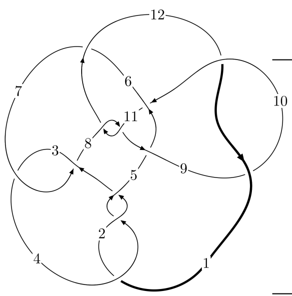
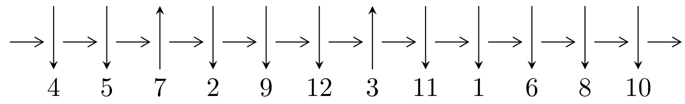
$12a_{0812}$ $(K12a_{0812})$



A knot diagram[1]

Linearized knot diagam



Solving Sequence

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

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

$$\begin{aligned}
I^u_1 = \langle & 1.08509 \times 10^{47} u^{41} + 2.04550 \times 10^{47} u^{40} + \cdots + 6.21177 \times 10^{47} b - 1.86338 \times 10^{48}, \\
& 5.29448 \times 10^{46} u^{41} + 1.94560 \times 10^{47} u^{40} + \cdots + 2.48471 \times 10^{48} a - 1.28814 \times 10^{49}, \\
& u^{42} + 3u^{41} + \cdots - 193u - 16 \rangle \\
I^u_2 = \langle & -19470u^{34}a + 16063u^{34} + \cdots + 14876a - 16265,\ 5u^{34}a - 2u^{34} + \cdots - 3a - 42, \\
& u^{35} + 3u^{34} + \cdots + u - 1 \rangle \\
I^u_3 = \langle & 4a^2 + b - 5a + 2,\ 4a^3 - 5a^2 + 3a - 1,\ u - 1 \rangle \\
I^u_4 = \langle & b + 1,\ 2u^3 + 2u^2 + 2a - 2u + 1,\ u^5 + u^4 - 2u^3 - u^2 + u - 1 \rangle \\
I^u_5 = \langle & -a^3 + 3a^2 + b - 5a + 2,\ a^4 - 3a^3 + 5a^2 - 3a + 1,\ u - 1 \rangle
\end{aligned}$$

* 5 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 124 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. $I^u_1 =$

$\langle 1.09\times10^{47}u^{41}+2.05\times10^{47}u^{40}+\cdots+6.21\times10^{47}b-1.86\times10^{48},\ 5.29\times10^{46}u^{41}+1.95\times10^{47}u^{40}+\cdots+2.48\times10^{48}a-1.29\times10^{49},\ u^{42}+3u^{41}+\cdots-193u-16\rangle$

(i) Arc colorings

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

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

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

$$a_5 = \begin{pmatrix} -u \\ -u^3 + u \end{pmatrix}$$

$$a_9 = \begin{pmatrix} -0.0213082u^{41} - 0.0783029u^{40} + \cdots - 15.6524u + 5.18428 \\ -0.174683u^{41} - 0.329294u^{40} + \cdots + 27.4193u + 2.99976 \end{pmatrix}$$

$$a_6 = \begin{pmatrix} 0.0226884u^{41} + 0.0558900u^{40} + \cdots - 11.7167u + 1.98961 \\ 0.101268u^{41} + 0.188266u^{40} + \cdots - 17.0252u - 1.36379 \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} 0.153375u^{41} + 0.250991u^{40} + \cdots - 43.0717u + 2.18452 \\ -0.174683u^{41} - 0.329294u^{40} + \cdots + 27.4193u + 2.99976 \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} 0.0127553u^{41} - 0.0150214u^{40} + \cdots - 16.9996u + 2.86365 \\ 0.0542267u^{41} + 0.114915u^{40} + \cdots - 8.87829u - 0.362657 \end{pmatrix}$$

$$a_8 = \begin{pmatrix} -0.0348739u^{41} - 0.0901865u^{40} + \cdots - 4.77020u + 3.86624 \\ 0.483980u^{41} + 0.895391u^{40} + \cdots - 78.1740u - 6.66305 \end{pmatrix}$$

$$a_{12} = \begin{pmatrix} 0.0139183u^{41} + 0.0517931u^{40} + \cdots + 8.25026u - 1.43381 \\ -0.100313u^{41} - 0.210125u^{40} + \cdots + 16.6956u + 1.23646 \end{pmatrix}$$

$$a_7 = \begin{pmatrix} -0.0504330u^{41} - 0.0839435u^{40} + \cdots + 1.76064u + 4.15274 \\ 0.481308u^{41} + 0.909837u^{40} + \cdots - 80.3209u - 6.90973 \end{pmatrix}$$

