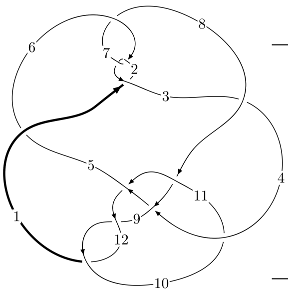
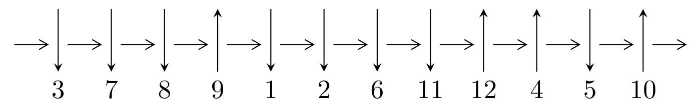
$12a_{0526}$ ($K12a_{0526}$)



A knot diagram[1]

Linearized knot diagam



Solving Sequence

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

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

$$I_1^u = \langle 1.43587 \times 10^{35} u^{107} + 2.94893 \times 10^{35} u^{106} + \cdots + 6.98068 \times 10^{34} b + 3.66969 \times 10^{35},$$
$$3.25085 \times 10^{35} u^{107} + 4.64698 \times 10^{35} u^{106} + \cdots + 6.98068 \times 10^{34} a + 7.03973 \times 10^{34},\ u^{108} + 2u^{107} + \cdots + 3u$$
$$I_2^u = \langle b + 1,\ -u^2 + a - u,\ u^3 + u^2 - 1 \rangle$$

* 2 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 111 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. $\boldsymbol{I^u_1 = \langle 1.44 \times 10^{35} u^{107} + 2.95 \times 10^{35} u^{106} + \cdots + 6.98 \times 10^{34} b + 3.67 \times 10^{35},\ 3.25 \times 10^{35} u^{107} + 4.65 \times 10^{35} u^{106} + \cdots + 6.98 \times 10^{34} a + 7.04 \times 10^{34},\ u^{108} + 2u^{107} + \cdots + 3u + 1 \rangle}$

