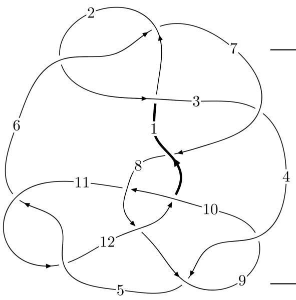
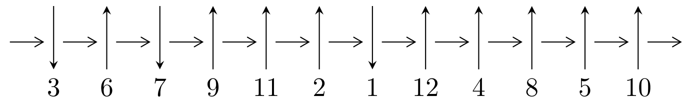
$12a_{0230}$ ($K12a_{0230}$)



A knot diagram[1]

Linearized knot diagam



Solving Sequence

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

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

$$\begin{aligned}
I_1^u = \langle &-11158891u^{48} - 471894272u^{47} + \cdots + 41943304b + 6878327209984,\\
&- 79952981u^{48} - 3436338262u^{47} + \cdots + 8388608a - 448987463155712,\\
&u^{49} + 44u^{48} + \cdots + 201326592u + 8388608\rangle\\
I_2^u = \langle &-3.30457 \times 10^{120}a^{45}u + 1.96555 \times 10^{120}a^{44}u + \cdots + 2.43626 \times 10^{123}a - 4.32752 \times 10^{122},\\
&- a^{45}u - 12a^{44}u + \cdots + 633a - 110,\ u^2 - u + 1\rangle\\
I_3^u = \langle &-22u^{23} - 61u^{22} + \cdots + b + 41,\ -38u^{23} - 111u^{22} + \cdots + a + 59,\ u^{24} + 3u^{23} + \cdots - 2u + 1\rangle
\end{aligned}$$

* 3 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 165 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. $\boldsymbol{I^u_1 = \langle -1.12\times 10^{7}u^{48} - 4.72\times 10^{8}u^{47} + \cdots + 4.19\times 10^{6}b + 6.88\times 10^{12},\ -8.00\times 10^{7}u^{48} - 3.44\times 10^{9}u^{47} + \cdots + 8.39\times 10^{6}a - 4.49\times 10^{14},\ u^{49} + 44u^{48} + \cdots + 201326592u + 8388608\rangle}$

(i) Arc colorings

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

$$a_{12} = \begin{pmatrix} 0 \\ u \end{pmatrix}$$

$$a_5 = \begin{pmatrix} 9.53114u^{48} + 409.643u^{47} + \cdots + 1.27596\times 10^{9}u + 5.35235\times 10^{7} \\ 2.66049u^{48} + 112.508u^{47} + \cdots - 1.29286\times 10^{7}u - 1639921 \end{pmatrix}$$

$$a_9 = \begin{pmatrix} 1 \\ -u^2 \end{pmatrix}$$

$$a_4 = \begin{pmatrix} -0.195494u^{48} - 11.2622u^{47} + \cdots - 5.89390\times 10^{8}u - 2.64295\times 10^{7} \\ 5.17357u^{48} + 225.387u^{47} + \cdots + 1.32808\times 10^{9}u + 5.76352\times 10^{7} \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} -0.000244141u^{48} - 0.0107422u^{47} + \cdots - 48128u - 2047.50 \\ -0.000488281u^{48} - 0.0209961u^{47} + \cdots - 49151.5u - 2048 \end{pmatrix}$$

$$a_6 = \begin{pmatrix} 14.0885u^{48} + 603.980u^{47} + \cdots + 1.57173\times 10^{9}u + 6.49774\times 10^{7} \\ -4.13982u^{48} - 186.093u^{47} + \cdots - 2.19280\times 10^{9}u - 9.69151\times 10^{7} \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} 0.000244141u^{48} + 0.0102539u^{47} + \cdots + 1023.50u + 0.500000 \\ -0.000488281u^{48} - 0.0209961u^{47} + \cdots - 49151.5u - 2048 \end{pmatrix}$$

$$a_1 = \begin{pmatrix} -0.00219727u^{48} - 0.0959473u^{47} + \cdots - 386048.u - 16384 \\ 0.000732422u^{48} + 0.0346680u^{47} + \cdots + 425985u + 18432 \end{pmatrix}$$

$$a_7 = \begin{pmatrix} -0.0363770u^{48} - 1.54468u^{47} + \cdots - 1803264u - 70655 \\ 0.0534668u^{48} + 2.30933u^{47} + \cdots + 7382016u + 311296 \end{pmatrix}$$

$$a_3 = \begin{pmatrix} 34.9112u^{48} + 1497.44u^{47} + \cdots + 4.47944\times 10^{9}u + 1.88451\times 10^{8} \\ -14.8198u^{48} - 653.719u^{47} + \cdots - 5.04287\times 10^{9}u - 2.20698\times 10^{8} \end{pmatrix}$$

