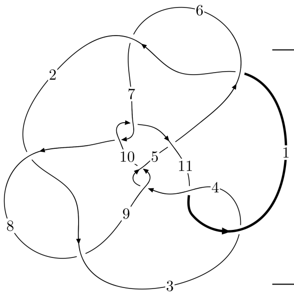
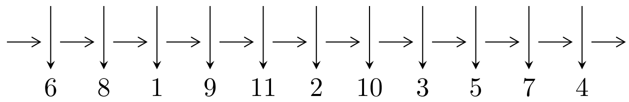
$11a_{318}$ ($K11a_{318}$)



A knot diagram[1]

Linearized knot diagam



Solving Sequence

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

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

$$\begin{aligned}
I_1^u &= \langle 970383u^{17} + 408499u^{16} + \cdots + 1982053b + 372351, \\
&\quad - 1777862u^{17} - 876895u^{16} + \cdots + 1982053a - 4101509,\ u^{18} + u^{17} + \cdots + u^2 - 1\rangle \\
I_2^u &= \langle 7.25333 \times 10^{100}u^{59} + 1.20321 \times 10^{99}u^{58} + \cdots + 5.25066 \times 10^{101}b - 1.15506 \times 10^{102}, \\
&\quad - 3.92526 \times 10^{102}u^{59} + 3.63473 \times 10^{101}u^{58} + \cdots + 8.92612 \times 10^{102}a + 1.52814 \times 10^{104}, \\
&\quad u^{60} - u^{59} + \cdots - 109u + 17\rangle \\
I_3^u &= \langle -509u^{19} - 338u^{18} + \cdots + 367b - 1165,\ 610u^{19} - 321u^{18} + \cdots + 367a - 671,\ u^{20} - 8u^{18} + \cdots + u - 1\rangle \\
I_4^u &= \langle u^3 + b + 1,\ u^2 + a + u,\ u^4 + u - 1\rangle \\
I_5^u &= \langle 638u^{11} - 606u^{10} + \cdots + 697b - 1440,\ 936u^{11} + 352u^{10} + \cdots + 697a - 1503, \\
&\quad u^{12} - 2u^{10} + u^9 - 5u^7 + 6u^6 + u^5 - 9u^4 + 5u^3 + 6u^2 - 2u - 1\rangle \\
I_6^u &= \langle b + 1,\ a + 1,\ u - 1\rangle
\end{aligned}$$

* 6 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 115 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.

$\boldsymbol{I_1^u = \langle 9.70\times 10^5 u^{17} + 4.08\times 10^5 u^{16} + \cdots + 1.98\times 10^6 b + 3.72\times 10^5,\ -1.78\times 10^6 u^{17} - 8.77\times 10^5 u^{16} + \cdots + 1.98\times 10^6 a - 4.10\times 10^6,\ u^{18} + u^{17} + \cdots + u^2 - 1\rangle}$