$$a_3 = \begin{pmatrix} -u^2 + 1 \\ -u^4 + 2u^2 \end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= -0.241704u^{41} - 0.550405u^{40} + \cdots + 15.5978u - 9.77163$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1, c_2, c_4	$u^{42} - 3u^{41} + \cdots + 193u - 16$
c_3, c_7	$u^{42} + 9u^{40} + \cdots + 432u + 128$
c_5, c_6	$32(32u^{42} + 48u^{41} + \cdots + 2u - 1)$
c_8, c_9, c_{11} c_{12}	$u^{42} + 5u^{41} + \cdots + 5u + 1$
c_{10}	$u^{42} - 6u^{41} + \cdots + 15360u - 4096$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_2, c_4	$y^{42} - 37y^{41} + \cdots - 56545y + 256$
c_3, c_7	$y^{42} + 18y^{41} + \cdots - 83200y + 16384$
c_5, c_6	$1024(1024y^{42} + 12032y^{41} + \cdots - 26y + 1)$
c_8, c_9, c_{11} c_{12}	$y^{42} + 21y^{41} + \cdots - 7y + 1$
c_{10}	$y^{42} + 12y^{41} + \cdots + 133169152y + 16777216$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.248224 + 0.954180I$ $a = -0.848722 + 0.859465I$ $b = -0.54514 - 1.34283I$	$6.4028 - 14.0443I$	$-4.40019 + 8.75993I$
$u = 0.248224 - 0.954180I$ $a = -0.848722 - 0.859465I$ $b = -0.54514 + 1.34283I$	$6.4028 + 14.0443I$	$-4.40019 - 8.75993I$
$u = 0.074743 + 1.078940I$ $a = 0.152006 - 0.668014I$ $b = 0.207853 + 1.064410I$	$3.92510 - 4.77662I$	$-2.81528 + 10.95479I$
$u = 0.074743 - 1.078940I$ $a = 0.152006 + 0.668014I$ $b = 0.207853 - 1.064410I$	$3.92510 + 4.77662I$	$-2.81528 - 10.95479I$
$u = -0.632717 + 0.661126I$ $a = 0.509452 - 0.199959I$ $b = -0.209062 - 1.245590I$	$7.73166 - 3.41034I$	$1.10803 + 3.48014I$
$u = -0.632717 - 0.661126I$ $a = 0.509452 + 0.199959I$ $b = -0.209062 + 1.245590I$	$7.73166 + 3.41034I$	$1.10803 - 3.48014I$
$u = 1.09752$ $a = -0.739117$ $b = 0.169294$	-2.12730	0.370320
$u = -1.109190 + 0.023523I$ $a = -0.247206 - 0.450213I$ $b = -0.23649 - 1.51407I$	$7.52656 - 5.05499I$	$-19.5152 - 0.7337I$
$u = -1.109190 - 0.023523I$ $a = -0.247206 + 0.450213I$ $b = -0.23649 + 1.51407I$	$7.52656 + 5.05499I$	$-19.5152 + 0.7337I$
$u = -0.323062 + 0.739421I$ $a = -1.228070 - 0.642588I$ $b = -0.407229 + 1.331930I$	$8.66776 + 7.85288I$	$-1.05755 - 5.46989I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = -0.323062 - 0.739421I$ $a = -1.228070 + 0.642588I$ $b = -0.407229 - 1.331930I$	$8.66776 - 7.85288I$	$-1.05755 + 5.46989I$
$u = 0.710359 + 0.992141I$ $a = -0.515262 + 0.317448I$ $b = -0.197546 - 0.956092I$	$1.34229 - 4.08963I$	$-9.0363 + 12.2471I$
$u = 0.710359 - 0.992141I$ $a = -0.515262 - 0.317448I$ $b = -0.197546 + 0.956092I$	$1.34229 + 4.08963I$	$-9.0363 - 12.2471I$
$u = 1.231670 + 0.094353I$ $a = 2.38664 - 0.99295I$ $b = 1.099420 - 0.250933I$	$-4.19721 - 0.35644I$	$-7.83557 + 11.50691I$
$u = 1.231670 - 0.094353I$ $a = 2.38664 + 0.99295I$ $b = 1.099420 + 0.250933I$	$-4.19721 + 0.35644I$	$-7.83557 - 11.50691I$
$u = 1.062770 + 0.640101I$ $a = 0.050170 + 0.246213I$ $b = -0.487427 + 1.277770I$	$3.96174 + 8.50579I$	$-6.69220 - 5.52259I$
$u = 1.062770 - 0.640101I$ $a = 0.050170 - 0.246213I$ $b = -0.487427 - 1.277770I$	$3.96174 - 8.50579I$	$-6.69220 + 5.52259I$
$u = 0.236961 + 0.636493I$ $a = -0.206766 + 0.041993I$ $b = 1.260010 - 0.175724I$	$-1.70101 - 1.91356I$	$0.02681 + 10.10782I$
$u = 0.236961 - 0.636493I$ $a = -0.206766 - 0.041993I$ $b = 1.260010 + 0.175724I$	$-1.70101 + 1.91356I$	$0.02681 - 10.10782I$
$u = 0.520974 + 0.404635I$ $a = 0.109786 - 1.228840I$ $b = 0.894996 + 0.377632I$	$-2.74179 - 1.37249I$	$-17.0129 - 1.6205I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.520974 - 0.404635I$ $a = 0.109786 + 1.228840I$ $b = 0.894996 - 0.377632I$	$-2.74179 + 1.37249I$	$-17.0129 + 1.6205I$
$u = 0.392865 + 0.454143I$ $a = -0.597332 - 0.349954I$ $b = -0.103400 + 0.198098I$	$-0.466654 - 1.208450I$	$-5.65241 + 4.78210I$
$u = 0.392865 - 0.454143I$ $a = -0.597332 + 0.349954I$ $b = -0.103400 - 0.198098I$	$-0.466654 + 1.208450I$	$-5.65241 - 4.78210I$
$u = 1.271940 + 0.603035I$ $a = 0.604222 - 0.251023I$ $b = 0.161484 + 0.882187I$	$-0.37856 - 2.57914I$	$-8.00000 + 9.43410I$
$u = 1.271940 - 0.603035I$ $a = 0.604222 + 0.251023I$ $b = 0.161484 - 0.882187I$	$-0.37856 + 2.57914I$	$-8.00000 - 9.43410I$
$u = -1.386130 + 0.262729I$ $a = 1.40638 + 0.89464I$ $b = 1.43050 + 0.28539I$	$-6.85298 + 5.22980I$	$-8.00000 - 7.21139I$
$u = -1.386130 - 0.262729I$ $a = 1.40638 - 0.89464I$ $b = 1.43050 - 0.28539I$	$-6.85298 - 5.22980I$	$-8.00000 + 7.21139I$
$u = -1.42771 + 0.10441I$ $a = 1.61787 - 0.00916I$ $b = 1.033580 - 0.727245I$	$-8.95280 + 3.04983I$	$-8.00000 + 0.I$
$u = -1.42771 - 0.10441I$ $a = 1.61787 + 0.00916I$ $b = 1.033580 + 0.727245I$	$-8.95280 - 3.04983I$	$-8.00000 + 0.I$
$u = 1.42833 + 0.29979I$ $a = -1.90675 - 0.45833I$ $b = -0.529519 - 1.302180I$	$3.09440 - 11.65060I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 1.42833 - 0.29979I$ $a = -1.90675 + 0.45833I$ $b = -0.529519 + 1.302180I$	$3.09440 + 11.65060I$	0
$u = -1.39218 + 0.45224I$ $a = 1.148140 + 0.058065I$ $b = 0.348492 - 1.178060I$	$-0.77197 + 10.13610I$	0
$u = -1.39218 - 0.45224I$ $a = 1.148140 - 0.058065I$ $b = 0.348492 + 1.178060I$	$-0.77197 - 10.13610I$	0
$u = -1.45716 + 0.20775I$ $a = -0.735467 - 0.263115I$ $b = -0.392117 - 0.291228I$	$-6.51306 + 3.82462I$	0
$u = -1.45716 - 0.20775I$ $a = -0.735467 + 0.263115I$ $b = -0.392117 + 0.291228I$	$-6.51306 - 3.82462I$	0
$u = -1.43751 + 0.39844I$ $a = -1.86696 + 0.05479I$ $b = -0.60360 + 1.37108I$	$1.0500 + 18.8951I$	0
$u = -1.43751 - 0.39844I$ $a = -1.86696 - 0.05479I$ $b = -0.60360 - 1.37108I$	$1.0500 - 18.8951I$	0
$u = 1.55911 + 0.19525I$ $a = -0.459593 - 0.364526I$ $b = -0.066400 - 0.822655I$	$-1.24848 - 0.86846I$	0
$u = 1.55911 - 0.19525I$ $a = -0.459593 + 0.364526I$ $b = -0.066400 + 0.822655I$	$-1.24848 + 0.86846I$	0
$u = -1.58720 + 0.14260I$ $a = -1.035690 + 0.554995I$ $b = -0.504339 + 0.985200I$	$-6.73705 + 7.84823I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -1.58720 - 0.14260I$ $a = -1.035690 - 0.554995I$ $b = -0.504339 - 0.985200I$	$-6.73705 - 7.84823I$	0
$u = -0.0676965$ $a = 6.25293$ $b = 0.522564$	-0.864294	-11.0520