$$a_2 = \begin{pmatrix} 13.8492u^{48} + 591.479u^{47} + \cdots + 1.33993\times 10^{9}u + 5.53213\times 10^{7} \\ -13.8870u^{48} - 602.707u^{47} + \cdots - 2.88876\times 10^{9}u - 1.24329\times 10^{8} \end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= \frac{1939025}{262144}u^{48} + \frac{175746237}{524288}u^{47} + \cdots + 4242276468u + 187028462$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{49} + 24u^{48} + \cdots + 108u - 16$
c_2, c_6	$u^{49} - 6u^{48} + \cdots + 38u - 4$
c_3	$u^{49} + 6u^{48} + \cdots - 2874u - 612$
c_4, c_5, c_9 c_{11}	$u^{49} + 17u^{47} + \cdots + 2u - 1$
c_7	$u^{49} - 30u^{48} + \cdots + 42842u - 3676$
c_8	$u^{49} - 44u^{48} + \cdots + 201326592u - 8388608$
c_{10}, c_{12}	$u^{49} - 2u^{48} + \cdots - 6u - 1$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{49} + 4y^{48} + \cdots + 26352y - 256$
c_2, c_6	$y^{49} + 24y^{48} + \cdots + 108y - 16$
c_3	$y^{49} - 10y^{48} + \cdots + 7605036y - 374544$
c_4, c_5, c_9 c_{11}	$y^{49} + 34y^{48} + \cdots + 12y^2 - 1$
c_7	$y^{49} + 16y^{48} + \cdots + 484690764y - 13512976$
c_8	$y^{49} + 14y^{47} + \cdots + 140737488355328y - 70368744177664$
c_{10}, c_{12}	$y^{49} - 14y^{48} + \cdots + 32y - 1$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = -0.878929 + 0.494546I$ $a = 0.534524 + 0.601733I$ $b = -0.037915 + 0.411539I$	$3.54777 - 3.28188I$	0
$u = -0.878929 - 0.494546I$ $a = 0.534524 - 0.601733I$ $b = -0.037915 - 0.411539I$	$3.54777 + 3.28188I$	0
$u = -0.865025 + 0.523898I$ $a = -0.562542 - 0.624626I$ $b = 0.018820 - 0.459526I$	$1.46395 - 8.18754I$	0
$u = -0.865025 - 0.523898I$ $a = -0.562542 + 0.624626I$ $b = 0.018820 + 0.459526I$	$1.46395 + 8.18754I$	0
$u = -0.955239 + 0.438408I$ $a = 0.432545 + 0.574512I$ $b = -0.127692 + 0.307642I$	$4.19521 - 1.27465I$	0
$u = -0.955239 - 0.438408I$ $a = 0.432545 - 0.574512I$ $b = -0.127692 - 0.307642I$	$4.19521 + 1.27465I$	0
$u = -0.791178 + 0.467861I$ $a = -0.606368 - 0.538508I$ $b = -0.086188 - 0.372058I$	$-0.734882 - 1.080480I$	0
$u = -0.791178 - 0.467861I$ $a = -0.606368 + 0.538508I$ $b = -0.086188 + 0.372058I$	$-0.734882 + 1.080480I$	0
$u = -1.014950 + 0.426931I$ $a = -0.366400 - 0.583109I$ $b = 0.195165 - 0.258541I$	$2.69787 + 3.43928I$	0
$u = -1.014950 - 0.426931I$ $a = -0.366400 + 0.583109I$ $b = 0.195165 + 0.258541I$	$2.69787 - 3.43928I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.086130 + 0.826479I$ $a = -0.707850 - 0.528651I$ $b = -0.900881 + 0.081531I$	$1.59244 - 0.95867I$	0
$u = -0.086130 - 0.826479I$ $a = -0.707850 + 0.528651I$ $b = -0.900881 - 0.081531I$	$1.59244 + 0.95867I$	0
$u = -1.195740 + 0.181382I$ $a = -0.121708 - 0.451777I$ $b = 0.138505 + 0.060157I$	$1.31700 - 1.83287I$	0
$u = -1.195740 - 0.181382I$ $a = -0.121708 + 0.451777I$ $b = 0.138505 - 0.060157I$	$1.31700 + 1.83287I$	0
$u = -0.280549 + 0.737409I$ $a = 0.792075 + 0.528472I$ $b = 0.761622 + 0.137681I$	$-0.08983 + 3.80204I$	0
$u = -0.280549 - 0.737409I$ $a = 0.792075 - 0.528472I$ $b = 0.761622 - 0.137681I$	$-0.08983 - 3.80204I$	0
$u = -0.499829 + 0.470865I$ $a = 0.806268 + 0.484022I$ $b = 0.380406 + 0.228190I$	$-1.56327 - 2.59162I$	0
$u = -0.499829 - 0.470865I$ $a = 0.806268 - 0.484022I$ $b = 0.380406 - 0.228190I$	$-1.56327 + 2.59162I$	0
$u = -0.112436 + 1.367480I$ $a = -0.632922 - 0.297654I$ $b = -1.56223 + 0.08456I$	$1.20898 - 3.44226I$	0
$u = -0.112436 - 1.367480I$ $a = -0.632922 + 0.297654I$ $b = -1.56223 - 0.08456I$	$1.20898 + 3.44226I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.566381$ $a=-0.802762$ $b=-0.197153$	0.798103	0
$u=-0.28939+1.46994I$ $a=\ \ 0.671650+0.215873I$ $b=\ \ 1.72303+0.09497I$	$-0.56151-8.64070I$	0
$u=-0.28939-1.46994I$ $a=\ \ 0.671650-0.215873I$ $b=\ \ 1.72303-0.09497I$	$-0.56151+8.64070I$	0
$u=-0.92906+1.39653I$ $a=\ \ 0.907569-0.198739I$ $b=\ \ 2.06801+0.68691I$	$-6.4260-19.1684I$	0
$u=-0.92906-1.39653I$ $a=\ \ 0.907569+0.198739I$ $b=\ \ 2.06801-0.68691I$	$-6.4260+19.1684I$	0
$u=-0.92101+1.40687I$ $a=-0.896980+0.187047I$ $b=-2.06222-0.67875I$	$-4.0767-13.9817I$	0
$u=-0.92101-1.40687I$ $a=-0.896980-0.187047I$ $b=-2.06222+0.67875I$	$-4.0767+13.9817I$	0
$u=-0.88294+1.43634I$ $a=-0.869308+0.141348I$ $b=-2.03878-0.65008I$	$-2.41043-11.37180I$	0
$u=-0.88294-1.43634I$ $a=-0.869308-0.141348I$ $b=-2.03878+0.65008I$	$-2.41043+11.37180I$	0
$u=-0.85826+1.46268I$ $a=\ \ 0.844125-0.115722I$ $b=\ \ 2.02991+0.62302I$	$-3.21746-6.27360I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.85826 - 1.46268I$ $a = 0.844125 + 0.115722I$ $b = 2.02991 - 0.62302I$	$-3.21746 + 6.27360I$	0
$u = -0.94044 + 1.42695I$ $a = 0.869943 - 0.204288I$ $b = 2.07688 + 0.66610I$	$-8.9618 - 11.1456I$	0
$u = -0.94044 - 1.42695I$ $a = 0.869943 + 0.204288I$ $b = 2.07688 - 0.66610I$	$-8.9618 + 11.1456I$	0
$u = -1.79760 + 0.18403I$ $a = -0.014886 + 0.527128I$ $b = -0.230920 - 0.745030I$	$1.27697 + 2.46560I$	0
$u = -1.79760 - 0.18403I$ $a = -0.014886 - 0.527128I$ $b = -0.230920 + 0.745030I$	$1.27697 - 2.46560I$	0
$u = -1.00973 + 1.55018I$ $a = -0.739072 + 0.225610I$ $b = -2.12531 - 0.62805I$	$-11.2775 - 10.1132I$	0
$u = -1.00973 - 1.55018I$ $a = -0.739072 - 0.225610I$ $b = -2.12531 + 0.62805I$	$-11.2775 + 10.1132I$	0
$u = -0.97218 + 1.61858I$ $a = 0.704321 - 0.180784I$ $b = 2.14055 + 0.59806I$	$-7.53111 - 6.12262I$	0
$u = -0.97218 - 1.61858I$ $a = 0.704321 + 0.180784I$ $b = 2.14055 - 0.59806I$	$-7.53111 + 6.12262I$	0
$u = 0.67061 + 1.79412I$ $a = 0.370631 + 0.274191I$ $b = 1.92950 - 0.98140I$	$-4.15134 - 1.35238I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.67061 - 1.79412I$ $a = 0.370631 - 0.274191I$ $b = 1.92950 + 0.98140I$	$-4.15134 + 1.35238I$	0
$u = -1.04810 + 1.66695I$ $a = -0.655969 + 0.211021I$ $b = -2.17530 - 0.62293I$	$-10.78670 - 1.62503I$	0
$u = -1.04810 - 1.66695I$ $a = -0.655969 - 0.211021I$ $b = -2.17530 + 0.62293I$	$-10.78670 + 1.62503I$	0
$u = -1.90209 + 0.73507I$ $a = 0.135328 - 0.540424I$ $b = 0.954871 + 0.914227I$	$-3.75897 + 9.93453I$	0
$u = -1.90209 - 0.73507I$ $a = 0.135328 + 0.540424I$ $b = 0.954871 - 0.914227I$	$-3.75897 - 9.93453I$	0
$u = -1.94845 + 0.63471I$ $a = -0.107654 + 0.527578I$ $b = -0.814471 - 0.960374I$	$-1.20397 + 4.73351I$	0
$u = -1.94845 - 0.63471I$ $a = -0.107654 - 0.527578I$ $b = -0.814471 + 0.960374I$	$-1.20397 - 4.73351I$	0
$u = -2.20817 + 0.68429I$ $a = 0.114062 - 0.468012I$ $b = 0.84321 + 1.29608I$	$-6.05300 + 1.44263I$	0
$u = -2.20817 - 0.68429I$ $a = 0.114062 + 0.468012I$ $b = 0.84321 - 1.29608I$	$-6.05300 - 1.44263I$	0

