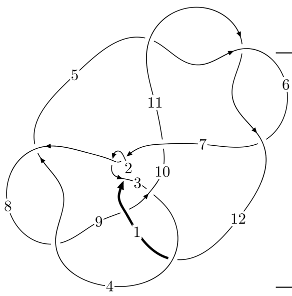
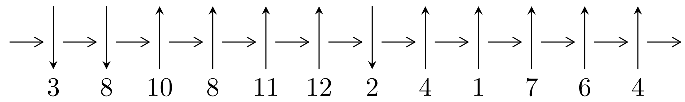
$12n_{0641}$ ($K12n_{0641}$)



A knot diagram[1]

Linearized knot diagam



Solving Sequence

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

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

$$I_1^u = \langle 8.49827 \times 10^{54} u^{47} + 2.37919 \times 10^{54} u^{46} + \cdots + 1.70744 \times 10^{55} b + 8.16269 \times 10^{54},$$
$$2.71230 \times 10^{55} u^{47} + 6.45531 \times 10^{54} u^{46} + \cdots + 1.70744 \times 10^{55} a - 5.14701 \times 10^{56},\ u^{48} - u^{47} + \cdots + 55u - 1\rangle$$
$$I_2^u = \langle -u^{14} - 2u^{13} + 3u^{12} + 8u^{11} - 6u^{10} - 21u^9 + 5u^8 + 33u^7 - u^6 - 36u^5 - 2u^4 + 22u^3 + u^2 + b - 8u,$$
$$-7u^{14} - 6u^{13} + \cdots + a + 9,$$
$$u^{15} + u^{14} - 4u^{13} - 5u^{12} + 10u^{11} + 14u^{10} - 15u^9 - 25u^8 + 16u^7 + 28u^6 - 11u^5 - 19u^4 + 5u^3 + 7u^2 - u - 1\rangle$$
$$I_3^u = \langle b + 1,\ a + 1,\ u + 1\rangle$$

* 3 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 64 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.

$\boldsymbol{I^u_1 = \langle 8.50\times 10^{54}u^{47} + 2.38\times 10^{54}u^{46} + \cdots + 1.71\times 10^{55}b + 8.16\times 10^{54},\ 2.71\times 10^{55}u^{47} + 6.46\times 10^{54}u^{46} + \cdots + 1.71\times 10^{55}a - 5.15\times 10^{56},\ u^{48} - u^{47} + \cdots + 55u - 1\rangle}$

