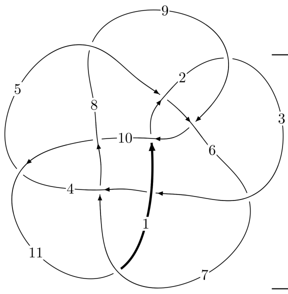
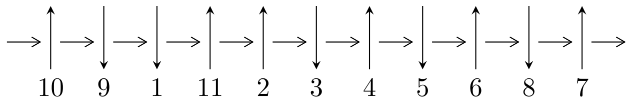
$11a_{266}$ ($K11a_{266}$)



A knot diagram[1]

Linearized knot diagam



Solving Sequence

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

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

$$\begin{aligned}
I_1^u = \langle & 2.09838 \times 10^{20} u^{29} + 6.55534 \times 10^{21} u^{28} + \cdots + 1.72668 \times 10^{21} b + 1.91679 \times 10^{23}, \\
& 7.48748 \times 10^{20} u^{29} + 2.12940 \times 10^{22} u^{28} + \cdots + 3.45337 \times 10^{21} a + 2.83237 \times 10^{23}, \\
& u^{30} + 29u^{29} + \cdots + 5632u + 512 \rangle \\
I_2^u = \langle & 222790111u^{46} - 4153864769u^{45} + \cdots + 2281728b + 6714872532, \\
& -2238290844u^{46}a - 21314380402u^{46} + \cdots - 16228635188a - 83493140173, \\
& u^{47} - 14u^{46} + \cdots + 30u - 3 \rangle \\
I_3^u = \langle & -1345u^{15} + 7729u^{14} + \cdots + 3655b + 38,\ -38u^{15} - 1117u^{14} + \cdots + 3655a + 12877, \\
& u^{16} - 6u^{15} + \cdots + u + 1 \rangle \\
I_4^u = \langle & 3au + 3b + 2u + 3,\ 3a^2 - au - a + 1,\ u^2 + 3u + 3 \rangle
\end{aligned}$$

* 4 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 144 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. $I_1^u = \langle 2.10\times10^{20}u^{29}+6.56\times10^{21}u^{28}+\cdots+1.73\times10^{21}b+1.92\times10^{23},\ 7.49\times10^{20}u^{29}+2.13\times10^{22}u^{28}+\cdots+3.45\times10^{21}a+2.83\times10^{23},\ u^{30}+29u^{29}+\cdots+5632u+512\rangle$

(i) Arc colorings

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

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

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

$$a_6 = \begin{pmatrix}-0.216817u^{29}-6.16616u^{28}+\cdots-843.133u-82.0175\\-0.121527u^{29}-3.79649u^{28}+\cdots-1139.09u-111.010\end{pmatrix}$$

$$a_7 = \begin{pmatrix}0.176923u^{29}+4.51009u^{28}+\cdots-277.468u-33.2290\\0.726411u^{29}+20.5852u^{28}+\cdots+2839.46u+269.003\end{pmatrix}$$

$$a_{10} = \begin{pmatrix}0.0737630u^{29}+2.11244u^{28}+\cdots+454.512u+44.0773\\0.0266890u^{29}+0.858935u^{28}+\cdots+372.356u+37.7667\end{pmatrix}$$

$$a_1 = \begin{pmatrix}-0.181935u^{29}-4.87001u^{28}+\cdots-131.180u-9.97749\\-0.321147u^{29}-9.00243u^{28}+\cdots-1126.22u-106.815\end{pmatrix}$$

$$a_4 = \begin{pmatrix}-0.344913u^{29}-9.38133u^{28}+\cdots-491.954u-39.3302\\-0.241720u^{29}-7.27828u^{28}+\cdots-1882.54u-183.233\end{pmatrix}$$

$$a_5 = \begin{pmatrix}-0.0952900u^{29}-2.36967u^{28}+\cdots+295.961u+28.9927\\-0.121527u^{29}-3.79649u^{28}+\cdots-1139.09u-111.010\end{pmatrix}$$

$$a_8 = \begin{pmatrix}-0.0645692u^{29}-1.79489u^{28}+\cdots-175.655u-17.7913\\0.111643u^{29}+3.04839u^{28}+\cdots+259.810u+24.1019\end{pmatrix}$$

$$a_{11} = \begin{pmatrix}-0.293270u^{29}-8.33770u^{28}+\cdots-1123.71u-104.995\\0.527885u^{29}+14.3259u^{28}+\cdots+755.639u+64.5890\end{pmatrix}$$