II. $\boldsymbol{I^u_2 = \langle -3.30\times 10^{120}a^{45}u + 1.97\times 10^{120}a^{44}u + \cdots + 2.44\times 10^{123}a - 4.33\times 10^{122},\ -a^{45}u - 12a^{44}u + \cdots + 633a - 110,\ u^2 - u + 1\rangle}$

(i) Arc colorings

$$a_8 = \begin{pmatrix}1\\0\end{pmatrix}$$
$$a_{12} = \begin{pmatrix}0\\u\end{pmatrix}$$
$$a_5 = \begin{pmatrix}a\\0.458983a^{45}u - 0.273001a^{44}u + \cdots - 338.380a + 60.1064\end{pmatrix}$$
$$a_9 = \begin{pmatrix}1\\-u+1\end{pmatrix}$$
$$a_4 = \begin{pmatrix}-0.458983a^{45}u + 0.273001a^{44}u + \cdots + 340.380a - 60.1064\\0.712699a^{45}u + 0.366732a^{44}u + \cdots - 135.930a - 12.3220\end{pmatrix}$$
$$a_{11} = \begin{pmatrix}-a^2u\\-0.620448a^{45}u - 0.330821a^{44}u + \cdots + 18.9814a + 34.0960\end{pmatrix}$$
$$a_6 = \begin{pmatrix}a^3u - a^3 + a\\0.376188a^{45}u + 0.234574a^{44}u + \cdots - 92.5711a - 3.98563\end{pmatrix}$$
$$a_{10} = \begin{pmatrix}0.620448a^{45}u + 0.330821a^{44}u + \cdots - 18.9814a - 34.0960\\-0.620448a^{45}u - 0.330821a^{44}u + \cdots + 18.9814a + 34.0960\end{pmatrix}$$
$$a_1 = \begin{pmatrix}0.792605a^{45}u + 0.0826922a^{44}u + \cdots - 289.525a + 17.7536\\-0.214889a^{45}u + 0.0650753a^{44}u + \cdots + 124.079a - 13.1906\end{pmatrix}$$
$$a_7 = \begin{pmatrix}-0.297470a^{45}u + 0.0576235a^{44}u + \cdots + 148.169a - 20.2849\\0.258693a^{45}u + 0.0763352a^{44}u + \cdots - 105.105a + 11.5799\end{pmatrix}$$
$$a_3 = \begin{pmatrix}0.350355a^{45}u - 0.0218100a^{44}u + \cdots - 300.160a + 54.1637\\0.826487a^{45}u + 0.517442a^{44}u + \cdots - 22.8980a - 65.2687\end{pmatrix}$$
$$a_2 = \begin{pmatrix}0.615915a^{45}u + 0.0935804a^{44}u + \cdots - 302.385a + 39.1733\\1.23323a^{45}u + 0.201466a^{44}u + \cdots - 436.330a + 21.0896\end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= 0.476405a^{45}u + 0.265059a^{44}u + \cdots - 443.753a + 31.6047$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$(u^{23} + 11u^{22} + \cdots - 2u^2 - 1)^4$
c_2, c_6	$(u^{23} + u^{22} + \cdots + 2u + 1)^4$
c_3	$(u^{23} - u^{22} + \cdots - 8u + 5)^4$
c_4, c_5, c_9 c_{11}	$u^{92} + u^{91} + \cdots - 2040u + 10099$
c_7	$(u^{23} + 5u^{22} + \cdots + 32u + 7)^4$
c_8	$(u^2 + u + 1)^{46}$
c_{10}, c_{12}	$u^{92} + 25u^{91} + \cdots + 292u + 13$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$(y^{23} + 3y^{22} + \cdots - 4y - 1)^4$
c_2, c_6	$(y^{23} + 11y^{22} + \cdots - 2y^2 - 1)^4$
c_3	$(y^{23} - 5y^{22} + \cdots + 264y - 25)^4$
c_4, c_5, c_9 c_{11}	$y^{92} + 75y^{91} + \cdots + 6818843988y + 101989801$
c_7	$(y^{23} + 7y^{22} + \cdots - 404y - 49)^4$
c_8	$(y^2 + y + 1)^{46}$
c_{10}, c_{12}	$y^{92} + 19y^{91} + \cdots - 4248y + 169$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.500000 + 0.866025I$ $a = -0.937121 - 0.371501I$ $b = -1.09291 - 0.92973I$	$-3.92076 + 1.08316I$	$4.43633 + 0.86900I$
$u = 0.500000 + 0.866025I$ $a = 0.841297 - 0.557369I$ $b = 0.148475 + 0.278228I$	$-5.96017 + 5.63569I$	$-0.88555 - 7.95268I$
$u = 0.500000 + 0.866025I$ $a = 0.691012 + 0.830724I$ $b = 1.146660 - 0.462212I$	$-3.97784 - 0.99488I$	$-60.10 - 1.248015I$
$u = 0.500000 + 0.866025I$ $a = 0.054927 + 0.916811I$ $b = 0.664482 - 0.377958I$	$0.70641 + 3.76624I$	$5.79313 - 5.93000I$
$u = 0.500000 + 0.866025I$ $a = -0.524642 - 0.956462I$ $b = -1.014530 + 0.390058I$	$0.70471 - 3.49418I$	$6.00000 + 0.I$
$u = 0.500000 + 0.866025I$ $a = -0.225600 - 0.879982I$ $b = -0.789052 + 0.434009I$	$1.84607 - 1.13246I$	$7.66460 + 0.I$
$u = 0.500000 + 0.866025I$ $a = -0.963827 - 0.529838I$ $b = -1.36762 - 1.09117I$	$-4.71439 - 0.26236I$	$1.82667 + 0.I$
$u = 0.500000 + 0.866025I$ $a = 0.954176 + 0.573352I$ $b = 1.42108 + 1.17214I$	$-6.93621 - 4.99789I$	$-1.56401 + 3.87629I$
$u = 0.500000 + 0.866025I$ $a = 1.099180 + 0.232834I$ $b = 1.91571 - 0.94244I$	$0.706409 + 0.293527I$	$6.00000 - 0.99820I$
$u = 0.500000 + 0.866025I$ $a = 0.809757 + 0.239901I$ $b = 0.788283 + 0.949215I$	$-5.55475 + 5.29231I$	$1.19624 - 5.73225I$