(i) Arc colorings

$$a_4 = \begin{pmatrix}1\\0\end{pmatrix}$$
$$a_9 = \begin{pmatrix}0\\u\end{pmatrix}$$
$$a_5 = \begin{pmatrix}1\\u^2\end{pmatrix}$$
$$a_1 = \begin{pmatrix}0.896980u^{17} + 0.442418u^{16} + \cdots - 1.43884u + 2.06932\\ -0.489585u^{17} - 0.206099u^{16} + \cdots + 1.33228u - 0.187861\end{pmatrix}$$
$$a_{10} = \begin{pmatrix}-u\\ -u^3 + u\end{pmatrix}$$
$$a_3 = \begin{pmatrix}0.0859684u^{17} + 0.537916u^{16} + \cdots - 8.56326u + 0.601597\\ 0.459466u^{17} - 0.352058u^{16} + \cdots + 1.86468u + 0.0670699\end{pmatrix}$$
$$a_8 = \begin{pmatrix}0.799368u^{17} + 0.226871u^{16} + \cdots - 7.13272u - 2.24851\\ 0.229761u^{17} + 0.320704u^{16} + \cdots + 2.30647u + 0.343733\end{pmatrix}$$
$$a_2 = \begin{pmatrix}0.139285u^{17} + 0.903251u^{16} + \cdots - 3.05848u + 3.34917\\ 0.00845336u^{17} - 0.364603u^{16} + \cdots + 1.75892u - 0.515882\end{pmatrix}$$
$$a_7 = \begin{pmatrix}0.515882u^{17} + 0.507429u^{16} + \cdots - 6.94486u - 1.75892\\ 0.0450356u^{17} + 0.277375u^{16} + \cdots + 1.83513u + 0.418192\end{pmatrix}$$
$$a_{11} = \begin{pmatrix}0.407395u^{17} + 0.236319u^{16} + \cdots - 0.106565u + 1.88146\\ -0.489585u^{17} - 0.206099u^{16} + \cdots + 1.33228u - 0.187861\end{pmatrix}$$
$$a_6 = \begin{pmatrix}-1.27985u^{17} - 0.522154u^{16} + \cdots + 3.59568u + 1.61964\\ 0.328021u^{17} - 0.170017u^{16} + \cdots - 1.31924u - 0.426645\end{pmatrix}$$
$$a_6 = \begin{pmatrix}-1.27985u^{17} - 0.522154u^{16} + \cdots + 3.59568u + 1.61964\\ 0.328021u^{17} - 0.170017u^{16} + \cdots - 1.31924u - 0.426645\end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= \frac{763801}{1982053}u^{17} + \frac{1992896}{1982053}u^{16} + \cdots + \frac{433836}{1982053}u - \frac{27209831}{1982053}$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1, c_4, c_6 c_9	$u^{18} + u^{17} + \cdots + u^2 - 1$
c_2, c_8	$u^{18} + u^{17} + \cdots + 50u + 4$
c_3, c_7, c_{10} c_{11}	$u^{18} - 2u^{17} + \cdots + 3u + 1$
c_5	$u^{18} + 6u^{17} + \cdots - 416u - 64$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_4, c_6 c_9	$y^{18} - 11y^{17} + \cdots - 2y + 1$
c_2, c_8	$y^{18} - 13y^{17} + \cdots - 1100y + 16$
c_3, c_7, c_{10} c_{11}	$y^{18} + 8y^{17} + \cdots - 9y + 1$
c_5	$y^{18} + 56y^{16} + \cdots - 37888y + 4096$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.969317$ $a = -1.04231$ $b = -1.08420$	-4.93604	-18.1160
$u = 0.503027 + 0.934053I$ $a = 0.117406 + 1.399640I$ $b = 0.129111 - 1.119030I$	$5.93090 - 0.43570I$	$-2.98328 + 1.68118I$
$u = 0.503027 - 0.934053I$ $a = 0.117406 - 1.399640I$ $b = 0.129111 + 1.119030I$	$5.93090 + 0.43570I$	$-2.98328 - 1.68118I$
$u = -1.155400 + 0.382844I$ $a = -0.0504197 - 0.0044892I$ $b = 1.25719 + 0.67749I$	$-8.49225 + 3.12657I$	$-16.5106 - 4.5687I$
$u = -1.155400 - 0.382844I$ $a = -0.0504197 + 0.0044892I$ $b = 1.25719 - 0.67749I$	$-8.49225 - 3.12657I$	$-16.5106 + 4.5687I$
$u = -1.219630 + 0.122646I$ $a = 1.35114 + 1.57540I$ $b = 0.417269 - 0.993577I$	$-4.77876 + 5.57099I$	$-14.6445 - 6.8943I$
$u = -1.219630 - 0.122646I$ $a = 1.35114 - 1.57540I$ $b = 0.417269 + 0.993577I$	$-4.77876 - 5.57099I$	$-14.6445 + 6.8943I$
$u = 1.306390 + 0.030156I$ $a = -0.314125 - 0.649221I$ $b = 0.308458 - 0.604810I$	$-7.41832 + 1.14356I$	$-14.7481 - 6.1062I$
$u = 1.306390 - 0.030156I$ $a = -0.314125 + 0.649221I$ $b = 0.308458 + 0.604810I$	$-7.41832 - 1.14356I$	$-14.7481 + 6.1062I$
$u = -1.244330 + 0.432653I$ $a = -1.32213 - 0.57859I$ $b = -0.507053 + 1.110690I$	$0.46162 + 9.59091I$	$-11.3598 - 8.6982I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-1.244330-0.432653I$ $a=-1.32213+0.57859I$ $b=-0.507053-1.110690I$	$0.46162-9.59091I$	$-11.3598+8.6982I$
$u=-0.52847+1.35181I$ $a=\ 0.436864+1.177610I$ $b=-0.402613-0.935090I$	$2.78527-3.16569I$	$-11.24611+7.60453I$
$u=-0.52847-1.35181I$ $a=\ 0.436864-1.177610I$ $b=-0.402613+0.935090I$	$2.78527+3.16569I$	$-11.24611-7.60453I$
$u=\ 1.37244+0.65413I$ $a=\ 0.72292-1.23621I$ $b=\ 0.73238+1.24612I$	$-3.9350-17.2773I$	$-12.8790+9.3490I$
$u=\ 1.37244-0.65413I$ $a=\ 0.72292+1.23621I$ $b=\ 0.73238-1.24612I$	$-3.9350+17.2773I$	$-12.8790-9.3490I$
$u=-0.333926$ $a=\ 0.701030$ $b=-0.239136$	-0.538352	-18.5400
$u=\ 0.148267+0.251923I$ $a=\ 3.22899-2.73957I$ $b=-0.273082+0.887649I$	$1.73441+2.46344I$	$-11.30045-4.80762I$
$u=\ 0.148267-0.251923I$ $a=\ 3.22899+2.73957I$ $b=-0.273082-0.887649I$	$1.73441-2.46344I$	$-11.30045+4.80762I$

II. $\boldsymbol{I_2^u = \langle 7.25 \times 10^{100} u^{59} + 1.20 \times 10^{99} u^{58} + \cdots + 5.25 \times 10^{101} b - 1.16 \times 10^{102},\ -3.93 \times 10^{102} u^{59} + 3.63 \times 10^{101} u^{58} + \cdots + 8.93 \times 10^{102} a + 1.53 \times 10^{104},\ u^{60} - u^{59} + \cdots - 109u + 17 \rangle}$