$$a_{11} = \begin{pmatrix}-0.293270u^{29}-8.33770u^{28}+\cdots-1123.71u-104.995\\0.527885u^{29}+14.3259u^{28}+\cdots+755.639u+64.5890\end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= \frac{190232019886448235663}{431670906353547523808}u^{29} + \frac{129941267151467896629 5}{1079177265883868809 52}u^{28} + \cdots + \frac{314592307554861968565 8}{134897158235483601 19}u + \frac{100943563341881674894}{13489715823548360119}$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{30} + 26u^{29} + \cdots + 12288u + 1024$
c_2	$u^{30} + 29u^{29} + \cdots + 5632u + 512$
c_3, c_{10}	$u^{30} - u^{28} + \cdots - 6u + 1$
c_4, c_{11}	$u^{30} + 8u^{28} + \cdots + 3u + 1$
c_5, c_9	$u^{30} - u^{29} + \cdots - 2u + 1$
c_6, c_8	$u^{30} - u^{29} + \cdots + 46u + 27$
c_7	$u^{30} - 19u^{29} + \cdots - 288u + 32$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{30} - 2y^{29} + \cdots + 12976128y + 1048576$
c_2	$y^{30} - 11y^{29} + \cdots + 11665408y + 262144$
c_3, c_{10}	$y^{30} - 2y^{29} + \cdots - 10y + 1$
c_4, c_{11}	$y^{30} + 16y^{29} + \cdots + 33y + 1$
c_5, c_9	$y^{30} + 3y^{29} + \cdots + 6y + 1$
c_6, c_8	$y^{30} - 13y^{29} + \cdots - 5896y + 729$
c_7	$y^{30} + y^{29} + \cdots + 11776y + 1024$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.294179 + 0.829081I$ $a = 0.118653 - 1.232520I$ $b = -0.986950 - 0.460952I$	$3.99955 - 4.35128I$	$6.59095 + 3.41349I$
$u = -0.294179 - 0.829081I$ $a = 0.118653 + 1.232520I$ $b = -0.986950 + 0.460952I$	$3.99955 + 4.35128I$	$6.59095 - 3.41349I$
$u = -0.620636 + 0.594308I$ $a = -0.605489 + 0.728544I$ $b = 0.057191 + 0.812008I$	$-0.89506 + 1.64854I$	$-1.59568 - 3.27710I$
$u = -0.620636 - 0.594308I$ $a = -0.605489 - 0.728544I$ $b = 0.057191 - 0.812008I$	$-0.89506 - 1.64854I$	$-1.59568 + 3.27710I$
$u = 0.240502 + 0.822969I$ $a = -0.329651 + 0.513210I$ $b = 0.501638 + 0.147864I$	$1.54778 + 0.98121I$	$6.08132 - 1.87254I$
$u = 0.240502 - 0.822969I$ $a = -0.329651 - 0.513210I$ $b = 0.501638 - 0.147864I$	$1.54778 - 0.98121I$	$6.08132 + 1.87254I$
$u = -0.593121 + 1.014040I$ $a = -0.296194 + 1.000500I$ $b = 0.838868 + 0.893772I$	$0.40807 + 2.90881I$	0
$u = -0.593121 - 1.014040I$ $a = -0.296194 - 1.000500I$ $b = 0.838868 - 0.893772I$	$0.40807 - 2.90881I$	0
$u = -1.218960 + 0.602440I$ $a = 0.242601 + 1.087790I$ $b = 0.95105 + 1.17983I$	$-5.97727 + 1.40898I$	0
$u = -1.218960 - 0.602440I$ $a = 0.242601 - 1.087790I$ $b = 0.95105 - 1.17983I$	$-5.97727 - 1.40898I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.062633 + 0.568284I$ $a = -0.89194 + 1.92406I$ $b = 1.037550 + 0.627385I$	$2.49609 + 5.04306I$	$4.14627 - 10.34955I$
$u = -0.062633 - 0.568284I$ $a = -0.89194 - 1.92406I$ $b = 1.037550 - 0.627385I$	$2.49609 - 5.04306I$	$4.14627 + 10.34955I$
$u = -1.26166 + 0.95513I$ $a = 0.035716 - 0.830069I$ $b = -0.747763 - 1.081370I$	$-5.36512 + 5.09529I$	0
$u = -1.26166 - 0.95513I$ $a = 0.035716 + 0.830069I$ $b = -0.747763 + 1.081370I$	$-5.36512 - 5.09529I$	0
$u = -1.45922 + 0.74935I$ $a = -0.234481 - 0.798219I$ $b = -0.940309 - 0.989071I$	$-5.17774 + 5.90499I$	0
$u = -1.45922 - 0.74935I$ $a = -0.234481 + 0.798219I$ $b = -0.940309 + 0.989071I$	$-5.17774 - 5.90499I$	0
$u = -1.27724 + 1.06097I$ $a = 0.038188 + 0.956845I$ $b = 1.06395 + 1.18161I$	$-4.2629 + 20.2286I$	0
$u = -1.27724 - 1.06097I$ $a = 0.038188 - 0.956845I$ $b = 1.06395 - 1.18161I$	$-4.2629 - 20.2286I$	0
$u = -1.24188 + 1.13304I$ $a = 0.028366 - 0.909730I$ $b = -0.99553 - 1.16192I$	$-5.60137 + 11.70800I$	0
$u = -1.24188 - 1.13304I$ $a = 0.028366 + 0.909730I$ $b = -0.99553 + 1.16192I$	$-5.60137 - 11.70800I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.003667 + 0.237046I$ $a = -2.94819 - 2.24065I$ $b = -0.520327 + 0.707073I$	$-1.89594 + 2.12626I$	$-1.09090 - 3.98101I$
$u = 0.003667 - 0.237046I$ $a = -2.94819 + 2.24065I$ $b = -0.520327 - 0.707073I$	$-1.89594 - 2.12626I$	$-1.09090 + 3.98101I$
$u = -1.43708 + 1.34143I$ $a = 0.060155 - 0.374617I$ $b = -0.416075 - 0.619050I$	$-4.05984 + 4.16834I$	0
$u = -1.43708 - 1.34143I$ $a = 0.060155 + 0.374617I$ $b = -0.416075 + 0.619050I$	$-4.05984 - 4.16834I$	0
$u = -1.73010 + 1.21293I$ $a = 0.178166 - 0.282307I$ $b = -0.034172 - 0.704524I$	$-5.55355 - 1.97987I$	0
$u = -1.73010 - 1.21293I$ $a = 0.178166 + 0.282307I$ $b = -0.034172 + 0.704524I$	$-5.55355 + 1.97987I$	0
$u = -1.93940 + 0.86304I$ $a = 0.299482 + 0.276653I$ $b = 0.819579 + 0.278076I$	$-1.09814 + 9.90729I$	0
$u = -1.93940 - 0.86304I$ $a = 0.299482 - 0.276653I$ $b = 0.819579 - 0.278076I$	$-1.09814 - 9.90729I$	0
$u = -1.60805 + 1.94539I$ $a = -0.195384 + 0.095348I$ $b = -0.128699 + 0.533421I$	$-3.10815 - 10.44340I$	0
$u = -1.60805 - 1.94539I$ $a = -0.195384 - 0.095348I$ $b = -0.128699 - 0.533421I$	$-3.10815 + 10.44340I$	0

II. $\boldsymbol{I_2^u =}$
$\boldsymbol{\langle 2.23\times10^8u^{46}-4.15\times10^9u^{45}+\cdots+2.28\times10^6b+6.71\times10^9,\ -2.24\times10^9au^{46}-2.13\times10^{10}u^{46}+\cdots-1.62\times10^{10}a-8.35\times10^{10},\ u^{47}-14u^{46}+\cdots+30u-3\rangle}$