II. $\boldsymbol{I^u_2 = \langle -1.95\times 10^4 au^{34} + 1.61\times 10^4 u^{34} + \cdots + 1.49\times 10^4 a - 1.63\times 10^4,\ 5u^{34}a - 2u^{34} + \cdots - 3a - 42,\ u^{35} + 3u^{34} + \cdots + u - 1\rangle}$

(i) Arc colorings

$$a_1 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$
$$a_4 = \begin{pmatrix} 0 \\ u \end{pmatrix}$$
$$a_2 = \begin{pmatrix} 1 \\ u^2 \end{pmatrix}$$
$$a_5 = \begin{pmatrix} -u \\ -u^3 + u \end{pmatrix}$$
$$a_9 = \begin{pmatrix} a \\ 3.97509au^{34} - 3.27950u^{34} + \cdots - 3.03716a + 3.32074 \end{pmatrix}$$
$$a_6 = \begin{pmatrix} 8.89506au^{34} - 13.8579u^{34} + \cdots - 8.77950a + 2.19559 \\ -4.35790au^{34} + 4.53716u^{34} + \cdots + 3.69559a - 5.08391 \end{pmatrix}$$
$$a_{10} = \begin{pmatrix} -3.97509au^{34} + 3.27950u^{34} + \cdots + 4.03716a - 3.32074 \\ 3.97509au^{34} - 3.27950u^{34} + \cdots - 3.03716a + 3.32074 \end{pmatrix}$$
$$a_{11} = \begin{pmatrix} 3.27950au^{34} - 5.69559u^{34} + \cdots - 3.32074a + 5.71641 \\ -1 \end{pmatrix}$$
$$a_8 = \begin{pmatrix} 3u^{34} + 5u^{33} + \cdots + u - 3 \\ -\frac{5}{2}u^{34} - 4u^{33} + \cdots - 2u + \frac{3}{2} \end{pmatrix}$$
$$a_{12} = \begin{pmatrix} -4.52491au^{34} + 1.72050u^{34} + \cdots + 4.46284a - 0.679257 \\ 3.74541au^{34} + 4.47509u^{34} + \cdots - 2.64210a - 2.53716 \end{pmatrix}$$
$$a_7 = \begin{pmatrix} u^{33} + u^{32} + \cdots - 3u - 1 \\ -\frac{11}{2}u^{34} - 10u^{33} + \cdots - 7u + \frac{9}{2} \end{pmatrix}$$
$$a_3 = \begin{pmatrix} -u^2 + 1 \\ -u^4 + 2u^2 \end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes