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.500000 + 0.866025I$ $a = -0.489628 + 1.061940I$ $b = 0.326898 - 0.113339I$	$0.706409 + 0.293527I$	$6.00000 + 0.I$
$u = 0.500000 + 0.866025I$ $a = -1.145350 - 0.237558I$ $b = -2.00157 + 0.90740I$	$1.84607 + 5.19223I$	$6.00000 - 6.93099I$
$u = 0.500000 + 0.866025I$ $a = 0.581793 + 1.018500I$ $b = 1.050400 - 0.345844I$	$-1.50338 - 8.56596I$	$6.00000 + 4.01378I$
$u = 0.500000 + 0.866025I$ $a = 1.037010 + 0.569702I$ $b = 1.54639 + 1.02940I$	$-8.67728 + 2.33323I$	$-5.41146 + 0.I$
$u = 0.500000 + 0.866025I$ $a = 0.761599 + 0.258463I$ $b = 1.37115 - 1.03631I$	$0.70641 + 3.76624I$	$5.79313 - 5.93000I$
$u = 0.500000 + 0.866025I$ $a = 1.108030 + 0.502169I$ $b = 1.68312 - 0.49391I$	$-2.98164 + 2.02988I$	0
$u = 0.500000 + 0.866025I$ $a = 0.581895 - 1.076430I$ $b = -0.274328 + 0.068526I$	$1.84607 + 5.19223I$	0
$u = 0.500000 + 0.866025I$ $a = -1.211140 - 0.245723I$ $b = -2.13231 + 0.85180I$	$0.70471 + 7.55395I$	0
$u = 0.500000 + 0.866025I$ $a = 1.213000 + 0.292997I$ $b = 2.10489 - 0.74808I$	$-3.97784 + 5.05464I$	0
$u = 0.500000 + 0.866025I$ $a = -0.757345 + 0.999939I$ $b = 0.1345460 - 0.0411339I$	$-3.97784 + 5.05464I$	0

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.500000 + 0.866025I$ $a = 1.232090 + 0.243441I$ $b = 2.17934 - 0.84456I$	$-1.50338 + 12.62570I$	0
$u = 0.500000 + 0.866025I$ $a = -0.532945 + 0.493913I$ $b = 0.042143 - 0.502169I$	$-2.98164 + 2.02988I$	$3.52609 - 3.46410I$
$u = 0.500000 + 0.866025I$ $a = 1.264720 - 0.188799I$ $b = 0.661174 + 0.184455I$	$-5.55475 - 1.23254I$	0
$u = 0.500000 + 0.866025I$ $a = -1.218540 - 0.460431I$ $b = -1.91136 + 0.37517I$	$-5.96017 + 5.63569I$	0
$u = 0.500000 + 0.866025I$ $a = -1.167740 - 0.590081I$ $b = -1.82054 - 0.80138I$	$-8.67728 + 1.72653I$	0
$u = 0.500000 + 0.866025I$ $a = -1.129410 - 0.665295I$ $b = -1.50665 + 0.35250I$	$-5.96017 - 1.57592I$	0
$u = 0.500000 + 0.866025I$ $a = -0.630623 - 0.264977I$ $b = -1.19408 + 1.04901I$	$1.84607 - 1.13246I$	$7.66460 + 0.00279I$
$u = 0.500000 + 0.866025I$ $a = 0.721244 - 1.100800I$ $b = -0.199931 - 0.003278I$	$0.70471 + 7.55395I$	0
$u = 0.500000 + 0.866025I$ $a = 1.219210 + 0.578914I$ $b = 1.90724 + 0.64794I$	$-4.71439 + 4.32213I$	0
$u = 0.500000 + 0.866025I$ $a = -0.763483 + 1.120900I$ $b = 0.183770 + 0.032906I$	$-1.50338 + 12.62570I$	0