(i) Arc colorings

$$a_2 = \begin{pmatrix}1\\0\end{pmatrix}$$
$$a_9 = \begin{pmatrix}0\\u\end{pmatrix}$$
$$a_3 = \begin{pmatrix}1\\u^2\end{pmatrix}$$
$$a_6 = \begin{pmatrix}a\\-97.6410u^{46}+1820.49u^{45}+\cdots+22316.5u-2942.89\end{pmatrix}$$
$$a_7 = \begin{pmatrix}97.6410u^{46}-1820.49u^{45}+\cdots+a+2942.89\\-875.274u^{46}+11767.0u^{45}+\cdots+36214.9u-4303.44\end{pmatrix}$$
$$a_{10} = \begin{pmatrix}97.6410au^{46}+6581.46u^{46}+\cdots+2942.89a+28024.0\\4213.21u^{46}-56627.3u^{45}+\cdots-169419.u+19744.4\end{pmatrix}$$
$$a_1 = \begin{pmatrix}-3947.68au^{46}-9825.94u^{46}+\cdots-16530.6a-44744.7\\-3404.42u^{46}+45900.4u^{45}+\cdots+143381.u-16838.2\end{pmatrix}$$
$$a_4 = \begin{pmatrix}20.4112au^{46}-4497.13u^{46}+\cdots-75.8750a-19073.6\\121.715au^{46}+2423.70u^{46}+\cdots-32.4492a+11974.6\end{pmatrix}$$
$$a_5 = \begin{pmatrix}97.6410u^{46}-1820.49u^{45}+\cdots+a+2942.89\\-97.6410u^{46}+1820.49u^{45}+\cdots+22316.5u-2942.89\end{pmatrix}$$
$$a_8 = \begin{pmatrix}875.274au^{46}+5244.35u^{46}+\cdots+4303.44a+22464.4\\-777.633au^{46}-2876.10u^{46}+\cdots-1360.55a-14184.8\end{pmatrix}$$
$$a_{11} = \begin{pmatrix}2411.09au^{46}+5244.06u^{46}+\cdots+5482.49a+8858.44\\-123.596au^{46}+924.784u^{46}+\cdots+518.225a-1814.05\end{pmatrix}$$
$$a_{11} = \begin{pmatrix}2411.09au^{46}+5244.06u^{46}+\cdots+5482.49a+8858.44\\-123.596au^{46}+924.784u^{46}+\cdots+518.225a-1814.05\end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= \frac{1922246023}{142608}u^{46} - \frac{103339844495}{570432}u^{45} + \cdots - \frac{317627554903}{570432}u + \frac{12453313365}{190144}$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$(u^{47} - 13u^{46} + \cdots + 193u - 27)^2$
c_2	$(u^{47} - 14u^{46} + \cdots + 30u - 3)^2$
c_3, c_{10}	$3(3u^{94} + 24u^{93} + \cdots + 45u - 1)$
c_4, c_{11}	$3(3u^{94} + 15u^{93} + \cdots - 14505u - 1083)$
c_5, c_9	$3(3u^{94} + 3u^{93} + \cdots - 93u - 3)$
c_6, c_8	$3(3u^{94} + 6u^{93} + \cdots + 9495938u - 2259497)$
c_7	$(u^{47} + 10u^{46} + \cdots + 18u + 3)^2$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$(y^{47} + 9y^{46} + \cdots - 11945y - 729)^2$
c_2	$(y^{47} - 12y^{46} + \cdots + 138y - 9)^2$
c_3, c_{10}	$9(9y^{94} - 156y^{93} + \cdots - 451y + 1)$
c_4, c_{11}	$9(9y^{94} - 165y^{93} + \cdots + 1.44834 \times 10^7 y + 1172889)$
c_5, c_9	$9(9y^{94} + 195y^{93} + \cdots - 885y + 9)$
c_6, c_8	$9(9y^{94} - 318y^{93} + \cdots - 1.81298 \times 10^{14} y + 5.10533 \times 10^{12})$
c_7	$(y^{47} - 8y^{46} + \cdots + 120y - 9)^2$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.975919+0.025887I$ $a=-0.095171-0.809640I$ $b=-1.04838-1.34279I$	$-5.74704-2.00651I$	0
$u=-0.975919+0.025887I$ $a=-1.03702-1.40343I$ $b=-0.113839-0.787679I$	$-5.74704-2.00651I$	0
$u=-0.975919-0.025887I$ $a=-0.095171+0.809640I$ $b=-1.04838+1.34279I$	$-5.74704+2.00651I$	0
$u=-0.975919-0.025887I$ $a=-1.03702+1.40343I$ $b=-0.113839+0.787679I$	$-5.74704+2.00651I$	0
$u=0.659230+0.697787I$ $a=-0.690219+0.639282I$ $b=-0.142130-0.073719I$	$1.93536+0.83864I$	0
$u=0.659230+0.697787I$ $a=0.157502-0.054887I$ $b=0.901096+0.060192I$	$1.93536+0.83864I$	0
$u=0.659230-0.697787I$ $a=-0.690219-0.639282I$ $b=-0.142130+0.073719I$	$1.93536-0.83864I$	0
$u=0.659230-0.697787I$ $a=0.157502+0.054887I$ $b=0.901096-0.060192I$	$1.93536-0.83864I$	0
$u=0.791795+0.721190I$ $a=-0.345700+1.037280I$ $b=-0.800003+0.474165I$	$3.87155-2.62212I$	0
$u=0.791795+0.721190I$ $a=0.254108-0.830297I$ $b=1.021800-0.572001I$	$3.87155-2.62212I$	0