(i) Arc colorings

$$a_4 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$
$$a_9 = \begin{pmatrix} 0 \\ u \end{pmatrix}$$
$$a_5 = \begin{pmatrix} 1 \\ u^2 \end{pmatrix}$$
$$a_1 = \begin{pmatrix} 0.439749u^{59} - 0.0407201u^{58} + \cdots + 31.2675u - 17.1199 \\ -0.138141u^{59} - 0.00229154u^{58} + \cdots - 8.07888u + 2.19983 \end{pmatrix}$$
$$a_{10} = \begin{pmatrix} -u \\ -u^3 + u \end{pmatrix}$$
$$a_3 = \begin{pmatrix} -0.106939u^{59} + 0.0813048u^{58} + \cdots + 0.961685u + 8.85949 \\ -0.0242627u^{59} + 0.0260886u^{58} + \cdots - 2.48933u - 0.0619791 \end{pmatrix}$$
$$a_8 = \begin{pmatrix} -0.0488347u^{59} - 0.0246562u^{58} + \cdots + 10.6648u + 7.45876 \\ -0.144743u^{59} - 0.00850452u^{58} + \cdots - 13.1254u + 2.03107 \end{pmatrix}$$
$$a_2 = \begin{pmatrix} -0.254240u^{59} - 0.0726928u^{58} + \cdots - 28.4567u + 3.38184 \\ -0.312091u^{59} + 0.0424687u^{58} + \cdots - 33.3786u + 6.15466 \end{pmatrix}$$
$$a_7 = \begin{pmatrix} -0.141036u^{59} - 0.0530891u^{58} + \cdots + 1.08963u + 9.25438 \\ -0.159476u^{59} + 0.00805005u^{58} + \cdots - 15.1320u + 2.28623 \end{pmatrix}$$
$$a_{11} = \begin{pmatrix} 0.301608u^{59} - 0.0430116u^{58} + \cdots + 23.1886u - 14.9200 \\ -0.138141u^{59} - 0.00229154u^{58} + \cdots - 8.07888u + 2.19983 \end{pmatrix}$$
$$a_6 = \begin{pmatrix} -0.451448u^{59} + 0.0218306u^{58} + \cdots - 41.4070u - 0.151128 \\ 0.0195413u^{59} + 0.0319909u^{58} + \cdots + 2.12465u + 0.466720 \end{pmatrix}$$
$$a_6 = \begin{pmatrix} -0.451448u^{59} + 0.0218306u^{58} + \cdots - 41.4070u - 0.151128 \\ 0.0195413u^{59} + 0.0319909u^{58} + \cdots + 2.12465u + 0.466720 \end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= 0.457112u^{59} + 0.104838u^{58} + \cdots + 36.7319u - 21.5900$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1, c_4, c_6 c_9	$u^{60} - u^{59} + \cdots - 109u + 17$
c_2, c_8	$(u^{30} + 6u^{29} + \cdots + 170u + 36)^2$
c_3, c_7, c_{10} c_{11}	$u^{60} - 2u^{59} + \cdots + 2u - 1$
c_5	$(u^{30} - 2u^{29} + \cdots + 2u - 1)^2$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_4, c_6 c_9	$y^{60} - 41y^{59} + \cdots - 18409y + 289$
c_2, c_8	$(y^{30} - 22y^{29} + \cdots - 460y + 1296)^2$
c_3, c_7, c_{10} c_{11}	$y^{60} + 32y^{59} + \cdots + 20y + 1$
c_5	$(y^{30} - 2y^{29} + \cdots - 84y + 1)^2$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.173863 + 0.983906I$ $a = -0.595302 - 1.227680I$ $b = 0.568581 + 1.096680I$	$-3.15719 - 4.84917I$	$-13.58414 + 3.73183I$
$u = -0.173863 - 0.983906I$ $a = -0.595302 + 1.227680I$ $b = 0.568581 - 1.096680I$	$-3.15719 + 4.84917I$	$-13.58414 - 3.73183I$
$u = -0.884656 + 0.446724I$ $a = -0.96473 - 1.07896I$ $b = -0.529022 - 0.052524I$	$-2.06368 + 5.36613I$	$-15.7641 - 4.3359I$
$u = -0.884656 - 0.446724I$ $a = -0.96473 + 1.07896I$ $b = -0.529022 + 0.052524I$	$-2.06368 - 5.36613I$	$-15.7641 + 4.3359I$
$u = -0.952526 + 0.271233I$ $a = -0.835395 + 0.173435I$ $b = -0.615493 + 0.932690I$	$1.57409 + 1.75671I$	$-11.26354 - 2.48942I$
$u = -0.952526 - 0.271233I$ $a = -0.835395 - 0.173435I$ $b = -0.615493 - 0.932690I$	$1.57409 - 1.75671I$	$-11.26354 + 2.48942I$
$u = 0.903459 + 0.213520I$ $a = -0.143616 + 1.243570I$ $b = -0.06489 - 1.61687I$	$1.72325 - 5.82388I$	$-14.0227 + 8.3964I$
$u = 0.903459 - 0.213520I$ $a = -0.143616 - 1.243570I$ $b = -0.06489 + 1.61687I$	$1.72325 + 5.82388I$	$-14.0227 - 8.3964I$
$u = 0.918123 + 0.113673I$ $a = 1.29720 - 2.26960I$ $b = 0.430781 + 1.048900I$	$-5.82415 - 2.23290I$	$-14.1085 - 2.1221I$
$u = 0.918123 - 0.113673I$ $a = 1.29720 + 2.26960I$ $b = 0.430781 - 1.048900I$	$-5.82415 + 2.23290I$	$-14.1085 + 2.1221I$