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.500000 + 0.866025I$ $a = -1.219790 - 0.603575I$ $b = -1.97180 - 0.70853I$	$-6.93621 + 9.05765I$	0
$u = 0.500000 + 0.866025I$ $a = 1.257640 + 0.526452I$ $b = 1.81897 + 0.38225I$	$-3.92076 + 2.97661I$	0
$u = 0.500000 + 0.866025I$ $a = -1.286200 - 0.520515I$ $b = -1.88974 - 0.14726I$	$-5.55475 - 1.23254I$	0
$u = 0.500000 + 0.866025I$ $a = -1.413420 + 0.031776I$ $b = -0.852089 - 0.112425I$	$-3.92076 + 2.97661I$	0
$u = 0.500000 + 0.866025I$ $a = 0.436590 - 0.170302I$ $b = 0.059353 + 0.847498I$	$-5.96017 - 1.57592I$	$-0.885548 + 1.024476I$
$u = 0.500000 + 0.866025I$ $a = -1.41330 - 0.61316I$ $b = -1.43478 + 0.09616I$	$-5.55475 + 5.29231I$	0
$u = 0.500000 + 0.866025I$ $a = -0.396532 - 0.141057I$ $b = -0.88642 + 1.20546I$	$0.70471 - 3.49418I$	$6.27222 + 0.05746I$
$u = 0.500000 + 0.866025I$ $a = 1.49845 + 0.51570I$ $b = 1.342670 - 0.042527I$	$-3.92076 + 1.08316I$	0
$u = 0.500000 + 0.866025I$ $a = -1.62301 - 0.01758I$ $b = -0.934980 + 0.051452I$	$-4.71439 + 4.32213I$	0
$u = 0.500000 + 0.866025I$ $a = 0.365459 + 0.069498I$ $b = 0.83407 - 1.29484I$	$-1.50338 - 8.56596I$	$3.03092 + 4.01378I$

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.500000+0.866025I$ $a = 1.67713+0.13038I$ $b = 1.024320-0.080912I$	$-8.67728+1.72653I$	0
$u = 0.500000+0.866025I$ $a = 1.68669+0.00479I$ $b = 0.934674-0.100170I$	$-6.93621+9.05765I$	0
$u = 0.500000+0.866025I$ $a = 0.200879+0.210349I$ $b = 0.656529-1.082590I$	$-3.97784-0.99488I$	$-0.122131-1.248015I$
$u = 0.500000+0.866025I$ $a = 1.65186+0.46081I$ $b = 1.248060-0.100528I$	$-4.71439-0.26236I$	0
$u = 0.500000+0.866025I$ $a = -1.68981-0.35841I$ $b = -1.180420+0.101292I$	$-8.67728+2.33323I$	0
$u = 0.500000+0.866025I$ $a = -1.70619-0.46839I$ $b = -1.239290+0.130393I$	$-6.93621-4.99789I$	0
$u = 0.500000-0.866025I$ $a = -0.937121+0.371501I$ $b = -1.09291+0.92973I$	$-3.92076-1.08316I$	$4.43633-0.86900I$
$u = 0.500000-0.866025I$ $a = 0.841297+0.557369I$ $b = 0.148475-0.278228I$	$-5.96017-5.63569I$	$-0.88555+7.95268I$
$u = 0.500000-0.866025I$ $a = 0.691012-0.830724I$ $b = 1.146660+0.462212I$	$-3.97784+0.99488I$	$-60.10+1.248015I$
$u = 0.500000-0.866025I$ $a = 0.054927-0.916811I$ $b = 0.664482+0.377958I$	$0.70641-3.76624I$	$5.79313+5.93000I$

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.500000 - 0.866025I$ $a = -0.524642 + 0.956462I$ $b = -1.014530 - 0.390058I$	$0.70471 + 3.49418I$	$6.00000 + 0.I$
$u = 0.500000 - 0.866025I$ $a = -0.225600 + 0.879982I$ $b = -0.789052 - 0.434009I$	$1.84607 + 1.13246I$	$7.66460 + 0.I$
$u = 0.500000 - 0.866025I$ $a = -0.963827 + 0.529838I$ $b = -1.36762 + 1.09117I$	$-4.71439 + 0.26236I$	$1.82667 + 0.I$
$u = 0.500000 - 0.866025I$ $a = 0.954176 - 0.573352I$ $b = 1.42108 - 1.17214I$	$-6.93621 + 4.99789I$	$-1.56401 - 3.87629I$
$u = 0.500000 - 0.866025I$ $a = 1.099180 - 0.232834I$ $b = 1.91571 + 0.94244I$	$0.706409 - 0.293527I$	$6.00000 + 0.99820I$
$u = 0.500000 - 0.866025I$ $a = 0.809757 - 0.239901I$ $b = 0.788283 - 0.949215I$	$-5.55475 - 5.29231I$	$1.19624 + 5.73225I$
$u = 0.500000 - 0.866025I$ $a = -0.489628 - 1.061940I$ $b = 0.326898 + 0.113339I$	$0.706409 - 0.293527I$	$6.00000 + 0.I$
$u = 0.500000 - 0.866025I$ $a = -1.145350 + 0.237558I$ $b = -2.00157 - 0.90740I$	$1.84607 - 5.19223I$	$6.00000 + 6.93099I$
$u = 0.500000 - 0.866025I$ $a = 0.581793 - 1.018500I$ $b = 1.050400 + 0.345844I$	$-1.50338 + 8.56596I$	$6.00000 - 4.01378I$
$u = 0.500000 - 0.866025I$ $a = 1.037010 - 0.569702I$ $b = 1.54639 - 1.02940I$	$-8.67728 - 2.33323I$	$-5.41146 + 0.I$

