ \ 0.778883-0.741783I$ $b=-1.44538+0.24251I$	$-4.97209+5.11669I$	0
$u=-1.46546-0.23954I$ $a=\ \ 0.778883+0.741783I$ $b=-1.44538-0.24251I$	$-4.97209-5.11669I$	0
$u=\ \ 1.22748+0.83655I$ $a=-0.546316+0.174607I$ $b=\ \ 0.091410-1.130240I$	$-6.99380-2.96639I$	0
$u=\ \ 1.22748-0.83655I$ $a=-0.546316-0.174607I$ $b=\ \ 0.091410+1.130240I$	$-6.99380+2.96639I$	0
$u=\ \ 0.208756+0.468070I$ $a=-1.034920-0.197444I$ $b=\ \ 0.106914+0.216906I$	$-0.189441-1.194630I$	$-3.03902+4.48079I$
$u=\ \ 0.208756-0.468070I$ $a=-1.034920+0.197444I$ $b=\ \ 0.106914-0.216906I$	$-0.189441+1.194630I$	$-3.03902-4.48079I$
$u=\ \ 1.49536+0.19812I$ $a=-1.070210-0.916497I$ $b=\ \ 0.49427-1.35780I$	$-10.2159-11.2963I$	0
$u=\ \ 1.49536-0.19812I$ $a=-1.070210+0.916497I$ $b=\ \ 0.49427+1.35780I$	$-10.2159+11.2963I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = -1.50308 + 0.37191I$ $a = -1.59621 + 0.46175I$ $b = 0.59118 + 1.39047I$	$-13.3178 + 18.7741I$	0
$u = -1.50308 - 0.37191I$ $a = -1.59621 - 0.46175I$ $b = 0.59118 - 1.39047I$	$-13.3178 - 18.7741I$	0
$u = 0.103524 + 0.426968I$ $a = 2.10169 - 1.36256I$ $b = -0.922128 + 0.404344I$	$2.10350 - 1.31837I$	$6.89891 - 1.71793I$
$u = 0.103524 - 0.426968I$ $a = 2.10169 + 1.36256I$ $b = -0.922128 - 0.404344I$	$2.10350 + 1.31837I$	$6.89891 + 1.71793I$
$u = -1.56428 + 0.38662I$ $a = 0.947107 - 0.401179I$ $b = -0.300179 - 1.217090I$	$-11.6070 + 9.8095I$	0
$u = -1.56428 - 0.38662I$ $a = 0.947107 + 0.401179I$ $b = -0.300179 + 1.217090I$	$-11.6070 - 9.8095I$	0
$u = -0.333406 + 0.020280I$ $a = -0.65169 + 1.58358I$ $b = -0.387814 + 0.633347I$	$0.54776 - 1.46692I$	$5.66103 + 4.76123I$
$u = -0.333406 - 0.020280I$ $a = -0.65169 - 1.58358I$ $b = -0.387814 - 0.633347I$	$0.54776 + 1.46692I$	$5.66103 - 4.76123I$
$u = -1.67473 + 0.04568I$ $a = -0.132515 - 0.361034I$ $b = 0.27984 - 1.41003I$	$-18.2575 - 5.2882I$	0
$u = -1.67473 - 0.04568I$ $a = -0.132515 + 0.361034I$ $b = 0.27984 + 1.41003I$	$-18.2575 + 5.2882I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 1.69220 + 0.30592I$ $a = 0.394986 + 0.353146I$ $b = -0.031137 + 1.135330I$	$-8.08716 - 1.02616I$	0
$u = 1.69220 - 0.30592I$ $a = 0.394986 - 0.353146I$ $b = -0.031137 - 1.135330I$	$-8.08716 + 1.02616I$	0

II. $I_2^u = \langle 431u^{34}a - 1267u^{34} + \cdots + 287a - 903,\ -3u^{34}a + 24u^{34} + \cdots + 3a + 14,\ u^{35} + 4u^{34} + \cdots + 3u + 1\rangle$

