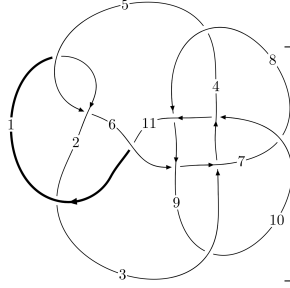
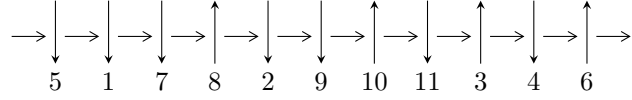


11a₁₇₁ (K11a₁₇₁)



A knot diagram¹

Linearized knot diagram



Solving Sequence

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

Ideals for irreducible components² of X_{par}

$$I_1^u = \langle 519990u^{45} + 1958497u^{44} + \dots + 69383b + 409894,$$

$$430369u^{45} + 1395316u^{44} + \dots + 69383a + 63169, u^{46} + 5u^{45} + \dots + 5u + 1 \rangle$$

$$I_2^u = \langle -29u^{30}a + 623u^{30} + \dots + 2a - 1427, 2u^{29}a - 2u^{30} + \dots + 2a + 2, u^{31} - 2u^{30} + \dots - 2u + 1 \rangle$$

$$I_3^u = \langle 2u^{14} - u^{13} - 7u^{12} + 6u^{11} + 12u^{10} - 13u^9 - 10u^8 + 15u^7 + 4u^6 - 9u^5 + 2u^4 + 2u^3 - 3u^2 + b - u + 2,$$

$$-u^{15} + 3u^{14} + \dots + a + 3,$$

$$u^{16} - 2u^{15} - 2u^{14} + 8u^{13} - u^{12} - 14u^{11} + 10u^{10} + 11u^9 - 15u^8 - u^7 + 11u^6 - 6u^5 - 2u^4 + 4u^3 - 2u + 1 \rangle$$

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

$$I_1^v = \langle a, b - 1, v - 1 \rangle$$

* 5 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 127 representations.

¹The 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>).

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

$$\mathbf{I. } I_1^u = \langle 5.20 \times 10^5 u^{45} + 1.96 \times 10^6 u^{44} + \dots + 6.94 \times 10^4 b + 4.10 \times 10^5, 4.30 \times 10^5 u^{45} + 1.40 \times 10^6 u^{44} + \dots + 6.94 \times 10^4 a + 6.32 \times 10^4, u^{46} + 5u^{45} + \dots + 5u + 1 \rangle$$

(i) Arc colorings

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

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

$$a_6 = \begin{pmatrix} 1 \\ u^2 \end{pmatrix}$$

$$a_9 = \begin{pmatrix} -6.20280u^{45} - 20.1103u^{44} + \dots - 3.24905u - 0.910439 \\ -7.49449u^{45} - 28.2273u^{44} + \dots - 26.5100u - 5.90770 \end{pmatrix}$$

$$a_7 = \begin{pmatrix} -8.99833u^{45} - 31.6872u^{44} + \dots - 10.4069u - 1.60077 \\ -5.46625u^{45} - 23.1524u^{44} + \dots - 24.6669u - 5.54479 \end{pmatrix}$$

$$a_1 = \begin{pmatrix} u \\ u \end{pmatrix}$$

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

$$a_{10} = \begin{pmatrix} -6.82680u^{45} - 25.1173u^{44} + \dots - 11.4935u - 3.08978 \\ -5.46625u^{45} - 22.1524u^{44} + \dots - 23.6669u - 5.54479 \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} u^3 \\ u^5 - u^3 + u \end{pmatrix}$$

$$a_8 = \begin{pmatrix} -4.24914u^{45} - 18.3303u^{44} + \dots - 13.4790u - 4.32022 \\ -2.54225u^{45} - 10.0590u^{44} + \dots - 8.86675u - 1.62373 \end{pmatrix}$$

$$a_4 = \begin{pmatrix} -6.16768u^{45} - 23.6777u^{44} + \dots - 9.23804u - 2.10931 \\ -6.74815u^{45} - 29.0939u^{44} + \dots - 27.8357u - 6.23964 \end{pmatrix}$$

$$a_4 = \begin{pmatrix} -6.16768u^{45} - 23.6777u^{44} + \dots - 9.23804u - 2.10931 \\ -6.74815u^{45} - 29.0939u^{44} + \dots - 27.8357u - 6.23964 \end{pmatrix}$$