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.791795 - 0.721190I$ $a = -0.345700 - 1.037280I$ $b = -0.800003 - 0.474165I$	$3.87155 + 2.62212I$	0
$u = 0.791795 - 0.721190I$ $a = 0.254108 + 0.830297I$ $b = 1.021800 + 0.572001I$	$3.87155 + 2.62212I$	0
$u = 0.716995 + 0.585257I$ $a = 0.211947 - 0.998129I$ $b = 1.08043 - 1.20236I$	$1.44210 - 5.12633I$	0
$u = 0.716995 + 0.585257I$ $a = -0.08286 + 1.74458I$ $b = -0.736127 + 0.591610I$	$1.44210 - 5.12633I$	0
$u = 0.716995 - 0.585257I$ $a = 0.211947 + 0.998129I$ $b = 1.08043 + 1.20236I$	$1.44210 + 5.12633I$	0
$u = 0.716995 - 0.585257I$ $a = -0.08286 - 1.74458I$ $b = -0.736127 - 0.591610I$	$1.44210 + 5.12633I$	0
$u = 0.548341 + 0.960440I$ $a = -0.089172 + 0.923171I$ $b = -0.38411 + 1.47635I$	$-0.215372 - 0.545445I$	0
$u = 0.548341 + 0.960440I$ $a = -0.987086 - 0.963483I$ $b = 0.935547 - 0.420568I$	$-0.215372 - 0.545445I$	0
$u = 0.548341 - 0.960440I$ $a = -0.089172 - 0.923171I$ $b = -0.38411 - 1.47635I$	$-0.215372 + 0.545445I$	0
$u = 0.548341 - 0.960440I$ $a = -0.987086 + 0.963483I$ $b = 0.935547 + 0.420568I$	$-0.215372 + 0.545445I$	0

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = -0.643393 + 1.000610I$ $a = 0.015163 - 0.916515I$ $b = -0.96718 - 1.40104I$	$0.77111 + 11.39920I$	0
$u = -0.643393 + 1.000610I$ $a = 0.55090 - 1.32082I$ $b = -0.907319 - 0.604852I$	$0.77111 + 11.39920I$	0
$u = -0.643393 - 1.000610I$ $a = 0.015163 + 0.916515I$ $b = -0.96718 + 1.40104I$	$0.77111 - 11.39920I$	0
$u = -0.643393 - 1.000610I$ $a = 0.55090 + 1.32082I$ $b = -0.907319 + 0.604852I$	$0.77111 - 11.39920I$	0
$u = 0.743194 + 0.234677I$ $a = 0.126137 - 0.765467I$ $b = -1.42530 - 1.15084I$	$-4.71436 - 3.28575I$	$-12.0478 + 10.0322I$
$u = 0.743194 + 0.234677I$ $a = 2.18855 + 0.85743I$ $b = -0.273382 + 0.539289I$	$-4.71436 - 3.28575I$	$-12.0478 + 10.0322I$
$u = 0.743194 - 0.234677I$ $a = 0.126137 + 0.765467I$ $b = -1.42530 + 1.15084I$	$-4.71436 + 3.28575I$	$-12.0478 - 10.0322I$
$u = 0.743194 - 0.234677I$ $a = 2.18855 - 0.85743I$ $b = -0.273382 - 0.539289I$	$-4.71436 + 3.28575I$	$-12.0478 - 10.0322I$
$u = 0.563178 + 1.087130I$ $a = -0.528826 + 0.308180I$ $b = -0.320532 - 0.491610I$	$-0.26046 + 4.20130I$	0
$u = 0.563178 + 1.087130I$ $a = 0.476952 - 0.047762I$ $b = 0.632856 + 0.401342I$	$-0.26046 + 4.20130I$	0

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.563178 - 1.087130I$ $a = -0.528826 - 0.308180I$ $b = -0.320532 + 0.491610I$	$-0.26046 - 4.20130I$	0
$u = 0.563178 - 1.087130I$ $a = 0.476952 + 0.047762I$ $b = 0.632856 - 0.401342I$	$-0.26046 - 4.20130I$	0
$u = 0.716855 + 0.240599I$ $a = -0.311842 - 1.295060I$ $b = 1.25725 - 1.15394I$	$-5.08486 - 6.93394I$	$-6.67195 + 7.26599I$
$u = 0.716855 + 0.240599I$ $a = -1.09070 + 1.97580I$ $b = -0.088046 + 1.003400I$	$-5.08486 - 6.93394I$	$-6.67195 + 7.26599I$
$u = 0.716855 - 0.240599I$ $a = -0.311842 + 1.295060I$ $b = 1.25725 + 1.15394I$	$-5.08486 + 6.93394I$	$-6.67195 - 7.26599I$
$u = 0.716855 - 0.240599I$ $a = -1.09070 - 1.97580I$ $b = -0.088046 - 1.003400I$	$-5.08486 + 6.93394I$	$-6.67195 - 7.26599I$
$u = 0.722078 + 0.185952I$ $a = -0.156126 + 1.004530I$ $b = 1.42280 + 1.34318I$	$-3.74054 - 11.30760I$	$-5.50352 + 11.29218I$
$u = 0.722078 + 0.185952I$ $a = -2.29711 - 1.26859I$ $b = 0.299530 - 0.696319I$	$-3.74054 - 11.30760I$	$-5.50352 + 11.29218I$
$u = 0.722078 - 0.185952I$ $a = -0.156126 - 1.004530I$ $b = 1.42280 - 1.34318I$	$-3.74054 + 11.30760I$	$-5.50352 - 11.29218I$
$u = 0.722078 - 0.185952I$ $a = -2.29711 + 1.26859I$ $b = 0.299530 + 0.696319I$	$-3.74054 + 11.30760I$	$-5.50352 - 11.29218I$