(i) Arc colorings

$$a_1 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$
$$a_4 = \begin{pmatrix} 0 \\ u \end{pmatrix}$$
$$a_2 = \begin{pmatrix} 1 \\ u^2 \end{pmatrix}$$
$$a_5 = \begin{pmatrix} -u \\ -u^3 + u \end{pmatrix}$$
$$a_3 = \begin{pmatrix} -u^2 + 1 \\ -u^4 + 2u^2 \end{pmatrix}$$
$$a_9 = \begin{pmatrix} a \\ -2.59639au^{34} + 7.63253u^{34} + \cdots - 1.72892a + 5.43976 \end{pmatrix}$$
$$a_{10} = \begin{pmatrix} -2.59639au^{34} + 7.63253u^{34} + \cdots - 0.728916a + 5.43976 \\ -2.59639au^{34} + 7.63253u^{34} + \cdots - 1.72892a + 5.43976 \end{pmatrix}$$
$$a_{12} = \begin{pmatrix} -6.19880au^{34} - 4.53916u^{34} + \cdots - 3.90964a - 4.43675 \\ -6.31627au^{34} - 2.84639u^{34} + \cdots - 4.71988a - 2.97892 \end{pmatrix}$$
$$a_6 = \begin{pmatrix} 6.56325au^{34} - 15.4307u^{34} + \cdots + 2.74398a - 3.80422 \\ -0.0391566au^{34} - 6.60241u^{34} + \cdots + 0.0632530a - 2.68072 \end{pmatrix}$$
$$a_7 = \begin{pmatrix} -\frac{7}{2}u^{34} - \frac{17}{2}u^{33} + \cdots - 9u - \frac{3}{2} \\ \frac{21}{4}u^{34} + \frac{57}{4}u^{33} + \cdots + 9u + \frac{19}{4} \end{pmatrix}$$
$$a_{11} = \begin{pmatrix} 7.63253au^{34} + 1.94277u^{34} + \cdots + 5.43976a + 2.70783 \\ 1 \end{pmatrix}$$
$$a_8 = \begin{pmatrix} \frac{7}{2}u^{34} + \frac{19}{2}u^{33} + \cdots + 2u + \frac{7}{2} \\ \frac{31}{4}u^{34} + \frac{83}{4}u^{33} + \cdots + 12u + \frac{25}{4} \end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= 10u^{34} + \frac{55}{2}u^{33} + \cdots + \frac{39}{2}u + \frac{13}{2}$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1, c_2, c_4	$(u^{35} - 4u^{34} + \cdots + 3u - 1)^2$
c_3, c_7	$(u^{35} - u^{34} + \cdots - 28u - 8)^2$
c_5, c_6	$u^{70} - 2u^{69} + \cdots - 215264236u + 17305121$
c_8, c_9, c_{11} c_{12}	$u^{70} + 12u^{69} + \cdots + 4u + 1$
c_{10}	$(u^{35} - 2u^{34} + \cdots - 2u + 1)^2$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_2, c_4	$(y^{35} - 34y^{34} + \cdots + 19y - 1)^2$
c_3, c_7	$(y^{35} + 21y^{34} + \cdots + 16y - 64)^2$
c_5, c_6	$y^{70} - 34y^{69} + \cdots - 9709459310743048y + 299467212824641$
c_8, c_9, c_{11} c_{12}	$y^{70} + 46y^{69} + \cdots + 60y^2 + 1$
c_{10}	$(y^{35} - 12y^{34} + \cdots + 10y - 1)^2$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.787288 + 0.599387I$ $a = -0.086494 + 0.987313I$ $b = -0.409191 - 1.343070I$	$-4.38053 + 3.19486I$	$-5.71319 - 2.77080I$
$u = 0.787288 + 0.599387I$ $a = -1.38411 - 1.00877I$ $b = 0.940264 + 0.111257I$	$-4.38053 + 3.19486I$	$-5.71319 - 2.77080I$
$u = 0.787288 - 0.599387I$ $a = -0.086494 - 0.987313I$ $b = -0.409191 + 1.343070I$	$-4.38053 - 3.19486I$	$-5.71319 + 2.77080I$
$u = 0.787288 - 0.599387I$ $a = -1.38411 + 1.00877I$ $b = 0.940264 - 0.111257I$	$-4.38053 - 3.19486I$	$-5.71319 + 2.77080I$
$u = 0.863463 + 0.435553I$ $a = 0.206812 - 0.579701I$ $b = -0.094077 + 1.102490I$	$-3.64066 - 1.76625I$	$-4.73044 + 2.55261I$
$u = 0.863463 + 0.435553I$ $a = -0.608026 + 1.260340I$ $b = 0.255940 - 0.178870I$	$-3.64066 - 1.76625I$	$-4.73044 + 2.55261I$
$u = 0.863463 - 0.435553I$ $a = 0.206812 + 0.579701I$ $b = -0.094077 - 1.102490I$	$-3.64066 + 1.76625I$	$-4.73044 - 2.55261I$
$u = 0.863463 - 0.435553I$ $a = -0.608026 - 1.260340I$ $b = 0.255940 + 0.178870I$	$-3.64066 + 1.76625I$	$-4.73044 - 2.55261I$
$u = 0.378284 + 0.838154I$ $a = -1.85036 - 0.34075I$ $b = 1.101690 + 0.020192I$	$-3.07931 - 8.20034I$	$-2.93623 + 7.67757I$
$u = 0.378284 + 0.838154I$ $a = 1.75417 - 0.92177I$ $b = -0.56291 + 1.37198I$	$-3.07931 - 8.20034I$	$-2.93623 + 7.67757I$