$= 7u^{34} + 7u^{33} - 100u^{32} - 67u^{31} + 665u^{30} + 193u^{29} - 2656u^{28} + 332u^{27} + 6763u^{26} - 4013u^{25} - 10334u^{24} + 13042u^{23} + 5838u^{22} - 22006u^{21} + 10452u^{20} + 17336u^{19} - 25367u^{18} + 3521u^{17} + 19332u^{16} - 18920u^{15} + 1888u^{14} + 11508u^{13} - 11034u^{12} + 2874u^{11} + 3024u^{10} - 4152u^9 + 2538u^8 - 542u^7 - 450u^6 + 658u^5 - 514u^4 + 230u^3 - 79u^2 + 25u - 12$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1, c_2, c_4	$(u^{35} - 3u^{34} + \cdots + u + 1)^2$
c_3, c_7	$(u^{35} - u^{34} + \cdots - 8u + 4)^2$
c_5, c_6	$u^{70} - 2u^{69} + \cdots - 5401216u + 7036657$
c_8, c_9, c_{11} c_{12}	$u^{70} - 12u^{69} + \cdots - 4u + 1$
c_{10}	$(u^{35} + 2u^{34} + \cdots - 2u^2 + 1)^2$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_2, c_4	$(y^{35} - 31y^{34} + \cdots - 17y - 1)^2$
c_3, c_7	$(y^{35} + 15y^{34} + \cdots - 72y - 16)^2$
c_5, c_6	$y^{70} + 34y^{69} + \cdots + 937785468713840y + 49514541735649$
c_8, c_9, c_{11} c_{12}	$y^{70} + 46y^{69} + \cdots + 40y^2 + 1$
c_{10}	$(y^{35} + 12y^{34} + \cdots + 4y - 1)^2$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_2^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.827242 + 0.510777I$ $a = -0.212545 - 0.733799I$ $b = -0.255434 + 0.179971I$	$-0.32534 - 1.86508I$	$-12.01949 + 2.70414I$
$u = 0.827242 + 0.510777I$ $a = 0.201230 - 0.318451I$ $b = 0.161759 + 0.922833I$	$-0.32534 - 1.86508I$	$-12.01949 + 2.70414I$
$u = 0.827242 - 0.510777I$ $a = -0.212545 + 0.733799I$ $b = -0.255434 - 0.179971I$	$-0.32534 + 1.86508I$	$-12.01949 - 2.70414I$
$u = 0.827242 - 0.510777I$ $a = 0.201230 + 0.318451I$ $b = 0.161759 - 0.922833I$	$-0.32534 + 1.86508I$	$-12.01949 - 2.70414I$
$u = 0.943343 + 0.501099I$ $a = -0.806313 + 1.002030I$ $b = -0.892934 - 0.050732I$	$0.19294 + 3.49535I$	$-10.37889 - 3.75014I$
$u = 0.943343 + 0.501099I$ $a = -0.392801 - 0.250034I$ $b = 0.473353 - 1.238280I$	$0.19294 + 3.49535I$	$-10.37889 - 3.75014I$
$u = 0.943343 - 0.501099I$ $a = -0.806313 - 1.002030I$ $b = -0.892934 + 0.050732I$	$0.19294 - 3.49535I$	$-10.37889 + 3.75014I$
$u = 0.943343 - 0.501099I$ $a = -0.392801 + 0.250034I$ $b = 0.473353 + 1.238280I$	$0.19294 - 3.49535I$	$-10.37889 + 3.75014I$
$u = 0.253334 + 0.839514I$ $a = 0.732491 - 0.990248I$ $b = 0.57430 + 1.36050I$	$2.31683 - 8.24742I$	$-6.56945 + 7.59916I$
$u = 0.253334 + 0.839514I$ $a = -0.236166 + 0.144804I$ $b = -1.099950 + 0.040721I$	$2.31683 - 8.24742I$	$-6.56945 + 7.59916I$

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.253334 - 0.839514I$ $a = 0.732491 + 0.990248I$ $b = 0.57430 - 1.36050I$	$2.31683 + 8.24742I$	$-6.56945 - 7.59916I$
$u = 0.253334 - 0.839514I$ $a = -0.236166 - 0.144804I$ $b = -1.099950 - 0.040721I$	$2.31683 + 8.24742I$	$-6.56945 - 7.59916I$
$u = 1.15725$ $a = 8.02935 + 5.32139I$ $b = 0.059906 - 1.005370I$	1.07873	-8.02480
$u = 1.15725$ $a = 8.02935 - 5.32139I$ $b = 0.059906 + 1.005370I$	1.07873	-8.02480
$u = 0.295449 + 0.784598I$ $a = 0.131977 + 0.656606I$ $b = 0.272386 - 0.009768I$	$1.31903 - 2.68874I$	$-8.58889 + 2.89622I$
$u = 0.295449 + 0.784598I$ $a = -0.99423 + 1.03224I$ $b = -0.138135 - 1.022530I$	$1.31903 - 2.68874I$	$-8.58889 + 2.89622I$
$u = 0.295449 - 0.784598I$ $a = 0.131977 - 0.656606I$ $b = 0.272386 + 0.009768I$	$1.31903 + 2.68874I$	$-8.58889 - 2.89622I$
$u = 0.295449 - 0.784598I$ $a = -0.99423 - 1.03224I$ $b = -0.138135 + 1.022530I$	$1.31903 + 2.68874I$	$-8.58889 - 2.89622I$
$u = 1.164960 + 0.288871I$ $a = 0.174184 + 1.133140I$ $b = -0.401753 + 1.320700I$	$3.90189 - 1.16771I$	$-3.40537 + 0.48242I$
$u = 1.164960 + 0.288871I$ $a = -2.78171 - 0.27519I$ $b = -0.507904 - 1.221810I$	$3.90189 - 1.16771I$	$-3.40537 + 0.48242I$