(ii) Obstruction class = -1

$$\text{(iii) Cusp Shapes} = -\frac{130759}{69383}u^{45} + \frac{81491}{69383}u^{44} + \dots - \frac{583416}{69383}u - \frac{777173}{69383}$$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1, c_5	$u^{46} + 5u^{45} + \dots + 5u + 1$
c_2	$u^{46} + 23u^{45} + \dots - 11u + 1$
c_3, c_{10}	$u^{46} - u^{45} + \dots + 2u + 1$
c_4, c_9	$u^{46} - 2u^{45} + \dots + u + 1$
c_6, c_8	$u^{46} + 6u^{45} + \dots - 9u + 1$
c_7	$u^{46} + 26u^{45} + \dots + u + 1$
c_{11}	$u^{46} + 15u^{45} + \dots + 1885u + 149$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_5	$y^{46} - 23y^{45} + \dots + 11y + 1$
c_2	$y^{46} + 5y^{45} + \dots - 73y + 1$
c_3, c_{10}	$y^{46} - 19y^{45} + \dots - 52y + 1$
c_4, c_9	$y^{46} - 2y^{45} + \dots + 27y + 1$
c_6, c_8	$y^{46} - 30y^{45} + \dots - 121y + 1$
c_7	$y^{46} + 38y^{44} + \dots + 49y + 1$
c_{11}	$y^{46} + 13y^{45} + \dots + 238229y + 22201$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.933486 + 0.444661I$		
$a = 1.39390 - 0.39376I$	$-1.098380 + 0.644192I$	$-5.70718 - 0.44366I$
$b = 0.917537 - 0.675621I$		
$u = -0.933486 - 0.444661I$		
$a = 1.39390 + 0.39376I$	$-1.098380 - 0.644192I$	$-5.70718 + 0.44366I$
$b = 0.917537 + 0.675621I$		
$u = -0.751399 + 0.721194I$		
$a = 0.377914 + 0.652284I$	$1.87378 + 10.77040I$	$-1.30875 - 9.40079I$
$b = -0.232701 + 0.476942I$		
$u = -0.751399 - 0.721194I$		
$a = 0.377914 - 0.652284I$	$1.87378 - 10.77040I$	$-1.30875 + 9.40079I$
$b = -0.232701 - 0.476942I$		
$u = -0.856947 + 0.701617I$		
$a = -0.552390 + 0.650998I$	$1.57181 - 5.40355I$	$-1.95277 + 5.01520I$
$b = -0.148213 + 0.105841I$		
$u = -0.856947 - 0.701617I$		
$a = -0.552390 - 0.650998I$	$1.57181 + 5.40355I$	$-1.95277 - 5.01520I$
$b = -0.148213 - 0.105841I$		
$u = -0.291347 + 0.840599I$		
$a = 0.415288 - 0.440575I$	$-0.71987 - 13.43220I$	$-2.36696 + 7.45298I$
$b = -1.79617 - 0.89753I$		
$u = -0.291347 - 0.840599I$		
$a = 0.415288 + 0.440575I$	$-0.71987 + 13.43220I$	$-2.36696 - 7.45298I$
$b = -1.79617 + 0.89753I$		
$u = -0.132938 + 0.848595I$		
$a = 0.159620 - 0.433157I$	$-2.72587 + 3.54069I$	$-7.48667 - 4.84167I$
$b = -0.956107 + 0.290168I$		
$u = -0.132938 - 0.848595I$		
$a = 0.159620 + 0.433157I$	$-2.72587 - 3.54069I$	$-7.48667 + 4.84167I$
$b = -0.956107 - 0.290168I$		

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.660174 + 0.548978I$		
$a = 0.018944 - 1.119640I$	$-0.36479 + 3.45703I$	$-5.70781 - 7.10352I$
$b = -0.023291 - 1.106980I$		
$u = -0.660174 - 0.548978I$		
$a = 0.018944 + 1.119640I$	$-0.36479 - 3.45703I$	$-5.70781 + 7.10352I$
$b = -0.023291 + 1.106980I$		
$u = 1.112300 + 0.261314I$		
$a = -1.89980 - 0.01447I$	$-5.91551 - 1.58146I$	$-13.59206 + 3.66934I$
$b = -0.856736 - 0.971479I$		
$u = 1.112300 - 0.261314I$		
$a = -1.89980 + 0.01447I$	$-5.91551 + 1.58146I$	$-13.59206 - 3.66934I$
$b = -0.856736 + 0.971479I$		
$u = 1.135200 + 0.294115I$		
$a = -1.85511 + 1.41022I$	$-6.20814 + 1.80497I$	$-14.2464 - 4.3963I$
$b = -1.71754 - 0.41559I$		
$u = 1.135200 - 0.294115I$		
$a = -1.85511 - 1.41022I$	$-6.20814 - 1.80497I$	$-14.2464 + 4.3963I$
$b = -1.71754 + 0.41559I$		
$u = -0.375652 + 0.726957I$		
$a = 0.249990 + 0.342484I$	$-1.60276 - 0.98411I$	$-7.53408 + 0.28472I$
$b = 1.203890 - 0.206841I$		
$u = -0.375652 - 0.726957I$		
$a = 0.249990 - 0.342484I$	$-1.60276 + 0.98411I$	$-7.53408 - 0.28472I$
$b = 1.203890 + 0.206841I$		
$u = 0.881986 + 0.787307I$		
$a = 0.191650 - 0.055578I$	$3.98279 - 2.95487I$	$23.7349 - 13.5735I$
$b = -0.053824 + 0.253337I$		
$u = 0.881986 - 0.787307I$		
$a = 0.191650 + 0.055578I$	$3.98279 + 2.95487I$	$23.7349 + 13.5735I$
$b = -0.053824 - 0.253337I$		

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -1.099790 + 0.438913I$ $a = -1.83196 - 1.36948I$ $b = -2.21067 - 0.24014I$	$-4.28647 + 3.53114I$	$-10.17349 - 4.71484I$
$u = -1.099790 - 0.438913I$ $a = -1.83196 + 1.36948I$ $b = -2.21067 + 0.24014I$	$-4.28647 - 3.53114I$	$-10.17349 + 4.71484I$
$u = 1.059210 + 0.534264I$ $a = 0.541434 - 0.766541I$ $b = 0.805091 + 0.458424I$	$0.17597 - 5.33365I$	$-1.16724 + 4.83689I$
$u = 1.059210 - 0.534264I$ $a = 0.541434 + 0.766541I$ $b = 0.805091 - 0.458424I$	$0.17597 + 5.33365I$	$-1.16724 - 4.83689I$
$u = 1.099340 + 0.465407I$ $a = -1.63134 + 0.89715I$ $b = -1.21983 - 1.23467I$	$-4.10186 - 3.81474I$	$-9.79702 + 3.58298I$
$u = 1.099340 - 0.465407I$ $a = -1.63134 - 0.89715I$ $b = -1.21983 + 1.23467I$	$-4.10186 + 3.81474I$	$-9.79702 - 3.58298I$
$u = -0.278150 + 0.732712I$ $a = -0.376095 + 0.785335I$ $b = 1.76661 + 0.88827I$	$-2.03242 - 4.83583I$	$-8.60020 + 6.83106I$
$u = -0.278150 - 0.732712I$ $a = -0.376095 - 0.785335I$ $b = 1.76661 - 0.88827I$	$-2.03242 + 4.83583I$	$-8.60020 - 6.83106I$
$u = -0.761418 + 0.115983I$ $a = 0.858924 - 0.607457I$ $b = 0.637850 - 0.558762I$	$-1.37145 + 0.34774I$	$-7.35312 - 1.68014I$
$u = -0.761418 - 0.115983I$ $a = 0.858924 + 0.607457I$ $b = 0.637850 + 0.558762I$	$-1.37145 - 0.34774I$	$-7.35312 + 1.68014I$