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.378284 - 0.838154I$ $a = -1.85036 + 0.34075I$ $b = 1.101690 - 0.020192I$	$-3.07931 + 8.20034I$	$-2.93623 - 7.67757I$
$u = 0.378284 - 0.838154I$ $a = 1.75417 + 0.92177I$ $b = -0.56291 - 1.37198I$	$-3.07931 + 8.20034I$	$-2.93623 - 7.67757I$
$u = 0.535823 + 0.722828I$ $a = -0.45702 - 1.35557I$ $b = 0.46606 + 1.42298I$	$-7.75853 - 2.44036I$	$-9.20394 + 3.90896I$
$u = 0.535823 + 0.722828I$ $a = -2.20201 + 0.82058I$ $b = 0.60727 - 1.30342I$	$-7.75853 - 2.44036I$	$-9.20394 + 3.90896I$
$u = 0.535823 - 0.722828I$ $a = -0.45702 + 1.35557I$ $b = 0.46606 - 1.42298I$	$-7.75853 + 2.44036I$	$-9.20394 - 3.90896I$
$u = 0.535823 - 0.722828I$ $a = -2.20201 - 0.82058I$ $b = 0.60727 + 1.30342I$	$-7.75853 + 2.44036I$	$-9.20394 - 3.90896I$
$u = 1.11802$ $a = -6.86583 + 4.96782I$ $b = 0.077086 - 1.008870I$	-5.44402	2.06430
$u = 1.11802$ $a = -6.86583 - 4.96782I$ $b = 0.077086 + 1.008870I$	-5.44402	2.06430
$u = 0.334838 + 0.781483I$ $a = 0.611108 - 0.709436I$ $b = -0.266376 + 0.028486I$	$-2.04839 - 2.67684I$	$-0.78426 + 2.93641I$
$u = 0.334838 + 0.781483I$ $a = -1.28426 + 0.62029I$ $b = 0.127641 - 1.040230I$	$-2.04839 - 2.67684I$	$-0.78426 + 2.93641I$

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.334838 - 0.781483I$ $a = 0.611108 + 0.709436I$ $b = -0.266376 - 0.028486I$	$-2.04839 + 2.67684I$	$-0.78426 - 2.93641I$
$u = 0.334838 - 0.781483I$ $a = -1.28426 - 0.62029I$ $b = 0.127641 + 1.040230I$	$-2.04839 + 2.67684I$	$-0.78426 - 2.93641I$
$u = -1.293330 + 0.022996I$ $a = -0.965695 - 0.118945I$ $b = 0.830183 - 0.558253I$	$-3.19397 + 3.04539I$	$-6.49856 - 3.07346I$
$u = -1.293330 + 0.022996I$ $a = 0.672369 + 0.296675I$ $b = -0.711919 - 0.891888I$	$-3.19397 + 3.04539I$	$-6.49856 - 3.07346I$
$u = -1.293330 - 0.022996I$ $a = -0.965695 + 0.118945I$ $b = 0.830183 + 0.558253I$	$-3.19397 - 3.04539I$	$-6.49856 + 3.07346I$
$u = -1.293330 - 0.022996I$ $a = 0.672369 - 0.296675I$ $b = -0.711919 + 0.891888I$	$-3.19397 - 3.04539I$	$-6.49856 + 3.07346I$
$u = 1.331630 + 0.151400I$ $a = 0.358567 - 0.966943I$ $b = -0.094807 + 0.186756I$	$-4.74191 - 0.58793I$	$-2.80279 + 0.I$
$u = 1.331630 + 0.151400I$ $a = -1.56667 - 1.15669I$ $b = 0.033995 - 1.083710I$	$-4.74191 - 0.58793I$	$-2.80279 + 0.I$
$u = 1.331630 - 0.151400I$ $a = 0.358567 + 0.966943I$ $b = -0.094807 - 0.186756I$	$-4.74191 + 0.58793I$	$-2.80279 + 0.I$
$u = 1.331630 - 0.151400I$ $a = -1.56667 + 1.15669I$ $b = 0.033995 + 1.083710I$	$-4.74191 + 0.58793I$	$-2.80279 + 0.I$