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = \ \ 1.164960 - 0.288871I$ $a = \ \ 0.174184 - 1.133140I$ $b = -0.401753 - 1.320700I$	$3.90189 + 1.16771I$	$-3.40537 - 0.48242I$
$u = \ \ 1.164960 - 0.288871I$ $a = -2.78171 + 0.27519I$ $b = -0.507904 + 1.221810I$	$3.90189 + 1.16771I$	$-3.40537 - 0.48242I$
$u = \ \ 0.098834 + 0.725130I$ $a = -0.388983 + 0.814875I$ $b = -0.62501 - 1.28751I$	$7.12278 - 2.53588I$	$-0.15314 + 3.83326I$
$u = \ \ 0.098834 + 0.725130I$ $a = -0.637467 - 1.226900I$ $b = -0.44854 + 1.43678I$	$7.12278 - 2.53588I$	$-0.15314 + 3.83326I$
$u = \ \ 0.098834 - 0.725130I$ $a = -0.388983 - 0.814875I$ $b = -0.62501 + 1.28751I$	$7.12278 + 2.53588I$	$-0.15314 - 3.83326I$
$u = \ \ 0.098834 - 0.725130I$ $a = -0.637467 + 1.226900I$ $b = -0.44854 - 1.43678I$	$7.12278 + 2.53588I$	$-0.15314 - 3.83326I$
$u = -1.275860 + 0.152636I$ $a = -1.19877 - 0.84816I$ $b = -1.066620 - 0.552500I$	$0.525136 - 0.811264I$	$-10.02594 + 0.I$
$u = -1.275860 + 0.152636I$ $a = -0.233286 + 0.448211I$ $b = \ \ 0.19793 + 1.59412I$	$0.525136 - 0.811264I$	$-10.02594 + 0.I$
$u = -1.275860 - 0.152636I$ $a = -1.19877 + 0.84816I$ $b = -1.066620 + 0.552500I$	$0.525136 + 0.811264I$	$-10.02594 + 0.I$
$u = -1.275860 - 0.152636I$ $a = -0.233286 - 0.448211I$ $b = \ \ 0.19793 - 1.59412I$	$0.525136 + 0.811264I$	$-10.02594 + 0.I$

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = \ \ 1.343360 + 0.175547I$ $a = -1.29193 - 0.61731I$ $b = -0.067487 - 0.890816I$	$-1.47991 - 0.62379I$	$-10.88558 + 0.I$
$u = \ \ 1.343360 + 0.175547I$ $a = -0.045410 + 0.417751I$ $b = \ \ 0.103890 - 0.197377I$	$-1.47991 - 0.62379I$	$-10.88558 + 0.I$
$u = \ \ 1.343360 - 0.175547I$ $a = -1.29193 + 0.61731I$ $b = -0.067487 + 0.890816I$	$-1.47991 + 0.62379I$	$-10.88558 + 0.I$
$u = \ \ 1.343360 - 0.175547I$ $a = -0.045410 - 0.417751I$ $b = \ \ 0.103890 + 0.197377I$	$-1.47991 + 0.62379I$	$-10.88558 + 0.I$
$u = -1.328700 + 0.290772I$ $a = \ \ 0.100120 - 0.714272I$ $b = -0.40483 - 1.60095I$	$2.63440 + 6.20108I$	$-5.95124 - 5.89177I$
$u = -1.328700 + 0.290772I$ $a = -1.92740 + 0.20238I$ $b = -0.81198 + 1.27967I$	$2.63440 + 6.20108I$	$-5.95124 - 5.89177I$
$u = -1.328700 - 0.290772I$ $a = \ \ 0.100120 + 0.714272I$ $b = -0.40483 + 1.60095I$	$2.63440 - 6.20108I$	$-5.95124 + 5.89177I$
$u = -1.328700 - 0.290772I$ $a = -1.92740 - 0.20238I$ $b = -0.81198 - 1.27967I$	$2.63440 - 6.20108I$	$-5.95124 + 5.89177I$
$u = \ \ 1.349650 + 0.231790I$ $a = -1.67459 + 0.63239I$ $b = -1.013470 + 0.079471I$	$-0.71766 - 6.15318I$	$-9.27676 + 5.00692I$
$u = \ \ 1.349650 + 0.231790I$ $a = \ \ 2.10621 + 0.67470I$ $b = \ \ 0.552167 + 1.289800I$	$-0.71766 - 6.15318I$	$-9.27676 + 5.00692I$