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = -0.502161 + 0.502278I$ $a = -0.811589 + 0.399482I$ $b = 0.507340 + 1.250810I$	$-1.33437 + 1.73522I$	$1.00000 + 1.18204I$
$u = -0.502161 + 0.502278I$ $a = -0.74039 + 1.75030I$ $b = -0.206898 + 0.608248I$	$-1.33437 + 1.73522I$	$1.00000 + 1.18204I$
$u = -0.502161 - 0.502278I$ $a = -0.811589 - 0.399482I$ $b = 0.507340 - 1.250810I$	$-1.33437 - 1.73522I$	$1.00000 - 1.18204I$
$u = -0.502161 - 0.502278I$ $a = -0.74039 - 1.75030I$ $b = -0.206898 - 0.608248I$	$-1.33437 - 1.73522I$	$1.00000 - 1.18204I$
$u = 0.683669 + 0.161155I$ $a = 0.691014 + 0.943770I$ $b = -1.26363 + 0.80256I$	$-4.37399 - 1.07626I$	$-9.22616 - 2.29912I$
$u = 0.683669 + 0.161155I$ $a = 1.48887 - 1.52485I$ $b = -0.320332 - 0.756587I$	$-4.37399 - 1.07626I$	$-9.22616 - 2.29912I$
$u = 0.683669 - 0.161155I$ $a = 0.691014 - 0.943770I$ $b = -1.26363 - 0.80256I$	$-4.37399 + 1.07626I$	$-9.22616 + 2.29912I$
$u = 0.683669 - 0.161155I$ $a = 1.48887 + 1.52485I$ $b = -0.320332 + 0.756587I$	$-4.37399 + 1.07626I$	$-9.22616 + 2.29912I$
$u = -0.786407 + 1.095290I$ $a = -0.182272 + 1.111210I$ $b = 0.654941 + 0.857680I$	$0.65352 + 2.88892I$	0
$u = -0.786407 + 1.095290I$ $a = -0.233409 + 0.765544I$ $b = 1.07376 + 1.07351I$	$0.65352 + 2.88892I$	0

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.786407 - 1.095290I$ $a = -0.182272 - 1.111210I$ $b = \quad 0.654941 - 0.857680I$	$0.65352 - 2.88892I$	0
$u = -0.786407 - 1.095290I$ $a = -0.233409 - 0.765544I$ $b = \quad 1.07376 - 1.07351I$	$0.65352 - 2.88892I$	0
$u = -0.608189 + 0.167810I$ $a = -0.18394 + 1.42724I$ $b = -1.03173 + 1.22867I$	$-1.98777 + 3.16700I$	$-4.3128 - 13.8397I$
$u = -0.608189 + 0.167810I$ $a = -2.09437 + 1.44234I$ $b = \quad 0.127634 + 0.898898I$	$-1.98777 + 3.16700I$	$-4.3128 - 13.8397I$
$u = -0.608189 - 0.167810I$ $a = -0.18394 - 1.42724I$ $b = -1.03173 - 1.22867I$	$-1.98777 - 3.16700I$	$-4.3128 + 13.8397I$
$u = -0.608189 - 0.167810I$ $a = -2.09437 - 1.44234I$ $b = \quad 0.127634 - 0.898898I$	$-1.98777 - 3.16700I$	$-4.3128 + 13.8397I$
$u = \quad 1.16636 + 0.87110I$ $a = \quad 0.122373 - 1.028040I$ $b = \quad 1.07792 - 1.22753I$	$-2.00176 - 11.29870I$	0
$u = \quad 1.16636 + 0.87110I$ $a = -0.088680 + 1.118680I$ $b = -1.03826 + 1.09246I$	$-2.00176 - 11.29870I$	0
$u = \quad 1.16636 - 0.87110I$ $a = \quad 0.122373 + 1.028040I$ $b = \quad 1.07792 + 1.22753I$	$-2.00176 + 11.29870I$	0
$u = \quad 1.16636 - 0.87110I$ $a = -0.088680 - 1.118680I$ $b = -1.03826 - 1.09246I$	$-2.00176 + 11.29870I$	0

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 1.21053 + 0.81525I$ $a = 0.542590 + 0.756883I$ $b = -0.322362 + 0.629048I$	$-2.23455 - 6.04607I$	0
$u = 1.21053 + 0.81525I$ $a = -0.057558 - 0.480884I$ $b = -0.039775 - 1.358570I$	$-2.23455 - 6.04607I$	0
$u = 1.21053 - 0.81525I$ $a = 0.542590 - 0.756883I$ $b = -0.322362 - 0.629048I$	$-2.23455 + 6.04607I$	0
$u = 1.21053 - 0.81525I$ $a = -0.057558 + 0.480884I$ $b = -0.039775 + 1.358570I$	$-2.23455 + 6.04607I$	0
$u = -0.470296 + 0.186708I$ $a = -0.295873 + 1.159110I$ $b = 1.40842 + 1.93656I$	$-1.52745 - 1.61554I$	$-1.60105 - 0.11717I$
$u = -0.470296 + 0.186708I$ $a = 1.17484 + 4.58415I$ $b = 0.077266 + 0.600364I$	$-1.52745 - 1.61554I$	$-1.60105 - 0.11717I$
$u = -0.470296 - 0.186708I$ $a = -0.295873 - 1.159110I$ $b = 1.40842 - 1.93656I$	$-1.52745 + 1.61554I$	$-1.60105 + 0.11717I$
$u = -0.470296 - 0.186708I$ $a = 1.17484 - 4.58415I$ $b = 0.077266 - 0.600364I$	$-1.52745 + 1.61554I$	$-1.60105 + 0.11717I$
$u = 1.18764 + 0.95978I$ $a = 0.082132 - 1.031720I$ $b = 0.78545 - 1.22589I$	$-5.61718 - 10.70300I$	0
$u = 1.18764 + 0.95978I$ $a = 0.104538 + 0.947719I$ $b = -1.08778 + 1.14649I$	$-5.61718 - 10.70300I$	0