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 1.40486$ $a = -0.474895 + 1.101280I$ $b = 0.54790 + 1.37862I$	-9.85232	-9.92120
$u = 1.40486$ $a = -0.474895 - 1.101280I$ $b = 0.54790 - 1.37862I$	-9.85232	-9.92120
$u = 1.403830 + 0.145115I$ $a = 0.98126 + 1.19495I$ $b = -0.49226 + 1.38247I$	$-5.78377 - 5.84473I$	0
$u = 1.403830 + 0.145115I$ $a = -0.252994 - 0.344206I$ $b = 1.053300 - 0.058898I$	$-5.78377 - 5.84473I$	0
$u = 1.403830 - 0.145115I$ $a = 0.98126 - 1.19495I$ $b = -0.49226 - 1.38247I$	$-5.78377 + 5.84473I$	0
$u = 1.403830 - 0.145115I$ $a = -0.252994 + 0.344206I$ $b = 1.053300 + 0.058898I$	$-5.78377 + 5.84473I$	0
$u = 0.374463 + 0.419722I$ $a = -2.06448 + 2.38148I$ $b = -0.028461 + 1.098670I$	$-3.71944 - 1.17044I$	$-1.16678 + 5.64189I$
$u = 0.374463 + 0.419722I$ $a = 4.28644 + 4.59791I$ $b = -0.059654 - 0.866754I$	$-3.71944 - 1.17044I$	$-1.16678 + 5.64189I$
$u = 0.374463 - 0.419722I$ $a = -2.06448 - 2.38148I$ $b = -0.028461 - 1.098670I$	$-3.71944 + 1.17044I$	$-1.16678 - 5.64189I$
$u = 0.374463 - 0.419722I$ $a = 4.28644 - 4.59791I$ $b = -0.059654 + 0.866754I$	$-3.71944 + 1.17044I$	$-1.16678 - 5.64189I$

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-1.46236+0.17601I$ $a=\quad 1.51571-0.46270I$ $b=-0.367348+0.819468I$	$-9.77721+3.48149I$	0
$u=-1.46236+0.17601I$ $a=\quad 0.43467-1.63292I$ $b=-0.091480-1.230270I$	$-9.77721+3.48149I$	0
$u=-1.46236-0.17601I$ $a=\quad 1.51571+0.46270I$ $b=-0.367348-0.819468I$	$-9.77721-3.48149I$	0
$u=-1.46236-0.17601I$ $a=\quad 0.43467+1.63292I$ $b=-0.091480+1.230270I$	$-9.77721-3.48149I$	0
$u=-1.45963+0.29677I$ $a=\quad 0.624599+0.193615I$ $b=-0.552157-0.070918I$	$-7.83682+6.58963I$	0
$u=-1.45963+0.29677I$ $a=-1.35152+0.58488I$ $b=\quad 0.249550+1.142520I$	$-7.83682+6.58963I$	0
$u=-1.45963-0.29677I$ $a=\quad 0.624599-0.193615I$ $b=-0.552157+0.070918I$	$-7.83682-6.58963I$	0
$u=-1.45963-0.29677I$ $a=-1.35152-0.58488I$ $b=\quad 0.249550-1.142520I$	$-7.83682-6.58963I$	0
$u=-0.166758+0.470101I$ $a=-1.10634-1.04351I$ $b=-0.266545+0.867095I$	$-0.05478-1.72545I$	$3.36392+2.52233I$
$u=-0.166758+0.470101I$ $a=-1.20153+0.96877I$ $b=\quad 0.368166+0.304402I$	$-0.05478-1.72545I$	$3.36392+2.52233I$

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.166758-0.470101I$ $a=-1.10634+1.04351I$ $b=-0.266545-0.867095I$	$-0.05478+1.72545I$	$3.36392-2.52233I$
$u=-0.166758-0.470101I$ $a=-1.20153-0.96877I$ $b=\ \ 0.368166-0.304402I$	$-0.05478+1.72545I$	$3.36392-2.52233I$
$u=-0.261262+0.408522I$ $a=-0.881409+0.809220I$ $b=\ \ 0.850553-0.149091I$	$-0.43566+3.77887I$	$2.70186-3.89618I$
$u=-0.261262+0.408522I$ $a=\ \ 2.21730-0.24123I$ $b=-0.502121-1.163120I$	$-0.43566+3.77887I$	$2.70186-3.89618I$
$u=-0.261262-0.408522I$ $a=-0.881409-0.809220I$ $b=\ \ 0.850553+0.149091I$	$-0.43566-3.77887I$	$2.70186+3.89618I$
$u=-0.261262-0.408522I$ $a=\ \ 2.21730+0.24123I$ $b=-0.502121+1.163120I$	$-0.43566-3.77887I$	$2.70186+3.89618I$
$u=-1.48269+0.31831I$ $a=-0.841244+0.661850I$ $b=\ \ 1.235650-0.053997I$	$-9.0790+12.3988I$	0
$u=-1.48269+0.31831I$ $a=\ \ 1.53656-0.44667I$ $b=-0.65200-1.43728I$	$-9.0790+12.3988I$	0
$u=-1.48269-0.31831I$ $a=-0.841244-0.661850I$ $b=\ \ 1.235650+0.053997I$	$-9.0790-12.3988I$	0
$u=-1.48269-0.31831I$ $a=\ \ 1.53656+0.44667I$ $b=-0.65200+1.43728I$	$-9.0790-12.3988I$	0