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.500000 - 0.866025I$ $a = 0.761599 - 0.258463I$ $b = 1.37115 + 1.03631I$	$0.70641 - 3.76624I$	$5.79313 + 5.93000I$
$u = 0.500000 - 0.866025I$ $a = 1.108030 - 0.502169I$ $b = 1.68312 + 0.49391I$	$-2.98164 - 2.02988I$	0
$u = 0.500000 - 0.866025I$ $a = 0.581895 + 1.076430I$ $b = -0.274328 - 0.068526I$	$1.84607 - 5.19223I$	0
$u = 0.500000 - 0.866025I$ $a = -1.211140 + 0.245723I$ $b = -2.13231 - 0.85180I$	$0.70471 - 7.55395I$	0
$u = 0.500000 - 0.866025I$ $a = 1.213000 - 0.292997I$ $b = 2.10489 + 0.74808I$	$-3.97784 - 5.05464I$	0
$u = 0.500000 - 0.866025I$ $a = -0.757345 - 0.999939I$ $b = 0.1345460 + 0.0411339I$	$-3.97784 - 5.05464I$	0
$u = 0.500000 - 0.866025I$ $a = 1.232090 - 0.243441I$ $b = 2.17934 + 0.84456I$	$-1.50338 - 12.62570I$	0
$u = 0.500000 - 0.866025I$ $a = -0.532945 - 0.493913I$ $b = 0.042143 + 0.502169I$	$-2.98164 - 2.02988I$	$3.52609 + 3.46410I$
$u = 0.500000 - 0.866025I$ $a = 1.264720 + 0.188799I$ $b = 0.661174 - 0.184455I$	$-5.55475 + 1.23254I$	0
$u = 0.500000 - 0.866025I$ $a = -1.218540 + 0.460431I$ $b = -1.91136 - 0.37517I$	$-5.96017 - 5.63569I$	0

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = \quad 0.500000 - 0.866025I$ $a = -1.167740 + 0.590081I$ $b = -1.82054 + 0.80138I$	$-8.67728 - 1.72653I$	0
$u = \quad 0.500000 - 0.866025I$ $a = -1.129410 + 0.665295I$ $b = -1.50665 - 0.35250I$	$-5.96017 + 1.57592I$	0
$u = \quad 0.500000 - 0.866025I$ $a = -0.630623 + 0.264977I$ $b = -1.19408 - 1.04901I$	$1.84607 + 1.13246I$	$7.66460 - 0.00279I$
$u = \quad 0.500000 - 0.866025I$ $a = \quad 0.721244 + 1.100800I$ $b = -0.199931 + 0.003278I$	$0.70471 - 7.55395I$	0
$u = \quad 0.500000 - 0.866025I$ $a = \quad 1.219210 - 0.578914I$ $b = \quad 1.90724 - 0.64794I$	$-4.71439 - 4.32213I$	0
$u = \quad 0.500000 - 0.866025I$ $a = -0.763483 - 1.120900I$ $b = \quad 0.183770 - 0.032906I$	$-1.50338 - 12.62570I$	0
$u = \quad 0.500000 - 0.866025I$ $a = -1.219790 + 0.603575I$ $b = -1.97180 + 0.70853I$	$-6.93621 - 9.05765I$	0
$u = \quad 0.500000 - 0.866025I$ $a = \quad 1.257640 - 0.526452I$ $b = \quad 1.81897 - 0.38225I$	$-3.92076 - 2.97661I$	0
$u = \quad 0.500000 - 0.866025I$ $a = -1.286200 + 0.520515I$ $b = -1.88974 + 0.14726I$	$-5.55475 + 1.23254I$	0
$u = \quad 0.500000 - 0.866025I$ $a = -1.413420 - 0.031776I$ $b = -0.852089 + 0.112425I$	$-3.92076 - 2.97661I$	0

Solutions to I_2^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.500000 - 0.866025I$ $a = 0.436590 + 0.170302I$ $b = 0.059353 - 0.847498I$	$-5.96017 + 1.57592I$	$-0.885548 - 1.024476I$
$u = 0.500000 - 0.866025I$ $a = -1.41330 + 0.61316I$ $b = -1.43478 - 0.09616I$	$-5.55475 - 5.29231I$	0
$u = 0.500000 - 0.866025I$ $a = -0.396532 + 0.141057I$ $b = -0.88642 - 1.20546I$	$0.70471 + 3.49418I$	$6.27222 - 0.05746I$
$u = 0.500000 - 0.866025I$ $a = 1.49845 - 0.51570I$ $b = 1.342670 + 0.042527I$	$-3.92076 - 1.08316I$	0
$u = 0.500000 - 0.866025I$ $a = -1.62301 + 0.01758I$ $b = -0.934980 - 0.051452I$	$-4.71439 - 4.32213I$	0
$u = 0.500000 - 0.866025I$ $a = 0.365459 - 0.069498I$ $b = 0.83407 + 1.29484I$	$-1.50338 + 8.56596I$	$3.03092 - 4.01378I$
$u = 0.500000 - 0.866025I$ $a = 1.67713 - 0.13038I$ $b = 1.024320 + 0.080912I$	$-8.67728 - 1.72653I$	0
$u = 0.500000 - 0.866025I$ $a = 1.68669 - 0.00479I$ $b = 0.934674 + 0.100170I$	$-6.93621 - 9.05765I$	0
$u = 0.500000 - 0.866025I$ $a = 0.200879 - 0.210349I$ $b = 0.656529 + 1.082590I$	$-3.97784 + 0.99488I$	$-0.122131 + 1.248015I$
$u = 0.500000 - 0.866025I$ $a = 1.65186 - 0.46081I$ $b = 1.248060 + 0.100528I$	$-4.71439 + 0.26236I$	0

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.500000 - 0.866025I$ $a = -1.68981 + 0.35841I$ $b = -1.180420 - 0.101292I$	$-8.67728 - 2.33323I$	0
$u = 0.500000 - 0.866025I$ $a = -1.70619 + 0.46839I$ $b = -1.239290 - 0.130393I$	$-6.93621 + 4.99789I$	0

III. $I_3^u = \langle -22u^{23} - 61u^{22} + \cdots + b + 41,\ -38u^{23} - 111u^{22} + \cdots + a + 59,\ u^{24} + 3u^{23} + \cdots - 2u + 1\rangle$