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 1.215530 + 0.243371I$		
$a = 1.75500 - 1.20403I$	$-5.60396 + 10.10350I$	$-8.00817 - 5.63549I$
$b = 1.83289 + 0.11458I$		
$u = 1.215530 - 0.243371I$		
$a = 1.75500 + 1.20403I$	$-5.60396 - 10.10350I$	$-8.00817 + 5.63549I$
$b = 1.83289 - 0.11458I$		
$u = 0.431319 + 0.618019I$		
$a = 0.744120 - 0.125502I$	$2.00312 + 0.77598I$	$3.08048 - 0.37837I$
$b = -0.551257 + 0.192009I$		
$u = 0.431319 - 0.618019I$		
$a = 0.744120 + 0.125502I$	$2.00312 - 0.77598I$	$3.08048 + 0.37837I$
$b = -0.551257 - 0.192009I$		
$u = -1.115390 + 0.573899I$		
$a = -1.01263 - 1.47969I$	$-3.77845 + 5.97580I$	$-9.62613 - 4.25022I$
$b = -1.60084 - 0.24549I$		
$u = -1.115390 - 0.573899I$		
$a = -1.01263 + 1.47969I$	$-3.77845 - 5.97580I$	$-9.62613 + 4.25022I$
$b = -1.60084 + 0.24549I$		
$u = -1.133410 + 0.543345I$		
$a = -2.66832 - 1.09843I$	$-4.51494 + 9.66961I$	$-12.1786 - 10.5958I$
$b = -2.59106 + 0.99651I$		
$u = -1.133410 - 0.543345I$		
$a = -2.66832 + 1.09843I$	$-4.51494 - 9.66961I$	$-12.1786 + 10.5958I$
$b = -2.59106 - 0.99651I$		
$u = 1.225340 + 0.349011I$		
$a = 1.355770 - 0.047043I$	$-6.99619 - 7.57481I$	$-10.39877 + 7.23305I$
$b = 0.889349 + 1.016990I$		
$u = 1.225340 - 0.349011I$		
$a = 1.355770 + 0.047043I$	$-6.99619 + 7.57481I$	$-10.39877 - 7.23305I$
$b = 0.889349 - 1.016990I$		

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -1.197320 + 0.502148I$ $a = 1.031320 + 0.860349I$ $b = 1.50432 - 0.00862I$	$-5.94279 + 1.33870I$	0
$u = -1.197320 - 0.502148I$ $a = 1.031320 - 0.860349I$ $b = 1.50432 + 0.00862I$	$-5.94279 - 1.33870I$	0
$u = -1.165270 + 0.576600I$ $a = 2.37516 + 1.00046I$ $b = 2.36478 - 1.14677I$	$-3.3293 + 18.6712I$	0
$u = -1.165270 - 0.576600I$ $a = 2.37516 - 1.00046I$ $b = 2.36478 + 1.14677I$	$-3.3293 - 18.6712I$	0
$u = 0.092447 + 0.293184I$ $a = -1.64140 + 2.88752I$ $b = 1.035920 - 0.158140I$	$-1.65225 + 0.00944I$	$-6.31613 + 0.26061I$
$u = 0.092447 - 0.293184I$ $a = -1.64140 - 2.88752I$ $b = 1.035920 + 0.158140I$	$-1.65225 - 0.00944I$	$-6.31613 - 0.26061I$

$$\text{II. } I_2^u = \langle -29u^{30}a + 623u^{30} + \dots + 2a - 1427, 2u^{29}a - 2u^{30} + \dots + 2a + 2, u^{31} - 2u^{30} + \dots - 2u + 1 \rangle$$

(i) Arc colorings

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

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

$$a_6 = \begin{pmatrix} 1 \\ u^2 \end{pmatrix}$$

$$a_9 = \begin{pmatrix} a \\ 0.0368488au^{30} - 0.791614u^{30} + \dots - 0.00254130a + 1.81321 \end{pmatrix}$$

$$a_7 = \begin{pmatrix} 1.79161au^{30} - 1.31639u^{30} + \dots - 0.813215a + 1.22872 \\ 0.416773au^{30} + 2.63278u^{30} + \dots - 0.373571a - 3.45743 \end{pmatrix}$$

$$a_1 = \begin{pmatrix} u \\ u \end{pmatrix}$$

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

$$a_{10} = \begin{pmatrix} 0.0368488au^{30} + 2.20839u^{30} + \dots + 0.997459a - 2.18679 \\ 0.108005au^{30} - 0.561626u^{30} + \dots - 0.0419314a + 1.41804 \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} u^3 \\ u^5 - u^3 + u \end{pmatrix}$$

$$a_8 = \begin{pmatrix} 0.0368488au^{30} + 2.20839u^{30} + \dots + 0.997459a - 2.18679 \\ -0.0368488au^{30} + 0.791614u^{30} + \dots + 0.00254130a + 0.186785 \end{pmatrix}$$

$$a_4 = \begin{pmatrix} -1.14485au^{30} + 0.353240u^{30} + \dots + 0.0444727a - 0.231258 \\ -0.0635324au^{30} + 2.33037u^{30} + \dots + 0.142313a - 3.54003 \end{pmatrix}$$

$$a_4 = \begin{pmatrix} -1.14485au^{30} + 0.353240u^{30} + \dots + 0.0444727a - 0.231258 \\ -0.0635324au^{30} + 2.33037u^{30} + \dots + 0.142313a - 3.54003 \end{pmatrix}$$