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -1.52211 + 0.12323I$ $a = -0.684628 + 0.572571I$ $b = \ \ 1.063560 - 0.479442I$	$-12.01000 - 1.04091I$	0
$u = -1.52211 + 0.12323I$ $a = -0.247279 + 0.320973I$ $b = -0.24344 + 1.56604I$	$-12.01000 - 1.04091I$	0
$u = -1.52211 - 0.12323I$ $a = -0.684628 - 0.572571I$ $b = \ \ 1.063560 + 0.479442I$	$-12.01000 + 1.04091I$	0
$u = -1.52211 - 0.12323I$ $a = -0.247279 - 0.320973I$ $b = -0.24344 - 1.56604I$	$-12.01000 + 1.04091I$	0
$u = -1.51902 + 0.23855I$ $a = -1.50135 + 0.36894I$ $b = \ \ 0.78842 + 1.32634I$	$-14.4705 + 5.9201I$	0
$u = -1.51902 + 0.23855I$ $a = \ \ 0.181610 + 0.009514I$ $b = \ \ 0.45096 - 1.59114I$	$-14.4705 + 5.9201I$	0
$u = -1.51902 - 0.23855I$ $a = -1.50135 - 0.36894I$ $b = \ \ 0.78842 - 1.32634I$	$-14.4705 - 5.9201I$	0
$u = -1.51902 - 0.23855I$ $a = \ \ 0.181610 - 0.009514I$ $b = \ \ 0.45096 + 1.59114I$	$-14.4705 - 5.9201I$	0
$u = -0.207771$ $a = -0.50303 + 3.16268I$ $b = \ \ 0.346555 + 1.166320I$	-4.65443	-2.49720
$u = -0.207771$ $a = -0.50303 - 3.16268I$ $b = \ \ 0.346555 - 1.166320I$	-4.65443	-2.49720

III. $\boldsymbol{I_3^u = \langle 16a^3 + b + 3a - 6,\ 4a^4 - 3a^3 + a^2 - 2a + 1,\ u - 1\rangle}$

(i) Arc colorings

$$a_1 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$

$$a_4 = \begin{pmatrix} 0 \\ 1 \end{pmatrix}$$

$$a_2 = \begin{pmatrix} 1 \\ 1 \end{pmatrix}$$

$$a_5 = \begin{pmatrix} -1 \\ 0 \end{pmatrix}$$

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

$$a_9 = \begin{pmatrix} a \\ -16a^3 - 3a + 6 \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} -16a^3 - 2a + 6 \\ -16a^3 - 3a + 6 \end{pmatrix}$$

$$a_{12} = \begin{pmatrix} 8a^3 - 2a^2 + 2a - 3 \\ 20a^3 - 3a^2 + 4a - 8 \end{pmatrix}$$

$$a_6 = \begin{pmatrix} 12a^3 - a^2 + 2a - 5 \\ 36a^3 - 3a^2 + 7a - 13 \end{pmatrix}$$

$$a_7 = \begin{pmatrix} 0 \\ 32a^3 - 4a^2 + 5a - 12 \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} 8a^3 - 2a^2 + 2a - 3 \\ 24a^3 - 2a^2 + 6a - 8 \end{pmatrix}$$

$$a_8 = \begin{pmatrix} 0 \\ 32a^3 - 4a^2 + 5a - 12 \end{pmatrix}$$

(ii) Obstruction class $= 1$

(iii) Cusp Shapes $= -24a^3 + 5a^2 - 9a + 7$

(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	$u^4 - 2u^3 + 3u^2 - u + 1$
c_8, c_9	$u^4 + u^2 + u + 1$
c_{10}	$u^4 - 3u^3 + 4u^2 - 3u + 2$
c_{11}, c_{12}	$u^4 + u^2 - u + 1$