(i) Arc colorings

$$a_2 = \begin{pmatrix}1\\0\end{pmatrix}$$
$$a_8 = \begin{pmatrix}0\\u\end{pmatrix}$$
$$a_3 = \begin{pmatrix}1\\u^2\end{pmatrix}$$
$$a_{10} = \begin{pmatrix}-1.58851u^{47} - 0.378069u^{46} + \cdots + 195.933u + 30.1446\\ -0.497719u^{47} - 0.139342u^{46} + \cdots + 94.5690u - 0.478065\end{pmatrix}$$
$$a_4 = \begin{pmatrix}-2.00213u^{47} + 1.12164u^{46} + \cdots + 231.824u - 45.9301\\ 0.532079u^{47} - 0.731391u^{46} + \cdots + 30.3920u - 2.14822\end{pmatrix}$$
$$a_5 = \begin{pmatrix}-2.00213u^{47} + 1.12164u^{46} + \cdots + 231.824u - 45.9301\\ 0.836676u^{47} - 0.793694u^{46} + \cdots - 16.0332u - 1.26772\end{pmatrix}$$
$$a_1 = \begin{pmatrix}-u^2+1\\ -u^4\end{pmatrix}$$
$$a_7 = \begin{pmatrix}u\\u\end{pmatrix}$$
$$a_{11} = \begin{pmatrix}-0.852685u^{47} - 0.569587u^{46} + \cdots + 123.900u + 31.4741\\ 0.238109u^{47} - 0.330861u^{46} + \cdots + 22.5362u + 0.851455\end{pmatrix}$$
$$a_9 = \begin{pmatrix}-1.07589u^{47} - 0.438793u^{46} + \cdots + 131.390u + 30.0699\\ -0.529673u^{47} - 0.199681u^{46} + \cdots + 108.525u - 0.735248\end{pmatrix}$$
$$a_{12} = \begin{pmatrix}-0.634463u^{47} - 0.0674825u^{46} + \cdots - 11.2930u + 67.9453\\ -0.184246u^{47} + 0.409138u^{46} + \cdots - 14.0906u + 2.82587\end{pmatrix}$$
$$a_6 = \begin{pmatrix}-0.0720669u^{47} + 0.836777u^{46} + \cdots + 39.2316u - 83.6537\\ 0.845245u^{47} - 0.416255u^{46} + \cdots - 32.8739u - 2.52326\end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= 5.23094u^{47} - 3.23434u^{46} + \cdots - 404.902u + 24.1944$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{48} + 15u^{47} + \cdots + 2837u + 1$
c_2, c_7	$u^{48} + u^{47} + \cdots - 55u - 1$
c_3	$u^{48} + u^{47} + \cdots - 14u + 1$
c_4, c_8	$u^{48} - 2u^{47} + \cdots + 14560u + 15853$
c_5, c_6, c_{11}	$u^{48} + 2u^{47} + \cdots - 12u - 1$
c_9	$u^{48} + u^{47} + \cdots + 719u - 293$
c_{10}	$u^{48} - 3u^{47} + \cdots + 10344u + 649$
c_{12}	$u^{48} + 4u^{47} + \cdots - 10508u - 1369$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{48} + 53y^{47} + \cdots - 7937733y + 1$
c_2, c_7	$y^{48} - 15y^{47} + \cdots - 2837y + 1$
c_3	$y^{48} + 5y^{47} + \cdots - 56y + 1$
c_4, c_8	$y^{48} - 64y^{47} + \cdots - 8556537210y + 251317609$
c_5, c_6, c_{11}	$y^{48} - 50y^{47} + \cdots - 66y + 1$
c_9	$y^{48} - 61y^{47} + \cdots - 3226039y + 85849$
c_{10}	$y^{48} - 39y^{47} + \cdots - 45579572y + 421201$
c_{12}	$y^{48} - 60y^{47} + \cdots - 53809914y + 1874161$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.780489 + 0.693178I$ $a = 0.705695 - 0.209382I$ $b = 0.862042 + 0.604842I$	$-0.43674 - 2.43309I$	$6.83450 + 4.39555I$
$u = 0.780489 - 0.693178I$ $a = 0.705695 + 0.209382I$ $b = 0.862042 - 0.604842I$	$-0.43674 + 2.43309I$	$6.83450 - 4.39555I$
$u = 0.529535 + 0.795568I$ $a = 1.41726 + 0.21633I$ $b = 0.20894 + 1.50824I$	$7.15738 + 1.35453I$	$12.13081 - 1.57989I$
$u = 0.529535 - 0.795568I$ $a = 1.41726 - 0.21633I$ $b = 0.20894 - 1.50824I$	$7.15738 - 1.35453I$	$12.13081 + 1.57989I$
$u = -1.052950 + 0.007832I$ $a = -0.707699 + 0.058294I$ $b = -0.965617 + 0.004183I$	$1.65094 + 0.00093I$	$6.00000 + 0.11555I$
$u = -1.052950 - 0.007832I$ $a = -0.707699 - 0.058294I$ $b = -0.965617 - 0.004183I$	$1.65094 - 0.00093I$	$6.00000 - 0.11555I$
$u = 1.05847$ $a = 1.90687$ $b = 3.40742$	8.27045	10.2350
$u = 0.912791 + 0.183084I$ $a = -1.080850 - 0.514657I$ $b = -1.221840 + 0.446864I$	$-0.81244 - 3.97179I$	$3.30801 + 3.48283I$
$u = 0.912791 - 0.183084I$ $a = -1.080850 + 0.514657I$ $b = -1.221840 - 0.446864I$	$-0.81244 + 3.97179I$	$3.30801 - 3.48283I$
$u = 0.918294 + 0.651222I$ $a = -0.957067 - 0.032883I$ $b = -0.745662 - 0.216607I$	$-1.09728 - 2.73985I$	$8.74885 + 1.99555I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.918294 - 0.651222I$ $a = -0.957067 + 0.032883I$ $b = -0.745662 + 0.216607I$	$-1.09728 + 2.73985I$	$8.74885 - 1.99555I$
$u = -1.064190 + 0.512825I$ $a = 1.060480 - 0.792956I$ $b = 0.694905 - 1.218350I$	$-0.91409 + 4.62733I$	$6.00000 - 9.84335I$
$u = -1.064190 - 0.512825I$ $a = 1.060480 + 0.792956I$ $b = 0.694905 + 1.218350I$	$-0.91409 - 4.62733I$	$6.00000 + 9.84335I$
$u = -0.798516 + 0.871376I$ $a = -1.77948 + 0.85153I$ $b = 0.462172 + 1.321260I$	$14.6213 + 0.5837I$	$11.01767 + 0.I$
$u = -0.798516 - 0.871376I$ $a = -1.77948 - 0.85153I$ $b = 0.462172 - 1.321260I$	$14.6213 - 0.5837I$	$11.01767 + 0.I$
$u = 0.846297 + 0.834975I$ $a = -0.598082 - 0.641634I$ $b = -0.31678 - 1.81032I$	$7.53406 - 1.71339I$	$6.00000 + 0.I$
$u = 0.846297 - 0.834975I$ $a = -0.598082 + 0.641634I$ $b = -0.31678 + 1.81032I$	$7.53406 + 1.71339I$	$6.00000 + 0.I$
$u = -0.717176 + 0.997613I$ $a = 0.584667 - 0.723750I$ $b = -0.218697 - 1.389430I$	$7.96025 - 3.20779I$	0
$u = -0.717176 - 0.997613I$ $a = 0.584667 + 0.723750I$ $b = -0.218697 + 1.389430I$	$7.96025 + 3.20779I$	0
$u = -0.734348 + 0.989945I$ $a = -0.626011 - 0.351788I$ $b = -0.795948 + 0.818156I$	$4.61963 + 5.43773I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.734348 - 0.989945I$ $a = -0.626011 + 0.351788I$ $b = -0.795948 - 0.818156I$	$4.61963 - 5.43773I$	0
$u = 0.958511 + 0.797758I$ $a = 1.47360 + 0.69247I$ $b = 0.338863 + 1.303150I$	$7.17999 - 4.40128I$	0
$u = 0.958511 - 0.797758I$ $a = 1.47360 - 0.69247I$ $b = 0.338863 - 1.303150I$	$7.17999 + 4.40128I$	0
$u = 1.177050 + 0.420372I$ $a = -0.180221 - 0.366873I$ $b = -0.0135532 + 0.0338086I$	$-1.66489 - 2.36125I$	0
$u = 1.177050 - 0.420372I$ $a = -0.180221 + 0.366873I$ $b = -0.0135532 - 0.0338086I$	$-1.66489 + 2.36125I$	0
$u = 1.076140 + 0.640039I$ $a = -1.46685 - 0.95325I$ $b = -0.59898 - 2.24608I$	$5.49499 - 6.77666I$	0
$u = 1.076140 - 0.640039I$ $a = -1.46685 + 0.95325I$ $b = -0.59898 + 2.24608I$	$5.49499 + 6.77666I$	0
$u = -0.724809 + 1.033950I$ $a = 1.064180 + 0.400574I$ $b = 0.486196 - 0.793628I$	$4.91559 + 3.36660I$	0
$u = -0.724809 - 1.033950I$ $a = 1.064180 - 0.400574I$ $b = 0.486196 + 0.793628I$	$4.91559 - 3.36660I$	0
$u = -0.712486$ $a = -1.97788$ $b = -2.16627$	2.80010	-4.83520