(i) Arc colorings

$$a_2 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$
$$a_7 = \begin{pmatrix} 0 \\ u \end{pmatrix}$$
$$a_3 = \begin{pmatrix} 1 \\ u^2 \end{pmatrix}$$
$$a_1 = \begin{pmatrix} -u^2 + 1 \\ -u^4 \end{pmatrix}$$
$$a_6 = \begin{pmatrix} u \\ u \end{pmatrix}$$
$$a_8 = \begin{pmatrix} -u^3 \\ -u^3 + u \end{pmatrix}$$
$$a_4 = \begin{pmatrix} -u^8 + u^6 - u^4 + 1 \\ -u^8 + 2u^6 - 2u^4 + 2u^2 \end{pmatrix}$$
$$a_{11} = \begin{pmatrix} -4.65692u^{107} - 6.65692u^{106} + \cdots - 6.39711u - 1.00846 \\ -2.05692u^{107} - 4.22441u^{106} + \cdots - 16.7623u - 5.25692 \end{pmatrix}$$
$$a_9 = \begin{pmatrix} 0.622547u^{107} + 1.02255u^{106} + \cdots - 3.55169u + 0.111274 \\ 0.222547u^{107} - 0.380109u^{106} + \cdots + 1.75637u + 0.622547 \end{pmatrix}$$
$$a_5 = \begin{pmatrix} -u^7 + 2u^5 - 2u^3 + 2u \\ -u^9 + u^7 - u^5 + u \end{pmatrix}$$
$$a_{10} = \begin{pmatrix} -5.78807u^{107} - 9.58807u^{106} + \cdots + 0.732755u - 0.554037 \\ -3.18807u^{107} - 5.54842u^{106} + \cdots - 14.3702u - 4.78807 \end{pmatrix}$$
$$a_{12} = \begin{pmatrix} -5.68213u^{107} - 9.28213u^{106} + \cdots - 0.971272u - 0.00106654 \\ -3.28213u^{107} - 5.84102u^{106} + \cdots - 14.0053u - 4.68213 \end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= -3.18066u^{107} - 12.3213u^{106} + \cdots - 15.7876u - 9.30066$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1, c_7	$u^{108} + 38u^{107} + \cdots + 7u + 1$
c_2, c_6	$u^{108} - 2u^{107} + \cdots - 3u + 1$
c_3, c_5	$u^{108} + 2u^{107} + \cdots + 9913u + 8017$
c_4	$u^{108} - 2u^{107} + \cdots + u - 1$
c_8	$u^{108} - 17u^{107} + \cdots - 20u + 8$
c_9, c_{12}	$u^{108} + 4u^{107} + \cdots - 28u - 1$
c_{10}	$u^{108} + 3u^{107} + \cdots + 1284u + 109$
c_{11}	$u^{108} + u^{107} + \cdots + 54u + 1$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_7	$y^{108} + 66y^{107} + \cdots + 49y + 1$
c_2, c_6	$y^{108} - 38y^{107} + \cdots - 7y + 1$
c_3, c_5	$y^{108} - 78y^{107} + \cdots - 1545833123y + 64272289$
c_4	$y^{108} - 14y^{107} + \cdots - 7y + 1$
c_8	$y^{108} - 21y^{107} + \cdots - 2256y + 64$
c_9, c_{12}	$y^{108} - 64y^{107} + \cdots - 780y + 1$
c_{10}	$y^{108} + 105y^{107} + \cdots + 224182y + 11881$
c_{11}	$y^{108} + 97y^{107} + \cdots - 3282y + 1$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = -0.597771 + 0.813650I$ $a = 2.47839 + 0.85182I$ $b = 2.57699 - 1.74065I$	$0.91550 - 12.81660I$	0
$u = -0.597771 - 0.813650I$ $a = 2.47839 - 0.85182I$ $b = 2.57699 + 1.74065I$	$0.91550 + 12.81660I$	0
$u = -0.586515 + 0.785999I$ $a = -2.58131 - 1.17591I$ $b = -2.78106 + 1.56187I$	$-2.76135 - 6.51854I$	0
$u = -0.586515 - 0.785999I$ $a = -2.58131 + 1.17591I$ $b = -2.78106 - 1.56187I$	$-2.76135 + 6.51854I$	0
$u = 0.614242 + 0.813810I$ $a = 1.370720 - 0.107661I$ $b = 0.98107 + 1.24217I$	$-0.36628 + 4.95266I$	0
$u = 0.614242 - 0.813810I$ $a = 1.370720 + 0.107661I$ $b = 0.98107 - 1.24217I$	$-0.36628 - 4.95266I$	0
$u = 0.993276 + 0.256239I$ $a = 0.048345 + 0.497832I$ $b = -0.417849 + 0.962950I$	$-0.21980 + 2.28779I$	0
$u = 0.993276 - 0.256239I$ $a = 0.048345 - 0.497832I$ $b = -0.417849 - 0.962950I$	$-0.21980 - 2.28779I$	0
$u = -0.607429 + 0.758889I$ $a = 1.10687 - 1.94850I$ $b = -0.65726 - 1.68774I$	$2.45525 - 4.40691I$	0
$u = -0.607429 - 0.758889I$ $a = 1.10687 + 1.94850I$ $b = -0.65726 + 1.68774I$	$2.45525 + 4.40691I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = -0.967017 + 0.354553I$ $a = 0.685909 + 0.472926I$ $b = 1.49049 + 0.16949I$	$0.30361 + 8.27780I$	0
$u = -0.967017 - 0.354553I$ $a = 0.685909 - 0.472926I$ $b = 1.49049 - 0.16949I$	$0.30361 - 8.27780I$	0
$u = 0.557597 + 0.778279I$ $a = -1.43951 + 0.23035I$ $b = -1.35512 - 1.16412I$	$-2.06069 + 1.57945I$	0
$u = 0.557597 - 0.778279I$ $a = -1.43951 - 0.23035I$ $b = -1.35512 + 1.16412I$	$-2.06069 - 1.57945I$	0
$u = 0.862517 + 0.409462I$ $a = 0.385572 - 0.577994I$ $b = 0.641697 - 0.857621I$	$-1.97653 - 1.26355I$	0
$u = 0.862517 - 0.409462I$ $a = 0.385572 + 0.577994I$ $b = 0.641697 + 0.857621I$	$-1.97653 + 1.26355I$	0
$u = -0.625012 + 0.720883I$ $a = 3.20428 + 0.82917I$ $b = 2.95448 - 1.87384I$	$3.68605 - 0.74056I$	0
$u = -0.625012 - 0.720883I$ $a = 3.20428 - 0.82917I$ $b = 2.95448 + 1.87384I$	$3.68605 + 0.74056I$	0
$u = 0.588671 + 0.741137I$ $a = 0.539890 - 1.301750I$ $b = 1.94501 - 1.70423I$	$0.76621 + 1.69194I$	0
$u = 0.588671 - 0.741137I$ $a = 0.539890 + 1.301750I$ $b = 1.94501 + 1.70423I$	$0.76621 - 1.69194I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = -0.815039 + 0.672331I$ $a = 1.30528 + 1.09070I$ $b = 1.63606 - 0.42604I$	$2.61814 + 2.06099I$	0
$u = -0.815039 - 0.672331I$ $a = 1.30528 - 1.09070I$ $b = 1.63606 + 0.42604I$	$2.61814 - 2.06099I$	0
$u = 0.791206 + 0.707863I$ $a = 1.242420 - 0.296906I$ $b = 0.289663 + 0.875878I$	$2.57323 + 1.47652I$	0
$u = 0.791206 - 0.707863I$ $a = 1.242420 + 0.296906I$ $b = 0.289663 - 0.875878I$	$2.57323 - 1.47652I$	0
$u = 1.06533$ $a = 1.87148$ $b = -1.09473$	-1.61062	0
$u = 1.083580 + 0.029651I$ $a = 0.428417 - 0.305662I$ $b = -0.275728 + 1.238730I$	$-3.22980 - 3.58406I$	0
$u = 1.083580 - 0.029651I$ $a = 0.428417 + 0.305662I$ $b = -0.275728 - 1.238730I$	$-3.22980 + 3.58406I$	0
$u = -1.091440 + 0.011709I$ $a = 0.73071 - 2.26932I$ $b = -0.154395 - 0.804597I$	$-4.77450 + 0.69884I$	0
$u = -1.091440 - 0.011709I$ $a = 0.73071 + 2.26932I$ $b = -0.154395 + 0.804597I$	$-4.77450 - 0.69884I$	0
$u = -0.856102 + 0.680324I$ $a = -3.16956 - 4.60118I$ $b = -6.17544 - 1.38034I$	$4.07616 + 2.62315I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.856102 - 0.680324I$ $a = -3.16956 + 4.60118I$ $b = -6.17544 + 1.38034I$	$4.07616 - 2.62315I$	0
$u = -0.757826 + 0.790886I$ $a = 0.186346 - 0.810336I$ $b = -0.453992 - 0.337006I$	$6.40107 + 3.53173I$	0
$u = -0.757826 - 0.790886I$ $a = 0.186346 + 0.810336I$ $b = -0.453992 + 0.337006I$	$6.40107 - 3.53173I$	0
$u = 0.491909 + 0.756563I$ $a = -1.250010 + 0.380217I$ $b = -1.251750 - 0.642698I$	$-2.40500 + 1.31068I$	0
$u = 0.491909 - 0.756563I$ $a = -1.250010 - 0.380217I$ $b = -1.251750 + 0.642698I$	$-2.40500 - 1.31068I$	0
$u = 0.568811 + 0.700498I$ $a = 0.923748 + 0.518614I$ $b = -0.06859 + 2.30340I$	$0.504377 + 0.446786I$	0
$u = 0.568811 - 0.700498I$ $a = 0.923748 - 0.518614I$ $b = -0.06859 - 2.30340I$	$0.504377 - 0.446786I$	0
$u = 0.840437 + 0.708054I$ $a = -0.153381 + 0.428703I$ $b = -0.65198 + 1.39073I$	$6.23476 - 0.88816I$	0
$u = 0.840437 - 0.708054I$ $a = -0.153381 - 0.428703I$ $b = -0.65198 - 1.39073I$	$6.23476 + 0.88816I$	0
$u = -0.854464 + 0.254519I$ $a = -1.106020 + 0.127999I$ $b = -1.49389 + 0.29078I$	$-2.63759 + 3.47259I$	0