(ii) Obstruction class = -1

(iii) Cusp Shapes

$$= 11u^{30} - 17u^{29} - 77u^{28} + 156u^{27} + 228u^{26} - 647u^{25} - 267u^{24} + 1574u^{23} - 282u^{22} - 2362u^{21} + 1582u^{20} + 2004u^{19} - 2748u^{18} - 365u^{17} + 2591u^{16} - 1168u^{15} - 1234u^{14} + 1358u^{13} + 106u^{12} - 640u^{11} + 136u^{10} + 174u^9 - 30u^8 - 92u^7 + 60u^6 + 44u^5 - 44u^4 + 16u^3 + 11u - 11$$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1, c_5	$(u^{31} - 2u^{30} + \dots - 2u + 1)^2$
c_2	$(u^{31} + 16u^{30} + \dots + 2u + 1)^2$
c_3, c_{10}	$u^{62} + 2u^{61} + \dots + u - 1$
c_4, c_9	$u^{62} + 2u^{61} + \dots - 211u + 31$
c_6, c_8	$u^{62} - 3u^{61} + \dots + 378u - 49$
c_7	$(u^{31} - 15u^{30} + \dots + 3u - 2)^2$
c_{11}	$(u^{31} - 9u^{30} + \dots + 73u - 8)^2$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_5	$(y^{31} - 16y^{30} + \dots + 2y - 1)^2$
c_2	$(y^{31} + 28y^{29} + \dots - 14y - 1)^2$
c_3, c_{10}	$y^{62} + 12y^{61} + \dots + 29y + 1$
c_4, c_9	$y^{62} + 58y^{60} + \dots - 104599y + 961$
c_6, c_8	$y^{62} + 13y^{61} + \dots + 17738y + 2401$
c_7	$(y^{31} - 3y^{30} + \dots + 69y - 4)^2$
c_{11}	$(y^{31} + 13y^{30} + \dots + 833y - 64)^2$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_2^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.790665 + 0.695036I$	$3.79486 - 2.62922I$	$6.53544 + 4.19495I$
$a = 0.669170 - 0.332267I$		
$b = 0.0656518 + 0.0523021I$		
$u = 0.790665 + 0.695036I$	$3.79486 - 2.62922I$	$6.53544 + 4.19495I$
$a = -0.207742 + 0.086773I$		
$b = -0.126798 + 0.478191I$		
$u = 0.790665 - 0.695036I$	$3.79486 + 2.62922I$	$6.53544 - 4.19495I$
$a = 0.669170 + 0.332267I$		
$b = 0.0656518 - 0.0523021I$		
$u = 0.790665 - 0.695036I$	$3.79486 + 2.62922I$	$6.53544 - 4.19495I$
$a = -0.207742 - 0.086773I$		
$b = -0.126798 - 0.478191I$		
$u = 0.271790 + 0.844936I$	$0.86287 + 5.06730I$	$2.75638 - 8.05298I$
$a = 0.569593 + 0.287323I$		
$b = -1.48334 + 0.65965I$		
$u = 0.271790 + 0.844936I$	$0.86287 + 5.06730I$	$2.75638 - 8.05298I$
$a = -0.119874 - 0.268542I$		
$b = 0.884101 - 0.757543I$		
$u = 0.271790 - 0.844936I$	$0.86287 - 5.06730I$	$2.75638 + 8.05298I$
$a = 0.569593 - 0.287323I$		
$b = -1.48334 - 0.65965I$		
$u = 0.271790 - 0.844936I$	$0.86287 - 5.06730I$	$2.75638 + 8.05298I$
$a = -0.119874 + 0.268542I$		
$b = 0.884101 + 0.757543I$		
$u = -1.11799$	-2.94773	9.04290
$a = -0.284257$		
$b = 0.391788$		
$u = -1.11799$	-2.94773	9.04290
$a = 2.15022$		
$b = 1.72304$		