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -1.058310 + 0.321731I$ $a = 0.993888 + 0.573737I$ $b = 0.319807 - 0.896497I$	$-0.48113 + 1.41291I$	$-11.00000 + 0.I$
$u = -1.058310 - 0.321731I$ $a = 0.993888 - 0.573737I$ $b = 0.319807 + 0.896497I$	$-0.48113 - 1.41291I$	$-11.00000 + 0.I$
$u = -0.868439 + 0.693479I$ $a = 0.592584 + 0.822702I$ $b = -0.315851 - 1.166500I$	$1.57409 + 1.75671I$	$-11.00000 + 0.I$
$u = -0.868439 - 0.693479I$ $a = 0.592584 - 0.822702I$ $b = -0.315851 + 1.166500I$	$1.57409 - 1.75671I$	$-11.00000 + 0.I$
$u = -0.172475 + 0.855408I$ $a = -0.33105 - 1.48907I$ $b = 0.616890 + 0.324785I$	$-2.27554 + 5.83321I$	$-13.60048 - 3.60394I$
$u = -0.172475 - 0.855408I$ $a = -0.33105 + 1.48907I$ $b = 0.616890 - 0.324785I$	$-2.27554 - 5.83321I$	$-13.60048 + 3.60394I$
$u = -0.723442 + 0.483773I$ $a = -1.08899 - 1.57094I$ $b = -0.601195 + 1.083620I$	$1.99201 + 3.02567I$	$-9.17011 - 1.57690I$
$u = -0.723442 - 0.483773I$ $a = -1.08899 + 1.57094I$ $b = -0.601195 - 1.083620I$	$1.99201 - 3.02567I$	$-9.17011 + 1.57690I$
$u = 0.913487 + 0.729355I$ $a = 0.84143 - 1.18997I$ $b = 0.839696 + 0.905250I$	$1.72325 - 5.82388I$	0
$u = 0.913487 - 0.729355I$ $a = 0.84143 + 1.18997I$ $b = 0.839696 - 0.905250I$	$1.72325 + 5.82388I$	0

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.681546 + 0.443831I$ $a = 1.314210 - 0.385156I$ $b = 0.168505 + 1.140690I$	$1.99201 + 3.02567I$	$-9.17011 - 1.57690I$
$u = 0.681546 - 0.443831I$ $a = 1.314210 + 0.385156I$ $b = 0.168505 - 1.140690I$	$1.99201 - 3.02567I$	$-9.17011 + 1.57690I$
$u = 0.639831 + 0.484680I$ $a = 0.649950 - 0.261552I$ $b = 0.343005 - 0.289428I$	$2.17471 - 2.01374I$	$-7.73585 + 3.91188I$
$u = 0.639831 - 0.484680I$ $a = 0.649950 + 0.261552I$ $b = 0.343005 + 0.289428I$	$2.17471 + 2.01374I$	$-7.73585 - 3.91188I$
$u = 1.036460 + 0.711450I$ $a = 0.32156 - 1.74527I$ $b = 0.521860 + 1.024170I$	$-6.56195 - 4.20028I$	0
$u = 1.036460 - 0.711450I$ $a = 0.32156 + 1.74527I$ $b = 0.521860 - 1.024170I$	$-6.56195 + 4.20028I$	0
$u = 1.26027$ $a = -0.136432$ $b = -1.08341$	-5.55198	0
$u = -0.673649 + 0.289156I$ $a = -2.03586 - 1.79948I$ $b = -0.100294 - 0.250395I$	$-2.10401 + 5.43294I$	$-16.4599 - 1.4390I$
$u = -0.673649 - 0.289156I$ $a = -2.03586 + 1.79948I$ $b = -0.100294 + 0.250395I$	$-2.10401 - 5.43294I$	$-16.4599 + 1.4390I$
$u = -0.205467 + 0.686465I$ $a = -0.31789 + 1.74264I$ $b = -0.325811 - 1.261230I$	$3.74729 - 5.28000I$	$-5.18091 + 3.40493I$

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.205467-0.686465I$ $a=-0.31789-1.74264I$ $b=-0.325811+1.261230I$	$3.74729+5.28000I$	$-5.18091-3.40493I$
$u=\ \ 1.260710+0.276157I$ $a=-0.837013+0.676075I$ $b=-0.599749-1.161530I$	$-2.06368-5.36613I$	0
$u=\ \ 1.260710-0.276157I$ $a=-0.837013-0.676075I$ $b=-0.599749+1.161530I$	$-2.06368+5.36613I$	0
$u=\ \ 0.185453+1.290280I$ $a=-0.326081+1.289900I$ $b=\ \ 0.552043-1.093600I$	$-0.13405+10.50230I$	0
$u=\ \ 0.185453-1.290280I$ $a=-0.326081-1.289900I$ $b=\ \ 0.552043+1.093600I$	$-0.13405-10.50230I$	0
$u=\ \ 1.157510+0.625695I$ $a=\ \ 1.029550-0.832056I$ $b=\ \ 0.403736+0.982366I$	$3.74729-5.28000I$	0
$u=\ \ 1.157510-0.625695I$ $a=\ \ 1.029550+0.832056I$ $b=\ \ 0.403736-0.982366I$	$3.74729+5.28000I$	0
$u=\ \ 1.292280+0.285538I$ $a=-0.858396+0.914234I$ $b=-0.583662-1.209510I$	$-2.10401-5.43294I$	0
$u=\ \ 1.292280-0.285538I$ $a=-0.858396-0.914234I$ $b=-0.583662+1.209510I$	$-2.10401+5.43294I$	0
$u=-0.335964+0.575378I$ $a=\ \ 0.270786-0.040171I$ $b=-0.749034-0.108799I$	$-0.48113-1.41291I$	$-11.50731+0.65666I$