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.854464 - 0.254519I$ $a = -1.106020 - 0.127999I$ $b = -1.49389 - 0.29078I$	$-2.63759 - 3.47259I$	0
$u = 0.794482 + 0.774864I$ $a = -1.360950 + 0.258430I$ $b = -0.607855 - 0.855698I$	$7.00651 + 6.05760I$	0
$u = 0.794482 - 0.774864I$ $a = -1.360950 - 0.258430I$ $b = -0.607855 + 0.855698I$	$7.00651 - 6.05760I$	0
$u = -0.888479 + 0.670392I$ $a = -0.101572 + 1.357190I$ $b = 1.25584 + 1.33718I$	$2.39366 + 3.13373I$	0
$u = -0.888479 - 0.670392I$ $a = -0.101572 - 1.357190I$ $b = 1.25584 - 1.33718I$	$2.39366 - 3.13373I$	0
$u = 1.112990 + 0.038874I$ $a = -1.58654 + 0.00313I$ $b = 0.786207 + 0.474131I$	$-8.68488 - 5.47508I$	0
$u = 1.112990 - 0.038874I$ $a = -1.58654 - 0.00313I$ $b = 0.786207 - 0.474131I$	$-8.68488 + 5.47508I$	0
$u = -1.111610 + 0.073871I$ $a = 0.639895 + 0.430578I$ $b = -0.517929 + 0.148112I$	$-6.60406 + 4.11832I$	0
$u = -1.111610 - 0.073871I$ $a = 0.639895 - 0.430578I$ $b = -0.517929 - 0.148112I$	$-6.60406 - 4.11832I$	0
$u = 0.872592 + 0.704880I$ $a = -1.305510 + 0.486497I$ $b = -0.426934 - 0.224892I$	$6.13711 - 4.51816I$	0