(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	$y^4 + 2y^3 + 7y^2 + 5y + 1$
c_8, c_9, c_{11} c_{12}	$y^4 + 2y^3 + 3y^2 + y + 1$
c_{10}	$y^4 - y^3 + 2y^2 + 7y + 4$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_3^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 1.00000$ $a = -0.286541 + 0.697356I$ $b = 0.547424 + 0.585652I$	$-0.66484 + 1.39709I$	$-1.91043 - 4.25783I$
$u = 1.00000$ $a = -0.286541 - 0.697356I$ $b = 0.547424 - 0.585652I$	$-0.66484 - 1.39709I$	$-1.91043 + 4.25783I$
$u = 1.00000$ $a = 0.661541 + 0.046758I$ $b = -0.547424 - 1.120870I$	$-4.26996 + 7.64338I$	$-3.62082 - 1.58240I$
$u = 1.00000$ $a = 0.661541 - 0.046758I$ $b = -0.547424 + 1.120870I$	$-4.26996 - 7.64338I$	$-3.62082 + 1.58240I$

IV. $\boldsymbol{I_4^u = \langle b-1,\ -2u^3-2u^2+2a+2u+3,\ u^5+u^4-2u^3-u^2+u-1\rangle}$

(i) Arc colorings

$$a_1 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$
$$a_4 = \begin{pmatrix} 0 \\ u \end{pmatrix}$$
$$a_2 = \begin{pmatrix} 1 \\ u^2 \end{pmatrix}$$
$$a_5 = \begin{pmatrix} -u \\ -u^3+u \end{pmatrix}$$
$$a_3 = \begin{pmatrix} -u^2+1 \\ -u^4+2u^2 \end{pmatrix}$$
$$a_9 = \begin{pmatrix} u^3+u^2-u-\frac{3}{2} \\ 1 \end{pmatrix}$$
$$a_{10} = \begin{pmatrix} u^3+u^2-u-\frac{1}{2} \\ 1 \end{pmatrix}$$
$$a_{12} = \begin{pmatrix} u^3+u^2-u+\frac{1}{2} \\ 1 \end{pmatrix}$$
$$a_6 = \begin{pmatrix} \frac{1}{4}u^3-\frac{3}{4}u \\ -\frac{1}{2}u^3+\frac{1}{2}u \end{pmatrix}$$
$$a_7 = \begin{pmatrix} u^3-2u \\ -u^3+u \end{pmatrix}$$
$$a_{11} = \begin{pmatrix} u^3+u^2-u-\frac{1}{2} \\ 1 \end{pmatrix}$$
$$a_8 = \begin{pmatrix} -1 \\ 0 \end{pmatrix}$$

(ii) Obstruction class $= 1$

(iii) Cusp Shapes $= \frac{17}{4}u^4+\frac{15}{4}u^3-\frac{17}{4}u^2+\frac{1}{2}u+\frac{7}{4}$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1, c_2	$u^5 + u^4 - 2u^3 - u^2 + u - 1$
c_3	$u^5 - u^4 + 2u^3 - u^2 + u - 1$
c_4	$u^5 - u^4 - 2u^3 + u^2 + u + 1$
c_5	$32(32u^5 + 48u^4 + 32u^3 + 4u^2 - 2u - 1)$
c_6	$32(32u^5 - 48u^4 + 32u^3 - 4u^2 - 2u + 1)$
c_7	$u^5 + u^4 + 2u^3 + u^2 + u + 1$
c_8, c_9	$(u + 1)^5$
c_{10}	u^5
c_{11}, c_{12}	$(u - 1)^5$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_2, c_4	$y^5 - 5y^4 + 8y^3 - 3y^2 - y - 1$
c_3, c_7	$y^5 + 3y^4 + 4y^3 + y^2 - y - 1$
c_5, c_6	$1024(1024y^5 - 256y^4 + 512y^3 - 48y^2 + 12y - 1)$
c_8, c_9, c_{11} c_{12}	$(y-1)^5$
c_{10}	y^5

(vi) Complex Volumes and Cusp Shapes

Solutions to I_4^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 1.21774$ $a = 0.570903$ $b = 1.00000$	-0.756147	12.1740
$u = 0.309916 + 0.549911I$ $a = -2.26766 - 0.21690I$ $b = 1.00000$	$1.31583 - 1.53058I$	$1.52646 - 1.80092I$
$u = 0.309916 - 0.549911I$ $a = -2.26766 + 0.21690I$ $b = 1.00000$	$1.31583 + 1.53058I$	$1.52646 + 1.80092I$
$u = -1.41878 + 0.21917I$ $a = -0.767792 + 0.471915I$ $b = 1.00000$	$-4.22763 + 4.40083I$	$-2.48831 - 2.71046I$
$u = -1.41878 - 0.21917I$ $a = -0.767792 - 0.471915I$ $b = 1.00000$	$-4.22763 - 4.40083I$	$-2.48831 + 2.71046I$