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -1.014230 + 0.800845I$ $a = 0.675996 - 0.593941I$ $b = 0.53182 - 2.37364I$	$13.9471 + 5.6591I$	0
$u = -1.014230 - 0.800845I$ $a = 0.675996 + 0.593941I$ $b = 0.53182 + 2.37364I$	$13.9471 - 5.6591I$	0
$u = -0.694037 + 0.060458I$ $a = 1.24961 - 1.05080I$ $b = 0.696219 + 0.640293I$	$-4.12135 + 0.22643I$	$0.431456 + 0.910944I$
$u = -0.694037 - 0.060458I$ $a = 1.24961 + 1.05080I$ $b = 0.696219 - 0.640293I$	$-4.12135 - 0.22643I$	$0.431456 - 0.910944I$
$u = -0.414437 + 0.505333I$ $a = -0.950768 + 0.151291I$ $b = -0.409586 + 0.582781I$	$0.970583 - 0.357083I$	$10.29975 + 3.20108I$
$u = -0.414437 - 0.505333I$ $a = -0.950768 - 0.151291I$ $b = -0.409586 - 0.582781I$	$0.970583 + 0.357083I$	$10.29975 - 3.20108I$
$u = -1.086260 + 0.818808I$ $a = -1.40570 + 0.48518I$ $b = -0.89489 + 1.58340I$	$6.79477 + 9.83464I$	0
$u = -1.086260 - 0.818808I$ $a = -1.40570 - 0.48518I$ $b = -0.89489 - 1.58340I$	$6.79477 - 9.83464I$	0
$u = 0.602545 + 0.150612I$ $a = -0.74027 + 2.02291I$ $b = -0.480320 - 0.677791I$	$0.44759 - 3.90440I$	$6.22150 + 4.06117I$
$u = 0.602545 - 0.150612I$ $a = -0.74027 - 2.02291I$ $b = -0.480320 + 0.677791I$	$0.44759 + 3.90440I$	$6.22150 - 4.06117I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.587564$ $a = 6.68300$ $b = 2.00737$	10.3493	-7.38360
$u = 0.748414 + 1.199110I$ $a = -0.608875 - 0.775844I$ $b = 0.92843 - 1.37321I$	$14.9212 + 6.6040I$	0
$u = 0.748414 - 1.199110I$ $a = -0.608875 + 0.775844I$ $b = 0.92843 + 1.37321I$	$14.9212 - 6.6040I$	0
$u = 1.17568 + 0.88106I$ $a = 1.43185 + 0.33117I$ $b = 1.26045 + 2.00959I$	$13.4534 - 14.0241I$	0
$u = 1.17568 - 0.88106I$ $a = 1.43185 - 0.33117I$ $b = 1.26045 - 2.00959I$	$13.4534 + 14.0241I$	0
$u = -1.40098 + 0.67383I$ $a = 0.295089 + 0.214824I$ $b = 0.930979 + 0.758020I$	$2.75175 + 3.73669I$	0
$u = -1.40098 - 0.67383I$ $a = 0.295089 - 0.214824I$ $b = 0.930979 - 0.758020I$	$2.75175 - 3.73669I$	0
$u = 0.0188398$ $a = 33.6749$ $b = 1.27318$	6.34803	16.5030