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 1.349650 - 0.231790I$ $a = -1.67459 - 0.63239I$ $b = -1.013470 - 0.079471I$	$-0.71766 + 6.15318I$	$-9.27676 - 5.00692I$
$u = 1.349650 - 0.231790I$ $a = 2.10621 - 0.67470I$ $b = 0.552167 - 1.289800I$	$-0.71766 + 6.15318I$	$-9.27676 - 5.00692I$
$u = -1.360060 + 0.198169I$ $a = 0.714600 + 1.125270I$ $b = 0.117959 - 1.223150I$	$-1.87781 + 3.59908I$	$-12.99233 - 3.96847I$
$u = -1.360060 + 0.198169I$ $a = 1.72670 + 0.67818I$ $b = 0.362424 + 0.868364I$	$-1.87781 + 3.59908I$	$-12.99233 - 3.96847I$
$u = -1.360060 - 0.198169I$ $a = 0.714600 - 1.125270I$ $b = 0.117959 + 1.223150I$	$-1.87781 - 3.59908I$	$-12.99233 + 3.96847I$
$u = -1.360060 - 0.198169I$ $a = 1.72670 - 0.67818I$ $b = 0.362424 - 0.868364I$	$-1.87781 - 3.59908I$	$-12.99233 + 3.96847I$
$u = -0.130391 + 0.566931I$ $a = -0.564679 - 0.532687I$ $b = -0.926527 + 0.182651I$	$3.98776 + 3.19845I$	$-2.93735 - 3.08489I$
$u = -0.130391 + 0.566931I$ $a = 1.47355 + 1.17244I$ $b = 0.36381 - 1.36753I$	$3.98776 + 3.19845I$	$-2.93735 - 3.08489I$
$u = -0.130391 - 0.566931I$ $a = -0.564679 + 0.532687I$ $b = -0.926527 - 0.182651I$	$3.98776 - 3.19845I$	$-2.93735 + 3.08489I$
$u = -0.130391 - 0.566931I$ $a = 1.47355 - 1.17244I$ $b = 0.36381 + 1.36753I$	$3.98776 - 3.19845I$	$-2.93735 + 3.08489I$

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -1.42263 + 0.31147I$ $a = 0.773954 - 0.130107I$ $b = 0.562971 + 0.001188I$	$-4.15268 + 6.65019I$	$-12.04335 + 0.I$
$u = -1.42263 + 0.31147I$ $a = -1.47708 - 0.09128I$ $b = -0.281937 + 1.111930I$	$-4.15268 + 6.65019I$	$-12.04335 + 0.I$
$u = -1.42263 - 0.31147I$ $a = 0.773954 + 0.130107I$ $b = 0.562971 - 0.001188I$	$-4.15268 - 6.65019I$	$-12.04335 + 0.I$
$u = -1.42263 - 0.31147I$ $a = -1.47708 + 0.09128I$ $b = -0.281937 - 1.111930I$	$-4.15268 - 6.65019I$	$-12.04335 + 0.I$
$u = -1.41674 + 0.34279I$ $a = -1.32972 - 0.72964I$ $b = -1.224650 - 0.094256I$	$-2.99525 + 12.51090I$	$0. - 8.16035I$
$u = -1.41674 + 0.34279I$ $a = 1.85441 - 0.13441I$ $b = 0.67176 - 1.40948I$	$-2.99525 + 12.51090I$	$0. - 8.16035I$
$u = -1.41674 - 0.34279I$ $a = -1.32972 + 0.72964I$ $b = -1.224650 + 0.094256I$	$-2.99525 - 12.51090I$	$0. + 8.16035I$
$u = -1.41674 - 0.34279I$ $a = 1.85441 + 0.13441I$ $b = 0.67176 + 1.40948I$	$-2.99525 - 12.51090I$	$0. + 8.16035I$
$u = -1.49697 + 0.02263I$ $a = 0.938878 - 0.712892I$ $b = 0.671118 - 0.890248I$	$-8.17684 + 3.01120I$	$-14.10437 + 0.I$
$u = -1.49697 + 0.02263I$ $a = -1.316410 - 0.089350I$ $b = -0.794357 - 0.531549I$	$-8.17684 + 3.01120I$	$-14.10437 + 0.I$

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = -1.49697 - 0.02263I$ $a = 0.938878 + 0.712892I$ $b = 0.671118 + 0.890248I$	$-8.17684 - 3.01120I$	$-14.10437 + 0.I$
$u = -1.49697 - 0.02263I$ $a = -1.316410 + 0.089350I$ $b = -0.794357 + 0.531549I$	$-8.17684 - 3.01120I$	$-14.10437 + 0.I$
$u = 0.223261 + 0.425121I$ $a = 4.06387 - 1.81746I$ $b = 0.055017 - 0.848791I$	$3.05354 - 1.15463I$	$-7.51275 + 5.51426I$
$u = 0.223261 + 0.425121I$ $a = -2.95799 - 5.46989I$ $b = 0.023876 + 1.105990I$	$3.05354 - 1.15463I$	$-7.51275 + 5.51426I$
$u = 0.223261 - 0.425121I$ $a = 4.06387 + 1.81746I$ $b = 0.055017 + 0.848791I$	$3.05354 + 1.15463I$	$-7.51275 - 5.51426I$
$u = 0.223261 - 0.425121I$ $a = -2.95799 + 5.46989I$ $b = 0.023876 - 1.105990I$	$3.05354 + 1.15463I$	$-7.51275 - 5.51426I$
$u = -0.146719 + 0.318162I$ $a = 0.31286 - 2.35336I$ $b = -0.331846 - 0.386611I$	$3.17896 - 1.46996I$	$-3.05083 + 3.34118I$
$u = -0.146719 + 0.318162I$ $a = -3.36692 + 0.15962I$ $b = 0.068722 + 1.183220I$	$3.17896 - 1.46996I$	$-3.05083 + 3.34118I$
$u = -0.146719 - 0.318162I$ $a = 0.31286 + 2.35336I$ $b = -0.331846 + 0.386611I$	$3.17896 + 1.46996I$	$-3.05083 - 3.34118I$
$u = -0.146719 - 0.318162I$ $a = -3.36692 - 0.15962I$ $b = 0.068722 - 1.183220I$	$3.17896 + 1.46996I$	$-3.05083 - 3.34118I$