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 1.18764 - 0.95978I$ $a = 0.082132 + 1.031720I$ $b = 0.78545 + 1.22589I$	$-5.61718 + 10.70300I$	0
$u = 1.18764 - 0.95978I$ $a = 0.104538 - 0.947719I$ $b = -1.08778 - 1.14649I$	$-5.61718 + 10.70300I$	0
$u = -0.77762 + 1.35805I$ $a = 0.032014 - 0.538519I$ $b = -0.1212740 + 0.0325207I$	$-0.08320 + 5.80714I$	0
$u = -0.77762 + 1.35805I$ $a = -0.0565417 - 0.0569243I$ $b = -0.706440 - 0.462240I$	$-0.08320 + 5.80714I$	0
$u = -0.77762 - 1.35805I$ $a = 0.032014 + 0.538519I$ $b = -0.1212740 - 0.0325207I$	$-0.08320 - 5.80714I$	0
$u = -0.77762 - 1.35805I$ $a = -0.0565417 + 0.0569243I$ $b = -0.706440 + 0.462240I$	$-0.08320 - 5.80714I$	0
$u = -1.58144 + 0.09381I$ $a = 0.463468 - 0.619520I$ $b = 0.088917 - 0.687357I$	$-2.60428 - 5.02841I$	0
$u = -1.58144 + 0.09381I$ $a = 0.081721 - 0.429793I$ $b = 0.674827 - 1.023210I$	$-2.60428 - 5.02841I$	0
$u = -1.58144 - 0.09381I$ $a = 0.463468 + 0.619520I$ $b = 0.088917 + 0.687357I$	$-2.60428 + 5.02841I$	0
$u = -1.58144 - 0.09381I$ $a = 0.081721 + 0.429793I$ $b = 0.674827 + 1.023210I$	$-2.60428 + 5.02841I$	0

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.166825 + 0.327662I$ $a = -0.573099 - 0.554415I$ $b = -1.66992 + 1.58351I$	$-1.67841 + 1.93955I$	$15.1921 - 13.7852I$
$u = 0.166825 + 0.327662I$ $a = -1.77725 - 6.00135I$ $b = -0.086053 + 0.280273I$	$-1.67841 + 1.93955I$	$15.1921 - 13.7852I$
$u = 0.166825 - 0.327662I$ $a = -0.573099 + 0.554415I$ $b = -1.66992 - 1.58351I$	$-1.67841 - 1.93955I$	$15.1921 + 13.7852I$
$u = 0.166825 - 0.327662I$ $a = -1.77725 + 6.00135I$ $b = -0.086053 - 0.280273I$	$-1.67841 - 1.93955I$	$15.1921 + 13.7852I$
$u = 1.64271$ $a = -0.742401$ $b = -1.13646$	3.08221	0
$u = 1.64271$ $a = 0.691818$ $b = 1.21955$	3.08221	0
$u = 1.50030 + 0.91446I$ $a = -0.108637 + 0.809699I$ $b = -0.602944 + 0.780086I$	$-1.20562 - 5.42950I$	0
$u = 1.50030 + 0.91446I$ $a = 0.061948 - 0.557711I$ $b = 0.90342 - 1.11545I$	$-1.20562 - 5.42950I$	0
$u = 1.50030 - 0.91446I$ $a = -0.108637 - 0.809699I$ $b = -0.602944 - 0.780086I$	$-1.20562 + 5.42950I$	0
$u = 1.50030 - 0.91446I$ $a = 0.061948 + 0.557711I$ $b = 0.90342 + 1.11545I$	$-1.20562 + 5.42950I$	0

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 1.14708 + 1.44106I$ $a = -0.396893 - 0.220062I$ $b = 0.092839 - 0.491834I$	$-4.45949 + 2.25311I$	0
$u = 1.14708 + 1.44106I$ $a = 0.177533 + 0.205739I$ $b = 0.138145 + 0.824376I$	$-4.45949 + 2.25311I$	0
$u = 1.14708 - 1.44106I$ $a = -0.396893 + 0.220062I$ $b = 0.092839 + 0.491834I$	$-4.45949 - 2.25311I$	0
$u = 1.14708 - 1.44106I$ $a = 0.177533 - 0.205739I$ $b = 0.138145 - 0.824376I$	$-4.45949 - 2.25311I$	0

III. $\boldsymbol{I^u_3 = \langle -1345u^{15} + 7729u^{14} + \cdots + 3655b + 38,\ -38u^{15} - 1117u^{14} + \cdots + 3655a + 12877,\ u^{16} - 6u^{15} + \cdots + u + 1\rangle}$

(i) Arc colorings

$$a_2 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$
$$a_9 = \begin{pmatrix} 0 \\ u \end{pmatrix}$$
$$a_3 = \begin{pmatrix} 1 \\ u^2 \end{pmatrix}$$
$$a_6 = \begin{pmatrix} 0.0103967u^{15} + 0.305609u^{14} + \cdots + 0.0399453u - 3.52312 \\ 0.367989u^{15} - 2.11464u^{14} + \cdots - 3.53352u - 0.0103967 \end{pmatrix}$$
$$a_7 = \begin{pmatrix} -0.264295u^{15} + 1.90479u^{14} + \cdots + 3.19508u - 3.88071 \\ 0.671409u^{15} - 3.59042u^{14} + \cdots - 3.20985u + 0.0385773 \end{pmatrix}$$
$$a_{10} = \begin{pmatrix} -1.59726u^{15} + 9.25937u^{14} + \cdots + 4.17893u - 1.00082 \\ -0.324213u^{15} + 1.66457u^{14} + \cdots + 1.59644u + 1.59726 \end{pmatrix}$$
$$a_1 = \begin{pmatrix} -1.48892u^{15} + 8.37045u^{14} + \cdots - 2.61532u + 0.926676 \\ -0.843776u^{15} + 3.85007u^{14} + \cdots + 3.33707u + 1.81313 \end{pmatrix}$$
$$a_4 = \begin{pmatrix} 1.84268u^{15} - 11.7138u^{14} + \cdots - 8.28865u + 3.94720 \\ -1.07250u^{15} + 5.32668u^{14} + \cdots + 0.458276u - 1.27825 \end{pmatrix}$$
$$a_5 = \begin{pmatrix} -0.357592u^{15} + 2.42025u^{14} + \cdots + 3.57346u - 3.51272 \\ 0.367989u^{15} - 2.11464u^{14} + \cdots - 3.53352u - 0.0103967 \end{pmatrix}$$
$$a_8 = \begin{pmatrix} -1.22955u^{15} + 7.27880u^{14} + \cdots + 4.90752u - 3.87114 \\ -0.0435021u^{15} + 0.316005u^{14} + \cdots - 0.325034u + 1.27305 \end{pmatrix}$$
$$a_{11} = \begin{pmatrix} -2.21423u^{15} + 13.9713u^{14} + \cdots - 6.77045u - 0.315732 \\ -0.0943912u^{15} - 0.148290u^{14} + \cdots + 3.42681u + 1.52832 \end{pmatrix}$$
$$a_{11} = \begin{pmatrix} -2.21423u^{15} + 13.9713u^{14} + \cdots - 6.77045u - 0.315732 \\ -0.0943912u^{15} - 0.148290u^{14} + \cdots + 3.42681u + 1.52832 \end{pmatrix}$$