Solutions to I_2^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 1.057020 + 0.392863I$		
$a = 1.81595 + 1.58347I$	$-1.41458 + 1.86246I$	$-6.47152 - 4.51832I$
$b = 0.457743 + 1.080970I$		
$u = 1.057020 + 0.392863I$		
$a = -1.94507 + 1.62723I$	$-1.41458 + 1.86246I$	$-6.47152 - 4.51832I$
$b = -2.78630 - 0.37900I$		
$u = 1.057020 - 0.392863I$		
$a = 1.81595 - 1.58347I$	$-1.41458 - 1.86246I$	$-6.47152 + 4.51832I$
$b = 0.457743 - 1.080970I$		
$u = 1.057020 - 0.392863I$		
$a = -1.94507 - 1.62723I$	$-1.41458 - 1.86246I$	$-6.47152 + 4.51832I$
$b = -2.78630 + 0.37900I$		
$u = -1.037230 + 0.490832I$		
$a = 0.871323 - 0.069012I$	$0.442167 + 0.494118I$	$-0.11941 - 1.82079I$
$b = 1.081080 + 0.215998I$		
$u = -1.037230 + 0.490832I$		
$a = 2.98544 + 0.56960I$	$0.442167 + 0.494118I$	$-0.11941 - 1.82079I$
$b = 1.86765 - 1.56472I$		
$u = -1.037230 - 0.490832I$		
$a = 0.871323 + 0.069012I$	$0.442167 - 0.494118I$	$-0.11941 + 1.82079I$
$b = 1.081080 - 0.215998I$		
$u = -1.037230 - 0.490832I$		
$a = 2.98544 - 0.56960I$	$0.442167 - 0.494118I$	$-0.11941 + 1.82079I$
$b = 1.86765 + 1.56472I$		
$u = 1.026550 + 0.519350I$		
$a = -0.1270640 + 0.0109867I$	$0.44756 - 5.41860I$	$-0.32653 + 5.88711I$
$b = -0.047205 + 0.721888I$		
$u = 1.026550 + 0.519350I$		
$a = 1.29914 - 1.65916I$	$0.44756 - 5.41860I$	$-0.32653 + 5.88711I$
$b = 1.61693 + 0.26044I$		

Solutions to I_2^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 1.026550 - 0.519350I$ $a = -0.1270640 - 0.0109867I$ $b = -0.047205 - 0.721888I$	$0.44756 + 5.41860I$	$-0.32653 - 5.88711I$
$u = 1.026550 - 0.519350I$ $a = 1.29914 + 1.65916I$ $b = 1.61693 - 0.26044I$	$0.44756 + 5.41860I$	$-0.32653 - 5.88711I$
$u = 0.753184 + 0.319413I$ $a = -0.788685 + 0.289104I$ $b = 0.022444 + 1.150080I$	$-0.12340 - 4.63553I$	$-7.19066 + 8.64807I$
$u = 0.753184 + 0.319413I$ $a = -0.30112 - 2.73557I$ $b = 0.95069 - 1.18509I$	$-0.12340 - 4.63553I$	$-7.19066 + 8.64807I$
$u = 0.753184 - 0.319413I$ $a = -0.788685 - 0.289104I$ $b = 0.022444 - 1.150080I$	$-0.12340 + 4.63553I$	$-7.19066 - 8.64807I$
$u = 0.753184 - 0.319413I$ $a = -0.30112 + 2.73557I$ $b = 0.95069 + 1.18509I$	$-0.12340 + 4.63553I$	$-7.19066 - 8.64807I$
$u = -1.094170 + 0.506739I$ $a = -1.49471 + 1.74452I$ $b = 0.001444 + 1.236820I$	$-0.54438 + 8.91512I$	$-2.96887 - 11.01596I$
$u = -1.094170 + 0.506739I$ $a = -2.77988 - 0.45386I$ $b = -2.38927 + 2.05281I$	$-0.54438 + 8.91512I$	$-2.96887 - 11.01596I$
$u = -1.094170 - 0.506739I$ $a = -1.49471 - 1.74452I$ $b = 0.001444 - 1.236820I$	$-0.54438 - 8.91512I$	$-2.96887 + 11.01596I$
$u = -1.094170 - 0.506739I$ $a = -2.77988 + 0.45386I$ $b = -2.38927 - 2.05281I$	$-0.54438 - 8.91512I$	$-2.96887 + 11.01596I$

Solutions to I_2^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.483181 + 0.627527I$		
$a = 1.053820 - 0.244238I$	$2.01990 + 0.90453I$	$3.65108 - 0.79331I$
$b = 0.024721 + 0.257856I$		
$u = 0.483181 + 0.627527I$		
$a = 0.475298 + 0.027991I$	$2.01990 + 0.90453I$	$3.65108 - 0.79331I$
$b = -1.131290 + 0.256367I$		
$u = 0.483181 - 0.627527I$		
$a = 1.053820 + 0.244238I$	$2.01990 - 0.90453I$	$3.65108 + 0.79331I$
$b = 0.024721 - 0.257856I$		
$u = 0.483181 - 0.627527I$		
$a = 0.475298 - 0.027991I$	$2.01990 - 0.90453I$	$3.65108 + 0.79331I$
$b = -1.131290 - 0.256367I$		
$u = -1.178190 + 0.355689I$		
$a = 1.48280 + 0.00076I$	$-6.17761 - 0.88062I$	$-14.6380 + 2.9072I$
$b = 1.02174 - 1.55077I$		
$u = -1.178190 + 0.355689I$		
$a = -1.38943 - 1.77723I$	$-6.17761 - 0.88062I$	$-14.6380 + 2.9072I$
$b = -1.80498 - 0.32855I$		
$u = -1.178190 - 0.355689I$		
$a = 1.48280 - 0.00076I$	$-6.17761 + 0.88062I$	$-14.6380 - 2.9072I$
$b = 1.02174 + 1.55077I$		
$u = -1.178190 - 0.355689I$		
$a = -1.38943 + 1.77723I$	$-6.17761 + 0.88062I$	$-14.6380 - 2.9072I$
$b = -1.80498 + 0.32855I$		
$u = 0.168042 + 0.738886I$		
$a = 0.608505 + 1.197800I$	$-2.24573 + 4.52331I$	$-8.41907 - 6.24640I$
$b = -1.277980 - 0.170746I$		
$u = 0.168042 + 0.738886I$		
$a = -0.382111 - 0.116834I$	$-2.24573 + 4.52331I$	$-8.41907 - 6.24640I$
$b = 1.53489 - 1.07053I$		