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.335964 - 0.575378I$ $a = 0.270786 + 0.040171I$ $b = -0.749034 + 0.108799I$	$-0.48113 + 1.41291I$	$-11.50731 - 0.65666I$
$u = -1.290140 + 0.372995I$ $a = 0.0208764 + 0.0986315I$ $b = -0.980371 - 0.207899I$	$-3.15719 + 4.84917I$	0
$u = -1.290140 - 0.372995I$ $a = 0.0208764 - 0.0986315I$ $b = -0.980371 + 0.207899I$	$-3.15719 - 4.84917I$	0
$u = -0.099098 + 0.640186I$ $a = 0.09004 - 1.81958I$ $b = -0.212959 + 1.109000I$	$2.17471 + 2.01374I$	$-7.73585 - 3.91188I$
$u = -0.099098 - 0.640186I$ $a = 0.09004 + 1.81958I$ $b = -0.212959 - 1.109000I$	$2.17471 - 2.01374I$	$-7.73585 + 3.91188I$
$u = 1.291760 + 0.455145I$ $a = -0.0309170 - 0.0318134I$ $b = 1.187980 - 0.445839I$	$-6.51599 - 10.49730I$	0
$u = 1.291760 - 0.455145I$ $a = -0.0309170 + 0.0318134I$ $b = 1.187980 + 0.445839I$	$-6.51599 + 10.49730I$	0
$u = 1.306830 + 0.465197I$ $a = -0.630886 + 1.147070I$ $b = -0.620144 - 1.216600I$	$-2.27554 - 5.83321I$	0
$u = 1.306830 - 0.465197I$ $a = -0.630886 - 1.147070I$ $b = -0.620144 + 1.216600I$	$-2.27554 + 5.83321I$	0
$u = -1.269270 + 0.579030I$ $a = 0.723396 + 1.171420I$ $b = 0.81690 - 1.22821I$	$-6.51599 + 10.49730I$	0

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-1.269270-0.579030I$ $a=\ 0.723396-1.171420I$ $b=\ 0.81690+1.22821I$	$-6.51599-10.49730I$	0
$u=\ 1.40424+0.40913I$ $a=-0.380784+0.192994I$ $b=\ 0.481225-0.576338I$	-7.98335	0
$u=\ 1.40424-0.40913I$ $a=-0.380784-0.192994I$ $b=\ 0.481225+0.576338I$	-7.98335	0
$u=-1.50639+0.03128I$ $a=\ 0.313720+0.382658I$ $b=\ 0.350132+0.706526I$	$-5.82415+2.23290I$	0
$u=-1.50639-0.03128I$ $a=\ 0.313720-0.382658I$ $b=\ 0.350132-0.706526I$	$-5.82415-2.23290I$	0
$u=-1.33093+0.72650I$ $a=-0.54342-1.31576I$ $b=-0.605352+1.216900I$	$-0.13405+10.50230I$	0
$u=-1.33093-0.72650I$ $a=-0.54342+1.31576I$ $b=-0.605352-1.216900I$	$-0.13405-10.50230I$	0
$u=-1.64506+0.30278I$ $a=-0.056451-0.315590I$ $b=\ 0.504888+0.670086I$	$-6.56195-4.20028I$	0
$u=-1.64506-0.30278I$ $a=-0.056451+0.315590I$ $b=\ 0.504888-0.670086I$	$-6.56195+4.20028I$	0
$u=\ 0.135724$ $a=-10.1813$ $b=\ 0.678987$	-5.55198	-15.3380

III. $I_3^u = \langle -509u^{19} - 338u^{18} + \cdots + 367b - 1165,\ 610u^{19} - 321u^{18} + \cdots + 367a - 671,\ u^{20} - 8u^{18} + \cdots + u - 1\rangle$

(i) Arc colorings

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

$$a_9 = \begin{pmatrix} 0 \\ u \end{pmatrix}$$

$$a_5 = \begin{pmatrix} 1 \\ u^2 \end{pmatrix}$$

$$a_1 = \begin{pmatrix} -1.66213u^{19} + 0.874659u^{18} + \cdots - 4.53951u + 1.82834 \\ 1.38692u^{19} + 0.920981u^{18} + \cdots + 1.83379u + 3.17439 \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} -u \\ -u^3 + u \end{pmatrix}$$

$$a_3 = \begin{pmatrix} -0.250681u^{19} - 0.681199u^{18} + \cdots + 1.98093u - 1.32425 \\ 0.752044u^{19} - 0.956403u^{18} + \cdots + 5.05722u + 0.972752 \end{pmatrix}$$

$$a_8 = \begin{pmatrix} -0.594005u^{19} - 0.00544959u^{18} + \cdots + 0.367847u - 1.74659 \\ -0.681199u^{19} - 1.19891u^{18} + \cdots + 1.92643u - 1.25068 \end{pmatrix}$$

$$a_2 = \begin{pmatrix} 0.594005u^{19} - 0.994550u^{18} + \cdots + 2.63215u - 0.253406 \\ 1.34060u^{19} + 0.599455u^{18} + \cdots + 4.53678u + 4.12534 \end{pmatrix}$$

$$a_7 = \begin{pmatrix} -0.673025u^{19} - 1.02452u^{18} + \cdots + 1.15531u - 3.35967 \\ -0.675749u^{19} - 0.749319u^{18} + \cdots + 2.07902u - 0.656676 \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} -0.275204u^{19} + 1.79564u^{18} + \cdots - 2.70572u + 5.00272 \\ 1.38692u^{19} + 0.920981u^{18} + \cdots + 1.83379u + 3.17439 \end{pmatrix}$$

$$a_6 = \begin{pmatrix} 1.65668u^{19} - 1.32425u^{18} + \cdots + 3.38692u - 2.42234 \\ -1.35422u^{19} - 0.223433u^{18} + \cdots - 2.91826u - 2.61035 \end{pmatrix}$$

$$a_6 = \begin{pmatrix} 1.65668u^{19} - 1.32425u^{18} + \cdots + 3.38692u - 2.42234 \\ -1.35422u^{19} - 0.223433u^{18} + \cdots - 2.91826u - 2.61035 \end{pmatrix}$$