(ii) Obstruction class $= 1$

(iii) Cusp Shapes $= -\frac{12541}{3655}u^{15} + \frac{63901}{3655}u^{14} + \cdots + \frac{29533}{3655}u - \frac{10346}{3655}$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{16} - 9u^{15} + \cdots - 33u + 9$
c_2	$u^{16} - 6u^{15} + \cdots + u + 1$
c_3, c_{10}	$u^{16} + 4u^{15} + \cdots + 2u - 1$
c_4, c_{11}	$u^{16} - u^{14} + \cdots + 3u - 1$
c_5, c_9	$u^{16} + u^{15} + \cdots + u^2 - 1$
c_6, c_8	$u^{16} + u^{15} + \cdots + 2u - 1$
c_7	$u^{16} + 8u^{15} + \cdots - 3u^2 + 1$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{16} - 13y^{15} + \cdots - 27y + 81$
c_2	$y^{16} - 10y^{15} + \cdots - 15y + 1$
c_3, c_{10}	$y^{16} + 2y^{14} + \cdots - 26y + 1$
c_4, c_{11}	$y^{16} - 2y^{15} + \cdots + 13y + 1$
c_5, c_9	$y^{16} - 3y^{15} + \cdots - 2y + 1$
c_6, c_8	$y^{16} - 7y^{15} + \cdots + 8y^2 + 1$
c_7	$y^{16} + 2y^{15} + \cdots - 6y + 1$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_3^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = -0.843774 + 0.020472I$ $a = -0.814747 + 0.307970I$ $b = 0.681158 - 0.276536I$	$-4.17810 + 2.37838I$	$-5.85782 - 3.30047I$
$u = -0.843774 - 0.020472I$ $a = -0.814747 - 0.307970I$ $b = 0.681158 + 0.276536I$	$-4.17810 - 2.37838I$	$-5.85782 + 3.30047I$
$u = 0.650319 + 1.149000I$ $a = 0.299647 + 0.918726I$ $b = -0.860745 + 0.941758I$	$0.40659 - 2.51099I$	$-3.33911 - 9.63855I$
$u = 0.650319 - 1.149000I$ $a = 0.299647 - 0.918726I$ $b = -0.860745 - 0.941758I$	$0.40659 + 2.51099I$	$-3.33911 + 9.63855I$
$u = -1.028220 + 0.857975I$ $a = -0.029407 + 0.419644I$ $b = -0.329808 - 0.456715I$	$-2.63766 - 10.07530I$	$0.70439 + 5.81996I$
$u = -1.028220 - 0.857975I$ $a = -0.029407 - 0.419644I$ $b = -0.329808 + 0.456715I$	$-2.63766 + 10.07530I$	$0.70439 - 5.81996I$
$u = 1.357830 + 0.318055I$ $a = -0.263706 - 0.623927I$ $b = -0.159624 - 0.931056I$	$-3.99183 + 4.14407I$	$-8.04295 - 6.13289I$
$u = 1.357830 - 0.318055I$ $a = -0.263706 + 0.623927I$ $b = -0.159624 + 0.931056I$	$-3.99183 - 4.14407I$	$-8.04295 + 6.13289I$
$u = 0.494805 + 0.313135I$ $a = -0.76630 + 1.72817I$ $b = -0.920318 + 0.615155I$	$2.37780 - 3.65031I$	$5.77914 + 4.75975I$
$u = 0.494805 - 0.313135I$ $a = -0.76630 - 1.72817I$ $b = -0.920318 - 0.615155I$	$2.37780 + 3.65031I$	$5.77914 - 4.75975I$

Solutions to I_3^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 1.09063 + 0.91474I$ $a = 0.001019 - 1.085380I$ $b = 0.99396 - 1.18281I$	$-3.41791 - 10.94270I$	$-2.27266 + 9.01140I$
$u = 1.09063 - 0.91474I$ $a = 0.001019 + 1.085380I$ $b = 0.99396 + 1.18281I$	$-3.41791 + 10.94270I$	$-2.27266 - 9.01140I$
$u = 1.51464$ $a = -0.673129$ $b = -1.01955$	3.85452	16.3090
$u = -0.317141 + 0.174078I$ $a = -1.95569 - 2.13567I$ $b = 0.992001 + 0.336866I$	$-1.67458 + 2.27154I$	$-1.49720 - 3.30379I$
$u = -0.317141 - 0.174078I$ $a = -1.95569 + 2.13567I$ $b = 0.992001 - 0.336866I$	$-1.67458 - 2.27154I$	$-1.49720 + 3.30379I$
$u = 1.67647$ $a = 0.731484$ $b = 1.22631$	2.63767	-12.2560