V. $\boldsymbol{I^u_5 = \langle -a^5+2a^4+8a^3-27a^2+11b+20a+4,\ a^6-5a^5+9a^4-4a^3-2a^2+a+1,\ u-1\rangle}$

(i) Arc colorings

$$a_1 = \begin{pmatrix}1\\0\end{pmatrix}$$
$$a_4 = \begin{pmatrix}0\\1\end{pmatrix}$$
$$a_2 = \begin{pmatrix}1\\1\end{pmatrix}$$
$$a_5 = \begin{pmatrix}-1\\0\end{pmatrix}$$
$$a_3 = \begin{pmatrix}0\\1\end{pmatrix}$$
$$a_9 = \begin{pmatrix}a\\0.0909091a^5 - 0.181818a^4 + \cdots - 1.81818a - 0.363636\end{pmatrix}$$
$$a_{10} = \begin{pmatrix}0.0909091a^5 - 0.181818a^4 + \cdots - 0.818182a - 0.363636\\0.0909091a^5 - 0.181818a^4 + \cdots - 1.81818a - 0.363636\end{pmatrix}$$
$$a_{12} = \begin{pmatrix}-0.363636a^5 + 1.72727a^4 + \cdots + 0.272727a + 0.454545\\-0.636364a^5 + 3.27273a^4 + \cdots + 0.727273a - 0.454545\end{pmatrix}$$
$$a_6 = \begin{pmatrix}0.454545a^5 - 1.90909a^4 + \cdots - 1.09091a - 0.818182\\-0.181818a^5 + 1.36364a^4 + \cdots - 1.36364a - 0.272727\end{pmatrix}$$
$$a_7 = \begin{pmatrix}0\\0.272727a^5 - 0.545455a^4 + \cdots - 1.45455a - 1.09091\end{pmatrix}$$
$$a_{11} = \begin{pmatrix}-0.363636a^5 + 1.72727a^4 + \cdots + 0.272727a + 0.454545\\-1\end{pmatrix}$$
$$a_8 = \begin{pmatrix}0\\0.272727a^5 - 0.545455a^4 + \cdots - 1.45455a - 1.09091\end{pmatrix}$$

(ii) Obstruction class $= 1$

(iii) Cusp Shapes $= -\frac{1}{11}a^5 + \frac{2}{11}a^4 + \frac{30}{11}a^3 - \frac{93}{11}a^2 + \frac{31}{11}a + \frac{15}{11}$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1, c_2	$(u-1)^6$
c_3, c_7	u^6
c_4	$(u+1)^6$
c_5, c_6	$u^6 - 3u^5 + 4u^4 - 2u^3 + 1$
c_8, c_9	$u^6 - u^5 + 2u^4 - 2u^3 + 2u^2 - 2u + 1$
c_{10}	$(u^3 + u^2 - 1)^2$
c_{11}, c_{12}	$u^6 + u^5 + 2u^4 + 2u^3 + 2u^2 + 2u + 1$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_2, c_4	$(y-1)^6$
c_3, c_7	y^6
c_5, c_6	$y^6 - y^5 + 4y^4 - 2y^3 + 8y^2 + 1$
c_8, c_9, c_{11} c_{12}	$y^6 + 3y^5 + 4y^4 + 2y^3 + 1$
c_{10}	$(y^3 - y^2 + 2y - 1)^2$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_5^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 1.00000$ $a = 0.836473 + 0.439023I$ $b = -0.713912 + 0.305839I$	$-1.91067 + 2.82812I$	$-0.28809 - 2.59975I$
$u = 1.00000$ $a = 0.836473 - 0.439023I$ $b = -0.713912 - 0.305839I$	$-1.91067 - 2.82812I$	$-0.28809 + 2.59975I$
$u = 1.00000$ $a = -0.376271 + 0.256441I$ $b = 0.498832 - 1.001300I$	$-1.91067 - 2.82812I$	$-0.28809 + 2.59975I$
$u = 1.00000$ $a = -0.376271 - 0.256441I$ $b = 0.498832 + 1.001300I$	$-1.91067 + 2.82812I$	$-0.28809 - 2.59975I$
$u = 1.00000$ $a = 2.03980 + 1.11514I$ $b = -0.284920 - 1.115140I$	-6.04826	$-12.42382 + 0.I$
$u = 1.00000$ $a = 2.03980 - 1.11514I$ $b = -0.284920 + 1.115140I$	-6.04826	$-12.42382 + 0.I$