(i) Arc colorings

$$a_8 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$
$$a_{12} = \begin{pmatrix} 0 \\ u \end{pmatrix}$$
$$a_5 = \begin{pmatrix} 38u^{23} + 111u^{22} + \cdots + 96u - 59 \\ 22u^{23} + 61u^{22} + \cdots + 61u - 41 \end{pmatrix}$$
$$a_9 = \begin{pmatrix} 1 \\ -u^2 \end{pmatrix}$$
$$a_4 = \begin{pmatrix} 41u^{23} + 145u^{22} + \cdots + 79u - 21 \\ 2u^{23} - 2u^{22} + \cdots + 14u - 16 \end{pmatrix}$$
$$a_{11} = \begin{pmatrix} -3u^{23} - 10u^{22} + \cdots - 12u + 3 \\ -u^{23} - 3u^{22} + \cdots - 3u + 2 \end{pmatrix}$$
$$a_6 = \begin{pmatrix} -59u^{23} - 215u^{22} + \cdots - 106u + 22 \\ -16u^{23} - 50u^{22} + \cdots - 35u + 18 \end{pmatrix}$$
$$a_{10} = \begin{pmatrix} -2u^{23} - 7u^{22} + \cdots - 9u + 1 \\ -u^{23} - 3u^{22} + \cdots - 3u + 2 \end{pmatrix}$$
$$a_1 = \begin{pmatrix} -u^{23} - 5u^{22} + \cdots - 3u - 7 \\ -2u^{23} - 7u^{22} + \cdots - 8u + 1 \end{pmatrix}$$
$$a_7 = \begin{pmatrix} -15u^{23} - 51u^{22} + \cdots - 42u + 13 \\ -5u^{23} - 14u^{22} + \cdots - 15u + 13 \end{pmatrix}$$
$$a_3 = \begin{pmatrix} 48u^{23} + 168u^{22} + \cdots + 92u - 10 \\ 13u^{23} + 38u^{22} + \cdots + 40u - 13 \end{pmatrix}$$
$$a_2 = \begin{pmatrix} 40u^{23} + 123u^{22} + \cdots + 100u - 38 \\ 7u^{23} + 13u^{22} + \cdots + 33u - 17 \end{pmatrix}$$

(ii) Obstruction class $= 1$

(iii) Cusp Shapes $= -61u^{23} - 222u^{22} - 346u^{21} - 257u^{20} - 411u^{19} - 911u^{18} - 749u^{17} - 254u^{16} - 973u^{15} - 1592u^{14} - 390u^{13} - 74u^{12} - 1416u^{11} - 908u^{10} + 367u^9 - 377u^8 - 897u^7 + 168u^6 + 175u^5 - 448u^4 + 21u^3 + 105u^2 - 105u + 15$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{24} - 13u^{23} + \cdots - 5u + 1$
c_2	$u^{24} - u^{23} + \cdots - u + 1$
c_3	$u^{24} + u^{23} + \cdots + 3u + 1$
c_4, c_{11}	$u^{24} + 13u^{22} + \cdots - 3u + 1$
c_5, c_9	$u^{24} + 13u^{22} + \cdots + 3u + 1$
c_6	$u^{24} + u^{23} + \cdots + u + 1$
c_7	$u^{24} + 5u^{23} + \cdots + 3u + 1$
c_8	$u^{24} + 3u^{23} + \cdots - 2u + 1$
c_{10}, c_{12}	$u^{24} + 2u^{23} + \cdots - 3u + 1$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{24} + y^{23} + \cdots + 9y + 1$
c_2, c_6	$y^{24} + 13y^{23} + \cdots + 5y + 1$
c_3	$y^{24} - 5y^{23} + \cdots + 9y + 1$
c_4, c_5, c_9 c_{11}	$y^{24} + 26y^{23} + \cdots + 11y + 1$
c_7	$y^{24} + 9y^{23} + \cdots + 19y + 1$
c_8	$y^{24} - y^{23} + \cdots + 2y + 1$
c_{10}, c_{12}	$y^{24} + 2y^{23} + \cdots - y + 1$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_3^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.816409 + 0.593474I$ $a = 0.963539 + 0.964379I$ $b = 0.845972 + 0.122344I$	$-8.03434 + 0.26941I$	$-2.72076 + 0.97413I$
$u = 0.816409 - 0.593474I$ $a = 0.963539 - 0.964379I$ $b = 0.845972 - 0.122344I$	$-8.03434 - 0.26941I$	$-2.72076 - 0.97413I$
$u = -0.949778 + 0.110011I$ $a = 0.273616 + 0.251971I$ $b = -0.583760 - 0.376285I$	$1.68243 - 2.41741I$	$8.43017 + 4.58087I$
$u = -0.949778 - 0.110011I$ $a = 0.273616 - 0.251971I$ $b = -0.583760 + 0.376285I$	$1.68243 + 2.41741I$	$8.43017 - 4.58087I$
$u = -0.760955 + 0.802756I$ $a = -0.223515 + 0.754303I$ $b = -1.37159 - 0.97719I$	$-1.61317 + 9.75044I$	$2.97430 - 11.20361I$
$u = -0.760955 - 0.802756I$ $a = -0.223515 - 0.754303I$ $b = -1.37159 + 0.97719I$	$-1.61317 - 9.75044I$	$2.97430 + 11.20361I$
$u = -1.085960 + 0.275502I$ $a = -0.117117 - 0.437613I$ $b = 0.638829 + 0.855751I$	$2.48107 + 2.14641I$	$12.43873 - 4.94998I$
$u = -1.085960 - 0.275502I$ $a = -0.117117 + 0.437613I$ $b = 0.638829 - 0.855751I$	$2.48107 - 2.14641I$	$12.43873 + 4.94998I$
$u = 0.420960 + 1.075700I$ $a = -1.070130 - 0.105332I$ $b = -1.48122 - 0.32953I$	$-5.61923 + 1.68735I$	$-1.85148 - 1.98716I$
$u = 0.420960 - 1.075700I$ $a = -1.070130 + 0.105332I$ $b = -1.48122 + 0.32953I$	$-5.61923 - 1.68735I$	$-1.85148 + 1.98716I$