II.
$\boldsymbol{I_2^u = \langle -u^{14}-2u^{13}+\cdots+b-8u,\ -7u^{14}-6u^{13}+\cdots+a+9,\ u^{15}+u^{14}+\cdots-u-1\rangle}$

(i) Arc colorings

$$a_2 = \begin{pmatrix}1\\0\end{pmatrix}$$
$$a_8 = \begin{pmatrix}0\\u\end{pmatrix}$$
$$a_3 = \begin{pmatrix}1\\u^2\end{pmatrix}$$
$$a_{10} = \begin{pmatrix}7u^{14}+6u^{13}+\cdots+25u-9\\u^{14}+2u^{13}+\cdots-u^2+8u\end{pmatrix}$$
$$a_4 = \begin{pmatrix}u^{14}-5u^{12}+\cdots+2u-7\\-4u^{14}-4u^{13}+\cdots-5u-1\end{pmatrix}$$
$$a_5 = \begin{pmatrix}u^{14}-5u^{12}+\cdots+2u-7\\-4u^{14}-4u^{13}+\cdots-6u^2-5u\end{pmatrix}$$
$$a_1 = \begin{pmatrix}-u^2+1\\-u^4\end{pmatrix}$$
$$a_7 = \begin{pmatrix}u\\u\end{pmatrix}$$
$$a_{11} = \begin{pmatrix}6u^{14}+6u^{13}+\cdots+21u-7\\2u^{13}+2u^{12}+\cdots+4u+2\end{pmatrix}$$
$$a_9 = \begin{pmatrix}6u^{14}+5u^{13}+\cdots+19u-8\\u^{14}+2u^{13}+\cdots-u^2+8u\end{pmatrix}$$
$$a_{12} = \begin{pmatrix}-u^{14}+5u^{12}+\cdots-2u+8\\5u^{14}+4u^{13}+\cdots+15u^2+8u\end{pmatrix}$$
$$a_6 = \begin{pmatrix}-8u^{14}-2u^{13}+\cdots-16u+18\\-6u^{14}-u^{13}+\cdots-8u+9\end{pmatrix}$$