III. $I_3^u = \langle 4a^2 + b - 5a + 2,\ 4a^3 - 5a^2 + 3a - 1,\ u - 1 \rangle$

(i) Arc colorings

$$a_1 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$
$$a_4 = \begin{pmatrix} 0 \\ 1 \end{pmatrix}$$
$$a_2 = \begin{pmatrix} 1 \\ 1 \end{pmatrix}$$
$$a_5 = \begin{pmatrix} -1 \\ 0 \end{pmatrix}$$
$$a_9 = \begin{pmatrix} a \\ -4a^2 + 5a - 2 \end{pmatrix}$$
$$a_6 = \begin{pmatrix} -a \\ -4a^2 + a + 1 \end{pmatrix}$$
$$a_{10} = \begin{pmatrix} 4a^2 - 4a + 2 \\ -4a^2 + 5a - 2 \end{pmatrix}$$
$$a_{11} = \begin{pmatrix} 4a^2 - 2a + 1 \\ 8a^2 - 6a \end{pmatrix}$$
$$a_8 = \begin{pmatrix} 0 \\ 4a^2 - 9a + 4 \end{pmatrix}$$
$$a_{12} = \begin{pmatrix} 4a^2 - 2a + 1 \\ -4a^2 + a + 1 \end{pmatrix}$$
$$a_7 = \begin{pmatrix} 0 \\ 4a^2 - 9a + 4 \end{pmatrix}$$
$$a_3 = \begin{pmatrix} 0 \\ 1 \end{pmatrix}$$

(ii) Obstruction class $= 1$

(iii) Cusp Shapes $= -93a^2 + 67a - 30$

(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, c_8 c_9	u^3+2u-1
c_{10}	u^3+3u^2+5u+2
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_8 c_9, c_{11}, c_{12}	$y^3 + 4y^2 + 4y - 1$
c_{10}	$y^3 + y^2 + 13y - 4$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_3^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 1.00000$ $a = 0.688043$ $b = -0.453398$	-2.43213	-27.9280
$u = 1.00000$ $a = 0.280979 + 0.533292I$ $b = 0.22670 + 1.46771I$	$7.79580 - 5.13794I$	$7.93256 + 7.85966I$
$u = 1.00000$ $a = 0.280979 - 0.533292I$ $b = 0.22670 - 1.46771I$	$7.79580 + 5.13794I$	$7.93256 - 7.85966I$

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

(i) Arc colorings

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

(ii) Obstruction class $= 1$

(iii) Cusp Shapes $= \frac{17}{4}u^4+\frac{15}{4}u^3-\frac{17}{4}u^2+\frac{1}{2}u-\frac{41}{4}$

(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
$u = 1.21774$ $a = -2.57090$ $b = -1.00000$	-4.04602	0.173700
$u = 0.309916 + 0.549911I$ $a = 0.267660 + 0.216900I$ $b = -1.00000$	$-1.97403 - 1.53058I$	$-10.47354 - 1.80092I$
$u = 0.309916 - 0.549911I$ $a = 0.267660 - 0.216900I$ $b = -1.00000$	$-1.97403 + 1.53058I$	$-10.47354 + 1.80092I$
$u = -1.41878 + 0.21917I$ $a = -1.232210 - 0.471915I$ $b = -1.00000$	$-7.51750 + 4.40083I$	$-14.4883 - 2.7105I$
$u = -1.41878 - 0.21917I$ $a = -1.232210 + 0.471915I$ $b = -1.00000$	$-7.51750 - 4.40083I$	$-14.4883 + 2.7105I$

V. $\boldsymbol{I_5^u = \langle -a^3 + 3a^2 + b - 5a + 2,\ a^4 - 3a^3 + 5a^2 - 3a + 1,\ u - 1\rangle}$

(i) Arc colorings

$$a_1 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$
$$a_4 = \begin{pmatrix} 0 \\ 1 \end{pmatrix}$$
$$a_2 = \begin{pmatrix} 1 \\ 1 \end{pmatrix}$$
$$a_5 = \begin{pmatrix} -1 \\ 0 \end{pmatrix}$$
$$a_9 = \begin{pmatrix} a \\ a^3 - 3a^2 + 5a - 2 \end{pmatrix}$$
$$a_6 = \begin{pmatrix} -a \\ a^3 - 2a^2 + 2a + 1 \end{pmatrix}$$
$$a_{10} = \begin{pmatrix} -a^3 + 3a^2 - 4a + 2 \\ a^3 - 3a^2 + 5a - 2 \end{pmatrix}$$
$$a_{11} = \begin{pmatrix} -a^3 + 2a^2 - 3a + 1 \\ 1 \end{pmatrix}$$
$$a_8 = \begin{pmatrix} 0 \\ a^3 - 3a^2 + 4a - 1 \end{pmatrix}$$
$$a_{12} = \begin{pmatrix} -a^3 + 2a^2 - 3a + 1 \\ a^3 - 2a^2 + 2a + 1 \end{pmatrix}$$
$$a_7 = \begin{pmatrix} 0 \\ a^3 - 3a^2 + 4a - 1 \end{pmatrix}$$
$$a_3 = \begin{pmatrix} 0 \\ 1 \end{pmatrix}$$