Solutions to I_2^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.168042 - 0.738886I$		
$a = 0.608505 - 1.197800I$	$-2.24573 - 4.52331I$	$-8.41907 + 6.24640I$
$b = -1.277980 + 0.170746I$		
$u = 0.168042 - 0.738886I$		
$a = -0.382111 + 0.116834I$	$-2.24573 - 4.52331I$	$-8.41907 + 6.24640I$
$b = 1.53489 + 1.07053I$		
$u = -1.229730 + 0.258953I$		
$a = -0.737514 - 0.824427I$	$-3.97519 - 1.59170I$	$-1.35198 + 10.14097I$
$b = -0.763646 - 0.121799I$		
$u = -1.229730 + 0.258953I$		
$a = 1.60333 + 0.66052I$	$-3.97519 - 1.59170I$	$-1.35198 + 10.14097I$
$b = 1.73249 - 0.42359I$		
$u = -1.229730 - 0.258953I$		
$a = -0.737514 + 0.824427I$	$-3.97519 + 1.59170I$	$-1.35198 - 10.14097I$
$b = -0.763646 + 0.121799I$		
$u = -1.229730 - 0.258953I$		
$a = 1.60333 - 0.66052I$	$-3.97519 + 1.59170I$	$-1.35198 - 10.14097I$
$b = 1.73249 + 0.42359I$		
$u = 1.157760 + 0.512519I$		
$a = 1.42443 - 1.28295I$	$-5.08886 - 9.19357I$	$-11.4929 + 8.9901I$
$b = 2.40547 - 0.13583I$		
$u = 1.157760 + 0.512519I$		
$a = -2.67908 + 0.57634I$	$-5.08886 - 9.19357I$	$-11.4929 + 8.9901I$
$b = -2.05828 - 1.41962I$		
$u = 1.157760 - 0.512519I$		
$a = 1.42443 + 1.28295I$	$-5.08886 + 9.19357I$	$-11.4929 - 8.9901I$
$b = 2.40547 + 0.13583I$		
$u = 1.157760 - 0.512519I$		
$a = -2.67908 - 0.57634I$	$-5.08886 + 9.19357I$	$-11.4929 - 8.9901I$
$b = -2.05828 + 1.41962I$		

Solutions to I_2^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 1.171540 + 0.571368I$ $a = -1.63048 + 0.31699I$ $b = -1.32040 - 0.86495I$	$-1.82208 - 10.29010I$	$-1.64284 + 11.44923I$
$u = 1.171540 + 0.571368I$ $a = 1.92634 - 0.84777I$ $b = 2.04018 + 1.07427I$	$-1.82208 - 10.29010I$	$-1.64284 + 11.44923I$
$u = 1.171540 - 0.571368I$ $a = -1.63048 - 0.31699I$ $b = -1.32040 + 0.86495I$	$-1.82208 + 10.29010I$	$-1.64284 - 11.44923I$
$u = 1.171540 - 0.571368I$ $a = 1.92634 + 0.84777I$ $b = 2.04018 - 1.07427I$	$-1.82208 + 10.29010I$	$-1.64284 - 11.44923I$
$u = -0.467072 + 0.505817I$ $a = 0.794897 - 0.380963I$ $b = -1.10555 - 1.62360I$	$2.11162 + 3.64112I$	$4.51546 - 4.55522I$
$u = -0.467072 + 0.505817I$ $a = -0.89772 - 1.89421I$ $b = -0.377102 - 0.526421I$	$2.11162 + 3.64112I$	$4.51546 - 4.55522I$
$u = -0.467072 - 0.505817I$ $a = 0.794897 + 0.380963I$ $b = -1.10555 + 1.62360I$	$2.11162 - 3.64112I$	$4.51546 + 4.55522I$
$u = -0.467072 - 0.505817I$ $a = -0.89772 + 1.89421I$ $b = -0.377102 + 0.526421I$	$2.11162 - 3.64112I$	$4.51546 + 4.55522I$
$u = -0.314340 + 0.572965I$ $a = 0.384701 + 0.785838I$ $b = -0.35569 + 1.42340I$	$1.67219 - 4.56405I$	$2.14197 + 7.53125I$
$u = -0.314340 + 0.572965I$ $a = -1.91723 + 0.69975I$ $b = 1.26319 + 1.26380I$	$1.67219 - 4.56405I$	$2.14197 + 7.53125I$

Solutions to I_2^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.314340 - 0.572965I$		
$a = 0.384701 - 0.785838I$	$1.67219 + 4.56405I$	$2.14197 - 7.53125I$
$b = -0.35569 - 1.42340I$		
$u = -0.314340 - 0.572965I$		
$a = -1.91723 - 0.69975I$	$1.67219 + 4.56405I$	$2.14197 - 7.53125I$
$b = 1.26319 - 1.26380I$		

III.

$$I_3^u = \langle 2u^{14} - u^{13} + \dots + b + 2, -u^{15} + 3u^{14} + \dots + a + 3, u^{16} - 2u^{15} + \dots - 2u + 1 \rangle$$

(i) Arc colorings

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

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

$$a_6 = \begin{pmatrix} 1 \\ u^2 \end{pmatrix}$$

$$a_9 = \begin{pmatrix} u^{15} - 3u^{14} + \dots + 2u - 3 \\ -2u^{14} + u^{13} + \dots + u - 2 \end{pmatrix}$$

$$a_7 = \begin{pmatrix} u^{15} - 3u^{14} + \dots - u - 2 \\ -u^{15} + 3u^{13} + \dots - 2u - 1 \end{pmatrix}$$

$$a_1 = \begin{pmatrix} u \\ u \end{pmatrix}$$

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

$$a_{10} = \begin{pmatrix} -u^{14} + 4u^{12} + \dots + u - 2 \\ -u^{14} + u^{13} + \dots + u - 1 \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} u^3 \\ u^5 - u^3 + u \end{pmatrix}$$

$$a_8 = \begin{pmatrix} u^{15} - 2u^{14} + \dots + 2u - 2 \\ -u^{14} + u^{13} + \dots + u^2 - 1 \end{pmatrix}$$

$$a_4 = \begin{pmatrix} -3u^{15} + 3u^{14} + \dots - 5u + 3 \\ -3u^{15} + 4u^{14} + \dots - 4u + 3 \end{pmatrix}$$

$$a_4 = \begin{pmatrix} -3u^{15} + 3u^{14} + \dots - 5u + 3 \\ -3u^{15} + 4u^{14} + \dots - 4u + 3 \end{pmatrix}$$