Solutions to I_3^u		$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=$	$0.281555+0.794809I$		
$a=$	$1.58599+0.00451I$	$-7.00231+4.11367I$	$-3.84808-4.14953I$
$b=$	$1.32116+0.55449I$		
$u=$	$0.281555-0.794809I$		
$a=$	$1.58599-0.00451I$	$-7.00231-4.11367I$	$-3.84808+4.14953I$
$b=$	$1.32116-0.55449I$		
$u=$	$0.586299+0.605904I$		
$a=$	$-1.43457-0.88046I$	$-4.41697+2.99372I$	$3.50329-1.67317I$
$b=$	$-0.966693-0.386767I$		
$u=$	$0.586299-0.605904I$		
$a=$	$-1.43457+0.88046I$	$-4.41697-2.99372I$	$3.50329+1.67317I$
$b=$	$-0.966693+0.386767I$		
$u=$	$0.422755+0.679873I$		
$a=$	$-1.68856-0.47087I$	$-4.04330+1.84908I$	$3.56105-0.03419I$
$b=$	$-1.143110-0.509910I$		
$u=$	$0.422755-0.679873I$		
$a=$	$-1.68856+0.47087I$	$-4.04330-1.84908I$	$3.56105+0.03419I$
$b=$	$-1.143110+0.509910I$		
$u=$	$0.609175+0.518283I$		
$a=$	$1.42573+1.12759I$	$-6.62215+7.58106I$	$-0.32877-5.75311I$
$b=$	$0.850019+0.410000I$		
$u=$	$0.609175-0.518283I$		
$a=$	$1.42573-1.12759I$	$-6.62215-7.58106I$	$-0.32877+5.75311I$
$b=$	$0.850019-0.410000I$		
$u=$	$-0.923032+0.769486I$		
$a=$	$0.137292-0.653280I$	$0.69791+4.54840I$	$7.17943-8.20372I$
$b=$	$1.26828+1.07344I$		
$u=$	$-0.923032-0.769486I$		
$a=$	$0.137292+0.653280I$	$0.69791-4.54840I$	$7.17943+8.20372I$
$b=$	$1.26828-1.07344I$		

Solutions to I_3^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.345437 + 0.662676I$ $a = 1.87018 + 0.30991I$ $b = 1.180650 + 0.589271I$	$-5.92912 - 2.54338I$	$-0.68969 + 4.27463I$
$u = 0.345437 - 0.662676I$ $a = 1.87018 - 0.30991I$ $b = 1.180650 - 0.589271I$	$-5.92912 + 2.54338I$	$-0.68969 - 4.27463I$
$u = -1.26286 + 1.24115I$ $a = -0.222464 + 0.423128I$ $b = -1.55855 - 1.53086I$	$-4.34911 + 1.66239I$	$0. - 13.97070I$
$u = -1.26286 - 1.24115I$ $a = -0.222464 - 0.423128I$ $b = -1.55855 + 1.53086I$	$-4.34911 - 1.66239I$	$0. + 13.97070I$

IV. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1	$((u^{23}+11u^{22}+\cdots-2u^2-1)^4)(u^{24}-13u^{23}+\cdots-5u+1)$ $\cdot(u^{49}+24u^{48}+\cdots+108u-16)$
c_2	$((u^{23}+u^{22}+\cdots+2u+1)^4)(u^{24}-u^{23}+\cdots-u+1)$ $\cdot(u^{49}-6u^{48}+\cdots+38u-4)$
c_3	$((u^{23}-u^{22}+\cdots-8u+5)^4)(u^{24}+u^{23}+\cdots+3u+1)$ $\cdot(u^{49}+6u^{48}+\cdots-2874u-612)$
c_4, c_{11}	$(u^{24}+13u^{22}+\cdots-3u+1)(u^{49}+17u^{47}+\cdots+2u-1)$ $\cdot(u^{92}+u^{91}+\cdots-2040u+10099)$
c_5, c_9	$(u^{24}+13u^{22}+\cdots+3u+1)(u^{49}+17u^{47}+\cdots+2u-1)$ $\cdot(u^{92}+u^{91}+\cdots-2040u+10099)$
c_6	$((u^{23}+u^{22}+\cdots+2u+1)^4)(u^{24}+u^{23}+\cdots+u+1)$ $\cdot(u^{49}-6u^{48}+\cdots+38u-4)$
c_7	$((u^{23}+5u^{22}+\cdots+32u+7)^4)(u^{24}+5u^{23}+\cdots+3u+1)$ $\cdot(u^{49}-30u^{48}+\cdots+42842u-3676)$
c_8	$((u^2+u+1)^{46})(u^{24}+3u^{23}+\cdots-2u+1)$ $\cdot(u^{49}-44u^{48}+\cdots+201326592u-8388608)$
c_{10}, c_{12}	$(u^{24}+2u^{23}+\cdots-3u+1)(u^{49}-2u^{48}+\cdots-6u-1)$ $\cdot(u^{92}+25u^{91}+\cdots+292u+13)$

V. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1	$((y^{23}+3y^{22}+\cdots-4y-1)^4)(y^{24}+y^{23}+\cdots+9y+1)$ $\cdot\,(y^{49}+4y^{48}+\cdots+26352y-256)$
c_2, c_6	$((y^{23}+11y^{22}+\cdots-2y^2-1)^4)(y^{24}+13y^{23}+\cdots+5y+1)$ $\cdot\,(y^{49}+24y^{48}+\cdots+108y-16)$
c_3	$((y^{23}-5y^{22}+\cdots+264y-25)^4)(y^{24}-5y^{23}+\cdots+9y+1)$ $\cdot\,(y^{49}-10y^{48}+\cdots+7605036y-374544)$
c_4, c_5, c_9 c_{11}	$(y^{24}+26y^{23}+\cdots+11y+1)(y^{49}+34y^{48}+\cdots+12y^2-1)$ $\cdot\,(y^{92}+75y^{91}+\cdots+6818843988y+101989801)$
c_7	$((y^{23}+7y^{22}+\cdots-404y-49)^4)(y^{24}+9y^{23}+\cdots+19y+1)$ $\cdot\,(y^{49}+16y^{48}+\cdots+484690764y-13512976)$
c_8	$((y^2+y+1)^{46})(y^{24}-y^{23}+\cdots+2y+1)$ $\cdot\,(y^{49}+14y^{47}+\cdots+140737488355328y-70368744177664)$
c_{10}, c_{12}	$(y^{24}+2y^{23}+\cdots-y+1)(y^{49}-14y^{48}+\cdots+32y-1)$ $\cdot\,(y^{92}+19y^{91}+\cdots-4248y+169)$