(ii) Obstruction class $= 1$

(iii) Cusp Shapes $= \frac{1598}{367}u^{19} - \frac{3955}{367}u^{18} + \cdots + \frac{8778}{367}u - \frac{10786}{367}$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1, c_4	$u^{20} - 8u^{18} + \cdots + u - 1$
c_2	$(u^{10} - 5u^8 + 8u^6 + 4u^5 - 6u^4 - 3u^3 + 3u^2 - 1)^2$
c_3, c_{10}	$u^{20} + 3u^{19} + \cdots - 8u^2 - 1$
c_5	$u^{20} + 8u^{14} - 52u^{12} - 138u^{10} + 104u^8 + 527u^6 + 296u^4 - 356u^2 - 319$
c_6, c_9	$u^{20} - 8u^{18} + \cdots - u - 1$
c_7, c_{11}	$u^{20} - 3u^{19} + \cdots - 8u^2 - 1$
c_8	$(u^{10} - 5u^8 + 8u^6 - 4u^5 - 6u^4 + 3u^3 + 3u^2 - 1)^2$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_4, c_6 c_9	$y^{20} - 16y^{19} + \cdots - 13y + 1$
c_2, c_8	$(y^{10} - 10y^9 + \cdots - 6y + 1)^2$
c_3, c_7, c_{10} c_{11}	$y^{20} + 13y^{19} + \cdots + 16y + 1$
c_5	$(y^{10} + 8y^7 - 52y^6 - 138y^5 + 104y^4 + 527y^3 + 296y^2 - 356y - 319)^2$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_3^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -1.006880 + 0.379394I$ $a = 0.71131 + 2.12605I$ $b = 0.406554 - 1.044110I$	$-5.60500 + 3.07077I$	$-11.10306 - 5.53745I$
$u = -1.006880 - 0.379394I$ $a = 0.71131 - 2.12605I$ $b = 0.406554 + 1.044110I$	$-5.60500 - 3.07077I$	$-11.10306 + 5.53745I$
$u = -0.307724 + 0.858449I$ $a = 0.579281 + 0.822097I$ $b = -0.301268 - 1.054370I$	3.58542	$-5.93598 + 0.I$
$u = -0.307724 - 0.858449I$ $a = 0.579281 - 0.822097I$ $b = -0.301268 + 1.054370I$	3.58542	$-5.93598 + 0.I$
$u = -1.005260 + 0.622930I$ $a = -0.917585 - 0.950908I$ $b = -0.723749 + 0.881883I$	$2.31904 + 5.08447I$	$-9.51292 - 2.92589I$
$u = -1.005260 - 0.622930I$ $a = -0.917585 + 0.950908I$ $b = -0.723749 - 0.881883I$	$2.31904 - 5.08447I$	$-9.51292 + 2.92589I$
$u = -0.543411 + 0.587321I$ $a = 0.318117 + 0.503113I$ $b = -0.424021 - 1.175640I$	3.51176	$-5.53076 + 0.I$
$u = -0.543411 - 0.587321I$ $a = 0.318117 - 0.503113I$ $b = -0.424021 + 1.175640I$	3.51176	$-5.53076 + 0.I$
$u = 0.641197 + 0.460705I$ $a = 1.60910 - 2.98924I$ $b = 0.265764 + 0.633820I$	$-1.76138 - 5.90098I$	$-8.4456 + 11.9708I$
$u = 0.641197 - 0.460705I$ $a = 1.60910 + 2.98924I$ $b = 0.265764 - 0.633820I$	$-1.76138 + 5.90098I$	$-8.4456 - 11.9708I$

Solutions to I_3^u	$\sqrt{-1}(\text{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 1.22178$ $a = -0.206592$ $b = -1.34573$	-6.32941	-27.2570
$u = -0.721984$ $a = 2.63740$ $b = 0.842412$	-6.32941	-27.2570
$u = 1.322280 + 0.225447I$ $a = -0.769082 + 0.973657I$ $b = -0.528515 - 1.268130I$	$-1.76138 - 5.90098I$	$-8.4456 + 11.9708I$
$u = 1.322280 - 0.225447I$ $a = -0.769082 - 0.973657I$ $b = -0.528515 + 1.268130I$	$-1.76138 + 5.90098I$	$-8.4456 - 11.9708I$
$u = -1.361800 + 0.242619I$ $a = -0.490712 + 0.349688I$ $b = 0.255308 + 0.676358I$	-7.12244	$-10.15337 + 0.I$
$u = -1.361800 - 0.242619I$ $a = -0.490712 - 0.349688I$ $b = 0.255308 - 0.676358I$	-7.12244	$-10.15337 + 0.I$
$u = 0.502690 + 0.120984I$ $a = 0.432595 + 0.041333I$ $b = -0.14840 - 1.42580I$	$2.31904 - 5.08447I$	$-9.51292 + 2.92589I$
$u = 0.502690 - 0.120984I$ $a = 0.432595 - 0.041333I$ $b = -0.14840 + 1.42580I$	$2.31904 + 5.08447I$	$-9.51292 - 2.92589I$
$u = 1.50902 + 0.12166I$ $a = -0.688432 - 0.075728I$ $b = -0.050017 - 0.545597I$	$-5.60500 + 3.07077I$	$-11.10306 - 5.53745I$
$u = 1.50902 - 0.12166I$ $a = -0.688432 + 0.075728I$ $b = -0.050017 + 0.545597I$	$-5.60500 - 3.07077I$	$-11.10306 + 5.53745I$