(ii) Obstruction class $= 1$

(iii) Cusp Shapes $= -12u^{14}+58u^{12}+12u^{11}-169u^{10}-44u^9+317u^8+107u^7-433u^6-113u^5+392u^4+65u^3-214u^2-6u+58$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{15} - 9u^{14} + \cdots + 15u - 1$
c_2	$u^{15} + u^{14} + \cdots - u - 1$
c_3	$u^{15} + 4u^{13} + \cdots - 3u^2 - 1$
c_4	$u^{15} + 3u^{13} + \cdots + 4u^2 + 1$
c_5, c_6	$u^{15} - 8u^{13} + \cdots - 12u^3 - 1$
c_7	$u^{15} - u^{14} + \cdots - u + 1$
c_8	$u^{15} + 3u^{13} + \cdots - 4u^2 - 1$
c_9	$u^{15} - u^{14} + \cdots - u + 1$
c_{10}	$u^{15} - 8u^{12} + \cdots - 3u^2 + 1$
c_{11}	$u^{15} - 8u^{13} + \cdots - 12u^3 + 1$
c_{12}	$u^{15} - u^{13} + \cdots + 4u^2 + 1$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{15} + 11y^{14} + \cdots + 31y - 1$
c_2, c_7	$y^{15} - 9y^{14} + \cdots + 15y - 1$
c_3	$y^{15} + 8y^{14} + \cdots - 6y - 1$
c_4, c_8	$y^{15} + 6y^{14} + \cdots - 8y - 1$
c_5, c_6, c_{11}	$y^{15} - 16y^{14} + \cdots + 12y^2 - 1$
c_9	$y^{15} - 15y^{14} + \cdots + 9y - 1$
c_{10}	$y^{15} - 22y^{13} + \cdots + 6y - 1$
c_{12}	$y^{15} - 2y^{14} + \cdots - 8y - 1$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = -0.894768 + 0.381504I$ $a = 0.561192 - 0.613047I$ $b = -0.133265 + 0.484278I$	$-3.89584 + 1.58539I$	$2.11826 - 3.74447I$
$u = -0.894768 - 0.381504I$ $a = 0.561192 + 0.613047I$ $b = -0.133265 - 0.484278I$	$-3.89584 - 1.58539I$	$2.11826 + 3.74447I$
$u = 1.002760 + 0.378711I$ $a = -0.492433 - 0.387786I$ $b = -0.380671 + 0.657450I$	$-0.33265 - 5.51163I$	$4.94815 + 7.40556I$
$u = 1.002760 - 0.378711I$ $a = -0.492433 + 0.387786I$ $b = -0.380671 - 0.657450I$	$-0.33265 + 5.51163I$	$4.94815 - 7.40556I$
$u = 0.800420 + 0.321515I$ $a = -0.433427 - 0.987439I$ $b = 0.703055 + 0.417003I$	$0.48032 + 2.56256I$	$7.50726 + 0.32927I$
$u = 0.800420 - 0.321515I$ $a = -0.433427 + 0.987439I$ $b = 0.703055 - 0.417003I$	$0.48032 - 2.56256I$	$7.50726 - 0.32927I$
$u = -0.712036$ $a = -1.36567$ $b = -2.13667$	5.68620	3.34500
$u = 1.083910 + 0.722936I$ $a = -0.725633 - 0.017802I$ $b = -0.738745 - 0.392095I$	$-1.62262 - 3.23030I$	$-0.70757 + 9.71898I$
$u = 1.083910 - 0.722936I$ $a = -0.725633 + 0.017802I$ $b = -0.738745 + 0.392095I$	$-1.62262 + 3.23030I$	$-0.70757 - 9.71898I$
$u = -0.945359 + 0.963665I$ $a = 0.814338 + 0.249756I$ $b = 0.603655 - 0.873044I$	$3.65766 + 5.39923I$	$5.36277 - 6.12141I$