(ii) Obstruction class = 1

(iii) Cusp Shapes = $20u^{15} - 25u^{14} - 65u^{13} + 116u^{12} + 83u^{11} - 235u^{10} + 247u^8 - 98u^7 - 123u^6 + 118u^5 - 7u^4 - 52u^3 + 27u^2 + 26u - 20$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{16} + 2u^{15} + \dots + 2u + 1$
c_2	$u^{16} + 8u^{15} + \dots + 4u + 1$
c_3, c_{10}	$u^{16} + 4u^{14} + \dots + u + 1$
c_4, c_9	$u^{16} - u^{15} + \dots + 4u^2 + 1$
c_5	$u^{16} - 2u^{15} + \dots - 2u + 1$
c_6, c_8	$u^{16} - 5u^{15} + \dots - 8u + 1$
c_7	$u^{16} + 11u^{15} + \dots + 38u + 5$
c_{11}	$u^{16} + 6u^{15} + \dots + 14u + 5$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_5	$y^{16} - 8y^{15} + \dots - 4y + 1$
c_2	$y^{16} + 4y^{15} + \dots + 8y + 1$
c_3, c_{10}	$y^{16} + 8y^{15} + \dots + 5y + 1$
c_4, c_9	$y^{16} + 5y^{15} + \dots + 8y + 1$
c_6, c_8	$y^{16} + 9y^{15} + \dots - 8y + 1$
c_7	$y^{16} + 3y^{15} + \dots + 126y + 25$
c_{11}	$y^{16} - 6y^{14} + \dots - 106y + 25$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_3^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 1.024370 + 0.459927I$ $a = 2.44332 + 0.20318I$ $b = 1.74413 + 1.13632I$	$-0.384219 + 0.628959I$	$-3.48364 - 2.80361I$
$u = 1.024370 - 0.459927I$ $a = 2.44332 - 0.20318I$ $b = 1.74413 - 1.13632I$	$-0.384219 - 0.628959I$	$-3.48364 + 2.80361I$
$u = -1.020340 + 0.486012I$ $a = 0.18997 + 1.48209I$ $b = 1.270210 - 0.038066I$	$-0.21632 + 6.81045I$	$-4.49677 - 10.12296I$
$u = -1.020340 - 0.486012I$ $a = 0.18997 - 1.48209I$ $b = 1.270210 + 0.038066I$	$-0.21632 - 6.81045I$	$-4.49677 + 10.12296I$
$u = 0.877768 + 0.808431I$ $a = -0.118784 + 0.214301I$ $b = 0.0389492 - 0.0700930I$	$3.87749 - 3.01517I$	$-33.6443 + 18.9911I$
$u = 0.877768 - 0.808431I$ $a = -0.118784 - 0.214301I$ $b = 0.0389492 + 0.0700930I$	$3.87749 + 3.01517I$	$-33.6443 - 18.9911I$
$u = 0.197391 + 0.752145I$ $a = -0.554414 - 0.452739I$ $b = 1.16852 - 0.80502I$	$-0.60305 + 4.58234I$	$-2.40249 - 6.00817I$
$u = 0.197391 - 0.752145I$ $a = -0.554414 + 0.452739I$ $b = 1.16852 + 0.80502I$	$-0.60305 - 4.58234I$	$-2.40249 + 6.00817I$
$u = -0.632624 + 0.437790I$ $a = 0.757123 - 1.153610I$ $b = -0.657889 + 0.179663I$	$1.10121 - 2.89037I$	$-1.29781 + 2.83273I$
$u = -0.632624 - 0.437790I$ $a = 0.757123 + 1.153610I$ $b = -0.657889 - 0.179663I$	$1.10121 + 2.89037I$	$-1.29781 - 2.83273I$

Solutions to I_3^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -1.189300 + 0.317097I$		
$a = -1.20436 - 0.91552I$	$-4.77806 - 1.04547I$	$-8.97927 + 2.31364I$
$b = -1.309860 + 0.285883I$		
$u = -1.189300 - 0.317097I$		
$a = -1.20436 + 0.91552I$	$-4.77806 + 1.04547I$	$-8.97927 - 2.31364I$
$b = -1.309860 - 0.285883I$		
$u = 1.151850 + 0.528952I$		
$a = -2.18614 + 0.52851I$	$-3.34287 - 9.35884I$	$-5.15004 + 8.71081I$
$b = -1.99390 - 1.08782I$		
$u = 1.151850 - 0.528952I$		
$a = -2.18614 - 0.52851I$	$-3.34287 + 9.35884I$	$-5.15004 - 8.71081I$
$b = -1.99390 + 1.08782I$		
$u = 0.590891 + 0.389110I$		
$a = -0.32671 + 1.81658I$	$1.05595 - 4.33077I$	$-0.04563 + 8.60569I$
$b = -0.76016 + 1.40762I$		
$u = 0.590891 - 0.389110I$		
$a = -0.32671 - 1.81658I$	$1.05595 + 4.33077I$	$-0.04563 - 8.60569I$
$b = -0.76016 - 1.40762I$		