VI. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1, c_2	$((u-1)^{10})(u^5+u^4+\cdots+u-1)(u^{35}-4u^{34}+\cdots+3u-1)^2$ $\cdot(u^{42}-4u^{41}+\cdots-65u+16)$
c_3	$u^{10}(u^5-u^4+\cdots+u-1)(u^{35}-u^{34}+\cdots-28u-8)^2$ $\cdot(u^{42}+12u^{40}+\cdots+800u-256)$
c_4	$((u+1)^{10})(u^5-u^4+\cdots+u+1)(u^{35}-4u^{34}+\cdots+3u-1)^2$ $\cdot(u^{42}-4u^{41}+\cdots-65u+16)$
c_5	$1024(u^4-2u^3+3u^2-u+1)(32u^5+48u^4+32u^3+4u^2-2u-1)$ $\cdot(u^6-3u^5+4u^4-2u^3+1)(32u^{42}-80u^{41}+\cdots-4u^2+1)$ $\cdot(u^{70}-2u^{69}+\cdots-215264236u+17305121)$
c_6	$1024(u^4-2u^3+3u^2-u+1)(32u^5-48u^4+32u^3-4u^2-2u+1)$ $\cdot(u^6-3u^5+4u^4-2u^3+1)(32u^{42}-80u^{41}+\cdots-4u^2+1)$ $\cdot(u^{70}-2u^{69}+\cdots-215264236u+17305121)$
c_7	$u^{10}(u^5+u^4+\cdots+u+1)(u^{35}-u^{34}+\cdots-28u-8)^2$ $\cdot(u^{42}+12u^{40}+\cdots+800u-256)$
c_8, c_9	$(u+1)^5(u^4+u^2+u+1)(u^6-u^5+2u^4-2u^3+2u^2-2u+1)$ $\cdot(u^{42}-5u^{41}+\cdots-9u-1)(u^{70}+12u^{69}+\cdots+4u+1)$
c_{10}	$u^5(u^3+u^2-1)^2(u^4-3u^3+\cdots-3u+2)(u^{35}-2u^{34}+\cdots-2u+1)^2$ $\cdot(u^{42}+6u^{41}+\cdots+23552u+4096)$
c_{11}, c_{12}	$(u-1)^5(u^4+u^2-u+1)(u^6+u^5+2u^4+2u^3+2u^2+2u+1)$ $\cdot(u^{42}-5u^{41}+\cdots-9u-1)(u^{70}+12u^{69}+\cdots+4u+1)$

VII. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1, c_2, c_4	$((y-1)^{10})(y^5 - 5y^4 + \cdots - y - 1)(y^{35} - 34y^{34} + \cdots + 19y - 1)^2$ $\cdot (y^{42} - 40y^{41} + \cdots - 2401y + 256)$
c_3, c_7	$y^{10}(y^5 + 3y^4 + \cdots - y - 1)(y^{35} + 21y^{34} + \cdots + 16y - 64)^2$ $\cdot (y^{42} + 24y^{41} + \cdots - 54272y + 65536)$
c_5, c_6	$1048576(y^4 + 2y^3 + 7y^2 + 5y + 1)$ $\cdot (1024y^5 - 256y^4 + 512y^3 - 48y^2 + 12y - 1)$ $\cdot (y^6 - y^5 + 4y^4 - 2y^3 + 8y^2 + 1)(1024y^{42} - 12544y^{41} + \cdots - 8y + 1)$ $\cdot (y^{70} - 34y^{69} + \cdots - 9709459310743048y + 299467212824641)$
c_8, c_9, c_{11} c_{12}	$(y-1)^5(y^4 + 2y^3 + 3y^2 + y + 1)(y^6 + 3y^5 + 4y^4 + 2y^3 + 1)$ $\cdot (y^{42} + 21y^{41} + \cdots - 57y + 1)(y^{70} + 46y^{69} + \cdots + 60y^2 + 1)$
c_{10}	$y^5(y^3 - y^2 + 2y - 1)^2(y^4 - y^3 + 2y^2 + 7y + 4)$ $\cdot (y^{35} - 12y^{34} + \cdots + 10y - 1)^2$ $\cdot (y^{42} - 12y^{41} + \cdots - 370147328y + 16777216)$