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = -0.945359 - 0.963665I$ $a = 0.814338 - 0.249756I$ $b = 0.603655 + 0.873044I$	$3.65766 - 5.39923I$	$5.36277 + 6.12141I$
$u = 0.620323$ $a = 2.57729$ $b = 2.00007$	3.14873	19.3840
$u = -1.268280 + 0.578450I$ $a = 0.548163 - 0.056389I$ $b = 1.152480 - 0.111993I$	$1.86244 + 1.54512I$	$7.16780 - 3.17961I$
$u = -1.268280 - 0.578450I$ $a = 0.548163 + 0.056389I$ $b = 1.152480 + 0.111993I$	$1.86244 - 1.54512I$	$7.16780 + 3.17961I$
$u = -0.465662$ $a = -7.75602$ $b = -2.27641$	10.6056	24.4780

III. $I_3^u = \langle b+1,\ a+1,\ u+1 \rangle$

(i) Arc colorings

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

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

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

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

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

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

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

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

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

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

$a_{12} = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$

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

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= 6$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1, c_{12}	$u+1$
c_2, c_4, c_5 c_6, c_7, c_8 c_9, c_{11}	$u-1$
c_3, c_{10}	u

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_2, c_4 c_5, c_6, c_7 c_8, c_9, c_{11} c_{12}	$y - 1$
c_3, c_{10}	y

(vi) Complex Volumes and Cusp Shapes

Solutions to I_3^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-1.00000$ $a=-1.00000$ $b=-1.00000$	1.64493	6.00000

IV. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1	$(u+1)(u^{15}-9u^{14}+\cdots+15u-1)(u^{48}+15u^{47}+\cdots+2837u+1)$
c_2	$(u-1)(u^{15}+u^{14}+\cdots-u-1)(u^{48}+u^{47}+\cdots-55u-1)$
c_3	$u(u^{15}+4u^{13}+\cdots-3u^2-1)(u^{48}+u^{47}+\cdots-14u+1)$
c_4	$(u-1)(u^{15}+3u^{13}+\cdots+4u^2+1)(u^{48}-2u^{47}+\cdots+14560u+15853)$
c_5, c_6	$(u-1)(u^{15}-8u^{13}+\cdots-12u^3-1)(u^{48}+2u^{47}+\cdots-12u-1)$
c_7	$(u-1)(u^{15}-u^{14}+\cdots-u+1)(u^{48}+u^{47}+\cdots-55u-1)$
c_8	$(u-1)(u^{15}+3u^{13}+\cdots-4u^2-1)(u^{48}-2u^{47}+\cdots+14560u+15853)$
c_9	$(u-1)(u^{15}-u^{14}+\cdots-u+1)(u^{48}+u^{47}+\cdots+719u-293)$
c_{10}	$u(u^{15}-8u^{12}+\cdots-3u^2+1)(u^{48}-3u^{47}+\cdots+10344u+649)$
c_{11}	$(u-1)(u^{15}-8u^{13}+\cdots-12u^3+1)(u^{48}+2u^{47}+\cdots-12u-1)$
c_{12}	$(u+1)(u^{15}-u^{13}+\cdots+4u^2+1)(u^{48}+4u^{47}+\cdots-10508u-1369)$

V. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1	$(y-1)(y^{15}+11y^{14}+\cdots+31y-1)(y^{48}+53y^{47}+\cdots-7937733y+1)$
c_2, c_7	$(y-1)(y^{15}-9y^{14}+\cdots+15y-1)(y^{48}-15y^{47}+\cdots-2837y+1)$
c_3	$y(y^{15}+8y^{14}+\cdots-6y-1)(y^{48}+5y^{47}+\cdots-56y+1)$
c_4, c_8	$(y-1)(y^{15}+6y^{14}+\cdots-8y-1)$ $\cdot(y^{48}-64y^{47}+\cdots-8556537210y+251317609)$
c_5, c_6, c_{11}	$(y-1)(y^{15}-16y^{14}+\cdots+12y^2-1)(y^{48}-50y^{47}+\cdots-66y+1)$
c_9	$(y-1)(y^{15}-15y^{14}+\cdots+9y-1)$ $\cdot(y^{48}-61y^{47}+\cdots-3226039y+85849)$
c_{10}	$y(y^{15}-22y^{13}+\cdots+6y-1)$ $\cdot(y^{48}-39y^{47}+\cdots-45579572y+421201)$
c_{12}	$(y-1)(y^{15}-2y^{14}+\cdots-8y-1)$ $\cdot(y^{48}-60y^{47}+\cdots-53809914y+1874161)$