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

(i) Arc colorings

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

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

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

$$a_9 = \begin{pmatrix} a \\ a + 1 \end{pmatrix}$$

$$a_7 = \begin{pmatrix} a + 1 \\ a + 2 \end{pmatrix}$$

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

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

$$a_{10} = \begin{pmatrix} 2a + 1 \\ a + 1 \end{pmatrix}$$

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

$$a_8 = \begin{pmatrix} a + 1 \\ a + 2 \end{pmatrix}$$

$$a_4 = \begin{pmatrix} 2 \\ a + 3 \end{pmatrix}$$

$$a_4 = \begin{pmatrix} 2 \\ a + 3 \end{pmatrix}$$

(ii) Obstruction class = 1

(iii) Cusp Shapes = -17

(iv) u-Polynomials at the component

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

(v) Riley Polynomials at the component

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

(vi) Complex Volumes and Cusp Shapes

Solutions to I_4^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -1.00000$ $a = -0.381966$ $b = 0.618034$	-3.28987	-17.0000
$u = -1.00000$ $a = -2.61803$ $b = -1.61803$	-3.28987	-17.0000

$$\mathbf{V. } I_1^v = \langle a, b - 1, v - 1 \rangle$$

(i) Arc colorings

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

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

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

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

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

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

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

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

$$a_{11} = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$

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

$$a_4 = \begin{pmatrix} 2 \\ 1 \end{pmatrix}$$

$$a_4 = \begin{pmatrix} 2 \\ 1 \end{pmatrix}$$

(ii) Obstruction class = -1

(iii) Cusp Shapes = -6

(iv) **u-Polynomials at the component**

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

(v) Riley Polynomials at the component

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

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^v	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$v = 1.00000$		
$a = 0$	-1.64493	-6.00000
$b = 1.00000$		

VI. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1	$u(u-1)^2(u^{16} + 2u^{15} + \dots + 2u + 1)(u^{31} - 2u^{30} + \dots - 2u + 1)^2 \cdot (u^{46} + 5u^{45} + \dots + 5u + 1)$
c_2	$u(u+1)^2(u^{16} + 8u^{15} + \dots + 4u + 1)(u^{31} + 16u^{30} + \dots + 2u + 1)^2 \cdot (u^{46} + 23u^{45} + \dots - 11u + 1)$
c_3, c_{10}	$(u+1)(u^2 - u - 1)(u^{16} + 4u^{14} + \dots + u + 1)(u^{46} - u^{45} + \dots + 2u + 1) \cdot (u^{62} + 2u^{61} + \dots + u - 1)$
c_4, c_9	$(u+1)(u^2 - u - 1)(u^{16} - u^{15} + \dots + 4u^2 + 1)(u^{46} - 2u^{45} + \dots + u + 1) \cdot (u^{62} + 2u^{61} + \dots - 211u + 31)$
c_5	$u(u+1)^2(u^{16} - 2u^{15} + \dots - 2u + 1)(u^{31} - 2u^{30} + \dots - 2u + 1)^2 \cdot (u^{46} + 5u^{45} + \dots + 5u + 1)$
c_6, c_8	$((u-1)^2)(u+1)(u^{16} - 5u^{15} + \dots - 8u + 1)(u^{46} + 6u^{45} + \dots - 9u + 1) \cdot (u^{62} - 3u^{61} + \dots + 378u - 49)$
c_7	$u^3(u^{16} + 11u^{15} + \dots + 38u + 5)(u^{31} - 15u^{30} + \dots + 3u - 2)^2 \cdot (u^{46} + 26u^{45} + \dots + u + 1)$
c_{11}	$u^3(u^{16} + 6u^{15} + \dots + 14u + 5)(u^{31} - 9u^{30} + \dots + 73u - 8)^2 \cdot (u^{46} + 15u^{45} + \dots + 1885u + 149)$

VII. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1, c_5	$y(y-1)^2(y^{16} - 8y^{15} + \dots - 4y + 1)(y^{31} - 16y^{30} + \dots + 2y - 1)^2$ $\cdot (y^{46} - 23y^{45} + \dots + 11y + 1)$
c_2	$y(y-1)^2(y^{16} + 4y^{15} + \dots + 8y + 1)(y^{31} + 28y^{29} + \dots - 14y - 1)^2$ $\cdot (y^{46} + 5y^{45} + \dots - 73y + 1)$
c_3, c_{10}	$(y-1)(y^2 - 3y + 1)(y^{16} + 8y^{15} + \dots + 5y + 1)$ $\cdot (y^{46} - 19y^{45} + \dots - 52y + 1)(y^{62} + 12y^{61} + \dots + 29y + 1)$
c_4, c_9	$(y-1)(y^2 - 3y + 1)(y^{16} + 5y^{15} + \dots + 8y + 1)(y^{46} - 2y^{45} + \dots + 27y + 1)$ $\cdot (y^{62} + 58y^{60} + \dots - 104599y + 961)$
c_6, c_8	$((y-1)^3)(y^{16} + 9y^{15} + \dots - 8y + 1)(y^{46} - 30y^{45} + \dots - 121y + 1)$ $\cdot (y^{62} + 13y^{61} + \dots + 17738y + 2401)$
c_7	$y^3(y^{16} + 3y^{15} + \dots + 126y + 25)(y^{31} - 3y^{30} + \dots + 69y - 4)^2$ $\cdot (y^{46} + 38y^{44} + \dots + 49y + 1)$
c_{11}	$y^3(y^{16} - 6y^{14} + \dots - 106y + 25)(y^{31} + 13y^{30} + \dots + 833y - 64)^2$ $\cdot (y^{46} + 13y^{45} + \dots + 238229y + 22201)$