IV. $I^u_4 = \langle u^3 + b + 1,\ u^2 + a + u,\ u^4 + u - 1 \rangle$

(i) Arc colorings

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

(ii) Obstruction class $= 1$

(iii) Cusp Shapes $= 4u^3 - 2u^2 + 3u - 6$

(iv) u-Polynomials at the component

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

(v) Riley Polynomials at the component

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

(vi) Complex Volumes and Cusp Shapes

Solutions to I_4^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = \quad 0.248126 + 1.033980I$ $a = \quad 0.75943 - 1.54710I$ $b = -0.219447 + 0.914474I$	$3.04135 + 1.96274I$	$-6.36273 - 1.58218I$
$u = \quad 0.248126 - 1.033980I$ $a = \quad 0.75943 + 1.54710I$ $b = -0.219447 - 0.914474I$	$3.04135 - 1.96274I$	$-6.36273 + 1.58218I$
$u = -1.22074$ $a = -0.269472$ $b = \quad 0.819173$	-8.36260	-19.9190
$u = \quad 0.724492$ $a = -1.24938$ $b = -1.38028$	-4.29983	-3.35520

V. $I^u_5 = \langle 638u^{11} - 606u^{10} + \cdots + 697b - 1440,\ 936u^{11} + 352u^{10} + \cdots + 697a - 1503,\ u^{12} - 2u^{10} + \cdots - 2u - 1\rangle$

(i) Arc colorings

$$a_4 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$
$$a_9 = \begin{pmatrix} 0 \\ u \end{pmatrix}$$
$$a_5 = \begin{pmatrix} 1 \\ u^2 \end{pmatrix}$$
$$a_1 = \begin{pmatrix} -1.34290u^{11} - 0.505022u^{10} + \cdots - 9.29412u + 2.15638 \\ -0.915352u^{11} + 0.869440u^{10} + \cdots + 0.352941u + 2.06600 \end{pmatrix}$$
$$a_{10} = \begin{pmatrix} -u \\ -u^3 + u \end{pmatrix}$$
$$a_3 = \begin{pmatrix} u^{11} - 2u^9 + u^8 - 5u^6 + 6u^5 + u^4 - 9u^3 + 5u^2 + 6u - 2 \\ 0.348637u^{11} + 0.208034u^{10} + \cdots + 1.47059u - 1.05022 \end{pmatrix}$$
$$a_8 = \begin{pmatrix} u^{11} - 2u^9 + u^8 - 5u^6 + 6u^5 + u^4 - 9u^3 + 5u^2 + 6u - 2 \\ 0.348637u^{11} + 0.208034u^{10} + \cdots + 2.47059u - 1.05022 \end{pmatrix}$$
$$a_2 = \begin{pmatrix} 0 \\ -u \end{pmatrix}$$
$$a_7 = \begin{pmatrix} 0.984218u^{11} + 0.566714u^{10} + \cdots + 7.76471u - 1.79197 \\ 0.286944u^{11} + 0.150646u^{10} + \cdots + 1.82353u - 0.691535 \end{pmatrix}$$
$$a_{11} = \begin{pmatrix} -2.25825u^{11} + 0.364419u^{10} + \cdots - 8.94118u + 4.22238 \\ -0.915352u^{11} + 0.869440u^{10} + \cdots + 0.352941u + 2.06600 \end{pmatrix}$$
$$a_6 = \begin{pmatrix} -0.984218u^{11} - 0.566714u^{10} + \cdots - 7.76471u + 1.79197 \\ -0.364419u^{11} + 0.358680u^{10} + \cdots + 0.294118u + 1.25825 \end{pmatrix}$$
$$a_6 = \begin{pmatrix} -0.984218u^{11} - 0.566714u^{10} + \cdots - 7.76471u + 1.79197 \\ -0.364419u^{11} + 0.358680u^{10} + \cdots + 0.294118u + 1.25825 \end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= -14$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1, c_4, c_6 c_9	$u^{12} - 2u^{10} + u^9 - 5u^7 + 6u^6 + u^5 - 9u^4 + 5u^3 + 6u^2 - 2u - 1$
c_2, c_8	$(u-1)^{12}$
c_3, c_7, c_{10} c_{11}	$u^{12} + 2u^{10} + u^9 + 5u^7 - 4u^6 + u^5 - u^4 - 3u^3 - 4u + 1$
c_5	$(u^6 + 2u^3 - 5u^2 + 1)^2$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_4, c_6 c_9	$y^{12} - 4y^{11} + \cdots - 16y + 1$
c_2, c_8	$(y-1)^{12}$
c_3, c_7, c_{10} c_{11}	$y^{12} + 4y^{11} + \cdots - 16y + 1$
c_5	$(y^6 - 10y^4 - 2y^3 + 25y^2 - 10y + 1)^2$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_5^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.721680 + 0.842764I$ $a = -0.291320 + 0.594026I$ $b = 0.653624 - 1.017120I$	2.30291	−14.0000
$u = 0.721680 - 0.842764I$ $a = -0.291320 - 0.594026I$ $b = 0.653624 + 1.017120I$	2.30291	−14.0000
$u = 1.13635$ $a = -0.0899500$ $b = -1.33394$	−5.59278	−14.0000
$u = -0.849985 + 0.107756I$ $a = -0.39789 + 1.38066I$ $b = -0.31772 - 1.47138I$	2.30291	−14.0000
$u = -0.849985 - 0.107756I$ $a = -0.39789 - 1.38066I$ $b = -0.31772 + 1.47138I$	2.30291	−14.0000
$u = 1.32540$ $a = -0.253927$ $b = -0.966860$	−5.59278	−14.0000
$u = 0.128305 + 1.331900I$ $a = 0.380195 - 1.282920I$ $b = -0.335906 + 0.823161I$	2.30291	−14.0000
$u = 0.128305 - 1.331900I$ $a = 0.380195 + 1.282920I$ $b = -0.335906 - 0.823161I$	2.30291	−14.0000
$u = 0.580134$ $a = -3.02808$ $b = 0.239009$	−5.59278	−14.0000
$u = -1.36109 + 0.59989I$ $a = 0.47553 + 1.40936I$ $b = 0.519889 - 0.970639I$	−5.59278	−14.0000