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

(i) Arc colorings

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

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

$$a_3 = \begin{pmatrix} 1 \\ -3u - 3 \end{pmatrix}$$

$$a_6 = \begin{pmatrix} a \\ -au - \frac{2}{3}u - 1 \end{pmatrix}$$

$$a_7 = \begin{pmatrix} -2au - 2a + \frac{2}{3}u + 1 \\ -4au - 9a + \frac{1}{3}u + 2 \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} -\frac{2}{3}au - a - \frac{1}{3}u \\ -1 \end{pmatrix}$$

$$a_1 = \begin{pmatrix} \frac{2}{3}au + a + \frac{1}{3}u + 1 \\ 1 \end{pmatrix}$$

$$a_4 = \begin{pmatrix} -au - \frac{7}{3}a + \frac{2}{3}u + \frac{4}{3} \\ -au - 3a - 2u - 2 \end{pmatrix}$$

$$a_5 = \begin{pmatrix} au + a + \frac{2}{3}u + 1 \\ -au - \frac{2}{3}u - 1 \end{pmatrix}$$

$$a_8 = \begin{pmatrix} \frac{1}{3}au + 2a - \frac{2}{3}u - 1 \\ -au - 3a + \frac{7}{3}u + 2 \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} -\frac{1}{3}au - a - u - \frac{4}{3} \\ au - a - \frac{5}{3} \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} -\frac{1}{3}au - a - u - \frac{4}{3} \\ au - a - \frac{5}{3} \end{pmatrix}$$

(ii) Obstruction class $= 1$

(iii) Cusp Shapes $= -\frac{145}{9}u - \frac{65}{3}$

(iv) u-Polynomials at the component

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

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$(y-1)^4$
c_2, c_7	$(y^2-3y+9)^2$
c_3, c_{10}	$9(9y^4+33y^3+85y^2-11y+1)$
c_4, c_5, c_9 c_{11}	$9(9y^4+24y^3+34y^2+15y+9)$
c_6, c_8	$9(9y^4-21y^3+58y^2-32y+49)$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_4^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-1.50000+0.86603I$ $a=-0.103734+0.733946I$ $b=\quad 0.480016+0.613405I$	$-1.64493+6.08965I$	$2.5000-13.9526I$
$u=-1.50000+0.86603I$ $a=-0.062933-0.445271I$ $b=-0.480016-1.190760I$	$-1.64493+6.08965I$	$2.5000-13.9526I$
$u=-1.50000-0.86603I$ $a=-0.103734-0.733946I$ $b=\quad 0.480016-0.613405I$	$-1.64493-6.08965I$	$2.5000+13.9526I$
$u=-1.50000-0.86603I$ $a=-0.062933+0.445271I$ $b=-0.480016+1.190760I$	$-1.64493-6.08965I$	$2.5000+13.9526I$

V. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1	$((u+1)^4)(u^{16}-9u^{15}+\cdots-33u+9)$ $\cdot(u^{30}+26u^{29}+\cdots+12288u+1024)$ $\cdot(u^{47}-13u^{46}+\cdots+193u-27)^2$
c_2	$((u^2+3u+3)^2)(u^{16}-6u^{15}+\cdots+u+1)$ $\cdot(u^{30}+29u^{29}+\cdots+5632u+512)(u^{47}-14u^{46}+\cdots+30u-3)^2$
c_3, c_{10}	$9(3u^4+3u^3+\cdots-5u+1)(u^{16}+4u^{15}+\cdots+2u-1)$ $\cdot(u^{30}-u^{28}+\cdots-6u+1)(3u^{94}+24u^{93}+\cdots+45u-1)$
c_4, c_{11}	$9(3u^4+4u^2+3u+3)(u^{16}-u^{14}+\cdots+3u-1)$ $\cdot(u^{30}+8u^{28}+\cdots+3u+1)(3u^{94}+15u^{93}+\cdots-14505u-1083)$
c_5, c_9	$9(3u^4+4u^2+3u+3)(u^{16}+u^{15}+\cdots+u^2-1)(u^{30}-u^{29}+\cdots-2u+1)$ $\cdot(3u^{94}+3u^{93}+\cdots-93u-3)$
c_6, c_8	$9(3u^4-3u^3+\cdots+2u+7)(u^{16}+u^{15}+\cdots+2u-1)$ $\cdot(u^{30}-u^{29}+\cdots+46u+27)$ $\cdot(3u^{94}+6u^{93}+\cdots+9495938u-2259497)$
c_7	$((u^2-3u+3)^2)(u^{16}+8u^{15}+\cdots-3u^2+1)$ $\cdot(u^{30}-19u^{29}+\cdots-288u+32)(u^{47}+10u^{46}+\cdots+18u+3)^2$

VI. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1	$((y-1)^4)(y^{16}-13y^{15}+\cdots-27y+81)$ $\cdot(y^{30}-2y^{29}+\cdots+12976128y+1048576)$ $\cdot(y^{47}+9y^{46}+\cdots-11945y-729)^2$
c_2	$((y^2-3y+9)^2)(y^{16}-10y^{15}+\cdots-15y+1)$ $\cdot(y^{30}-11y^{29}+\cdots+11665408y+262144)$ $\cdot(y^{47}-12y^{46}+\cdots+138y-9)^2$
c_3, c_{10}	$81(9y^4+33y^3+\cdots-11y+1)(y^{16}+2y^{14}+\cdots-26y+1)$ $\cdot(y^{30}-2y^{29}+\cdots-10y+1)(9y^{94}-156y^{93}+\cdots-451y+1)$
c_4, c_{11}	$81(9y^4+24y^3+\cdots+15y+9)(y^{16}-2y^{15}+\cdots+13y+1)$ $\cdot(y^{30}+16y^{29}+\cdots+33y+1)$ $\cdot(9y^{94}-165y^{93}+\cdots+14483427y+1172889)$
c_5, c_9	$81(9y^4+24y^3+\cdots+15y+9)(y^{16}-3y^{15}+\cdots-2y+1)$ $\cdot(y^{30}+3y^{29}+\cdots+6y+1)(9y^{94}+195y^{93}+\cdots-885y+9)$
c_6, c_8	$81(9y^4-21y^3+\cdots-32y+49)(y^{16}-7y^{15}+\cdots+8y^2+1)$ $\cdot(y^{30}-13y^{29}+\cdots-5896y+729)$ $\cdot(9y^{94}-318y^{93}+\cdots-181297638508792y+5105326693009)$
c_7	$((y^2-3y+9)^2)(y^{16}+2y^{15}+\cdots-6y+1)$ $\cdot(y^{30}+y^{29}+\cdots+11776y+1024)(y^{47}-8y^{46}+\cdots+120y-9)^2$