(ii) Obstruction class $= 1$

(iii) Cusp Shapes $= -4a^3 + 12a^2 - 16a - 1$

(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, c_8 c_9	$u^4+u^3+2u^2+2u+1$
c_{10}	$(u^2-u+1)^2$
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_8 c_9, c_{11}, c_{12}	$y^4 + 3y^3 + 2y^2 + 1$
c_{10}	$(y^2 + y + 1)^2$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_5^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 1.00000$ $a = 0.378256 + 0.440597I$ $b = -0.121744 + 1.306620I$	$1.64493 + 2.02988I$	$-7.00000 - 3.46410I$
$u = 1.00000$ $a = 0.378256 - 0.440597I$ $b = -0.121744 - 1.306620I$	$1.64493 - 2.02988I$	$-7.00000 + 3.46410I$
$u = 1.00000$ $a = 1.12174 + 1.30662I$ $b = 0.621744 + 0.440597I$	$1.64493 - 2.02988I$	$-7.00000 + 3.46410I$
$u = 1.00000$ $a = 1.12174 - 1.30662I$ $b = 0.621744 - 0.440597I$	$1.64493 + 2.02988I$	$-7.00000 - 3.46410I$

VI. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1, c_2	$((u-1)^7)(u^5+u^4+\cdots+u-1)(u^{35}-3u^{34}+\cdots+u+1)^2$ $\cdot(u^{42}-3u^{41}+\cdots+193u-16)$
c_3	$u^7(u^5-u^4+\cdots+u-1)(u^{35}-u^{34}+\cdots-8u+4)^2$ $\cdot(u^{42}+9u^{40}+\cdots+432u+128)$
c_4	$((u+1)^7)(u^5-u^4+\cdots+u+1)(u^{35}-3u^{34}+\cdots+u+1)^2$ $\cdot(u^{42}-3u^{41}+\cdots+193u-16)$
c_5	$1024(u^3+2u-1)(u^4+u^3+2u^2+2u+1)$ $\cdot(32u^5-48u^4+\cdots-2u+1)(32u^{42}+48u^{41}+\cdots+2u-1)$ $\cdot(u^{70}-2u^{69}+\cdots-5401216u+7036657)$
c_6	$1024(u^3+2u-1)(u^4+u^3+2u^2+2u+1)$ $\cdot(32u^5+48u^4+\cdots-2u-1)(32u^{42}+48u^{41}+\cdots+2u-1)$ $\cdot(u^{70}-2u^{69}+\cdots-5401216u+7036657)$
c_7	$u^7(u^5+u^4+\cdots+u+1)(u^{35}-u^{34}+\cdots-8u+4)^2$ $\cdot(u^{42}+9u^{40}+\cdots+432u+128)$
c_8, c_9	$((u-1)^5)(u^3+2u-1)(u^4+u^3+\cdots+2u+1)(u^{42}+5u^{41}+\cdots+5u+1)$ $\cdot(u^{70}-12u^{69}+\cdots-4u+1)$
c_{10}	$u^5(u^2-u+1)^2(u^3+3u^2+5u+2)(u^{35}+2u^{34}+\cdots-2u^2+1)^2$ $\cdot(u^{42}-6u^{41}+\cdots+15360u-4096)$
c_{11}, c_{12}	$((u+1)^5)(u^3+2u+1)(u^4-u^3+\cdots-2u+1)(u^{42}+5u^{41}+\cdots+5u+1)$ $\cdot(u^{70}-12u^{69}+\cdots-4u+1)$

VII. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1, c_2, c_4	$((y-1)^7)(y^5-5y^4+\cdots-y-1)(y^{35}-31y^{34}+\cdots-17y-1)^2$ $\cdot(y^{42}-37y^{41}+\cdots-56545y+256)$
c_3, c_7	$y^7(y^5+3y^4+\cdots-y-1)(y^{35}+15y^{34}+\cdots-72y-16)^2$ $\cdot(y^{42}+18y^{41}+\cdots-83200y+16384)$
c_5, c_6	$1048576(y^3+4y^2+4y-1)(y^4+3y^3+2y^2+1)$ $\cdot(1024y^5-256y^4+512y^3-48y^2+12y-1)$ $\cdot(1024y^{42}+12032y^{41}+\cdots-26y+1)$ $\cdot(y^{70}+34y^{69}+\cdots+937785468713840y+49514541735649)$
c_8, c_9, c_{11} c_{12}	$(y-1)^5(y^3+4y^2+4y-1)(y^4+3y^3+2y^2+1)$ $\cdot(y^{42}+21y^{41}+\cdots-7y+1)(y^{70}+46y^{69}+\cdots+40y^2+1)$
c_{10}	$y^5(y^2+y+1)^2(y^3+y^2+13y-4)(y^{35}+12y^{34}+\cdots+4y-1)^2$ $\cdot(y^{42}+12y^{41}+\cdots+133169152y+16777216)$