Solutions to I_5^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -1.36109 - 0.59989I$ $a = 0.47553 - 1.40936I$ $b = 0.519889 + 0.970639I$	-5.59278	-14.0000
$u = -0.319710$ $a = 4.03893$ $b = 1.02201$	-5.59278	-14.0000

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

(i) Arc colorings

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

$a_9 = \begin{pmatrix} 0 \\ 1 \end{pmatrix}$

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

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

$a_{10} = \begin{pmatrix} -1 \\ 0 \end{pmatrix}$

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

$a_8 = \begin{pmatrix} 0 \\ 1 \end{pmatrix}$

$a_2 = \begin{pmatrix} 0 \\ -1 \end{pmatrix}$

$a_7 = \begin{pmatrix} 1 \\ 1 \end{pmatrix}$

$a_{11} = \begin{pmatrix} -2 \\ -1 \end{pmatrix}$

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

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

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= -18$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1, c_4, c_5 c_6, c_9	$u - 1$
c_2, c_8	u
c_3, c_7, c_{10} c_{11}	$u + 1$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_3, c_4 c_5, c_6, c_7 c_9, c_{10}, c_{11}	$y - 1$
c_2, c_8	y

(vi) Complex Volumes and Cusp Shapes

Solutions to I_6^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 1.00000$ $a = -1.00000$ $b = -1.00000$	-4.93480	-18.0000

VII. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1, c_4	$(u-1)(u^4+u-1)$ $\cdot(u^{12}-2u^{10}+u^9-5u^7+6u^6+u^5-9u^4+5u^3+6u^2-2u-1)$ $\cdot(u^{18}+u^{17}+\cdots+u^2-1)(u^{20}-8u^{18}+\cdots+u-1)$ $\cdot(u^{60}-u^{59}+\cdots-109u+17)$
c_2	$u(u-1)^{12}(u^4-2u^2+u+1)$ $\cdot(u^{10}-5u^8+8u^6+4u^5-6u^4-3u^3+3u^2-1)^2$ $\cdot(u^{18}+u^{17}+\cdots+50u+4)(u^{30}+6u^{29}+\cdots+170u+36)^2$
c_3, c_{10}	$(u+1)(u^4+u^3-1)(u^{12}+2u^{10}+\cdots-4u+1)$ $\cdot(u^{18}-2u^{17}+\cdots+3u+1)(u^{20}+3u^{19}+\cdots-8u^2-1)$ $\cdot(u^{60}-2u^{59}+\cdots+2u-1)$
c_5	$u^4(u-1)(u^6+2u^3-5u^2+1)^2(u^{18}+6u^{17}+\cdots-416u-64)$ $\cdot(u^{20}+8u^{14}-52u^{12}-138u^{10}+104u^8+527u^6+296u^4-356u^2-319)$ $\cdot(u^{30}-2u^{29}+\cdots+2u-1)^2$
c_6, c_9	$(u-1)(u^4-u-1)$ $\cdot(u^{12}-2u^{10}+u^9-5u^7+6u^6+u^5-9u^4+5u^3+6u^2-2u-1)$ $\cdot(u^{18}+u^{17}+\cdots+u^2-1)(u^{20}-8u^{18}+\cdots-u-1)$ $\cdot(u^{60}-u^{59}+\cdots-109u+17)$
c_7, c_{11}	$(u+1)(u^4-u^3-1)(u^{12}+2u^{10}+\cdots-4u+1)$ $\cdot(u^{18}-2u^{17}+\cdots+3u+1)(u^{20}-3u^{19}+\cdots-8u^2-1)$ $\cdot(u^{60}-2u^{59}+\cdots+2u-1)$
c_8	$u(u-1)^{12}(u^4-2u^2-u+1)$ $\cdot(u^{10}-5u^8+8u^6-4u^5-6u^4+3u^3+3u^2-1)^2$ $\cdot(u^{18}+u^{17}+\cdots+50u+4)(u^{30}+6u^{29}+\cdots+170u+36)^2$

VIII. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1, c_4, c_6 c_9	$(y-1)(y^4-2y^2-y+1)(y^{12}-4y^{11}+\cdots-16y+1)$ $\cdot(y^{18}-11y^{17}+\cdots-2y+1)(y^{20}-16y^{19}+\cdots-13y+1)$ $\cdot(y^{60}-41y^{59}+\cdots-18409y+289)$
c_2, c_8	$y(y-1)^{12}(y^4-4y^3+\cdots-5y+1)(y^{10}-10y^9+\cdots-6y+1)^2$ $\cdot(y^{18}-13y^{17}+\cdots-1100y+16)(y^{30}-22y^{29}+\cdots-460y+1296)^2$
c_3, c_7, c_{10} c_{11}	$(y-1)(y^4-y^3-2y^2+1)(y^{12}+4y^{11}+\cdots-16y+1)$ $\cdot(y^{18}+8y^{17}+\cdots-9y+1)(y^{20}+13y^{19}+\cdots+16y+1)$ $\cdot(y^{60}+32y^{59}+\cdots+20y+1)$
c_5	$y^4(y-1)(y^6-10y^4-2y^3+25y^2-10y+1)^2$ $\cdot(y^{10}+8y^7-52y^6-138y^5+104y^4+527y^3+296y^2-356y-319)^2$ $\cdot(y^{18}+56y^{16}+\cdots-37888y+4096)(y^{30}-2y^{29}+\cdots-84y+1)^2$