Solutions to I_1^u	$\sqrt{-1}(\text{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.872592 - 0.704880I$ $a = -1.305510 - 0.486497I$ $b = -0.426934 + 0.224892I$	$6.13711 + 4.51816I$	0
$u = 1.124510 + 0.063645I$ $a = 1.57274 - 0.13635I$ $b = -0.613678 - 0.384341I$	$-5.29137 - 11.81510I$	0
$u = 1.124510 - 0.063645I$ $a = 1.57274 + 0.13635I$ $b = -0.613678 + 0.384341I$	$-5.29137 + 11.81510I$	0
$u = -1.126880 + 0.022051I$ $a = -1.110330 - 0.281031I$ $b = 0.323711 - 0.092251I$	$-7.89299 + 0.30667I$	0
$u = -1.126880 - 0.022051I$ $a = -1.110330 + 0.281031I$ $b = 0.323711 + 0.092251I$	$-7.89299 - 0.30667I$	0
$u = 0.910555 + 0.696624I$ $a = -0.492712 - 0.518249I$ $b = 0.46169 - 1.56934I$	$2.21367 - 6.85953I$	0
$u = 0.910555 - 0.696624I$ $a = -0.492712 + 0.518249I$ $b = 0.46169 + 1.56934I$	$2.21367 + 6.85953I$	0
$u = -0.473057 + 0.701119I$ $a = -2.36399 + 0.29042I$ $b = -1.36106 + 1.67556I$	$-3.49363 + 3.85706I$	0
$u = -0.473057 - 0.701119I$ $a = -2.36399 - 0.29042I$ $b = -1.36106 - 1.67556I$	$-3.49363 - 3.85706I$	0
$u = -0.574655 + 0.620179I$ $a = 0.36588 + 2.18977I$ $b = 1.56918 + 0.62098I$	$1.73231 + 2.38348I$	0

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.574655 - 0.620179I$ $a = 0.36588 - 2.18977I$ $b = 1.56918 - 0.62098I$	$1.73231 - 2.38348I$	0
$u = -0.405577 + 0.720122I$ $a = 2.06312 - 0.21038I$ $b = 1.22359 - 1.43875I$	$-0.19376 + 9.86627I$	$0. - 7.10519I$
$u = -0.405577 - 0.720122I$ $a = 2.06312 + 0.21038I$ $b = 1.22359 + 1.43875I$	$-0.19376 - 9.86627I$	$0. + 7.10519I$
$u = -0.878370 + 0.781985I$ $a = 0.025753 + 0.166614I$ $b = 0.282822 - 0.106686I$	$4.29469 + 2.93793I$	0
$u = -0.878370 - 0.781985I$ $a = 0.025753 - 0.166614I$ $b = 0.282822 + 0.106686I$	$4.29469 - 2.93793I$	0
$u = 1.027390 + 0.587354I$ $a = 0.53010 - 1.45772I$ $b = 1.12255 - 1.18580I$	$-3.46386 - 2.56925I$	0
$u = 1.027390 - 0.587354I$ $a = 0.53010 + 1.45772I$ $b = 1.12255 + 1.18580I$	$-3.46386 + 2.56925I$	0
$u = 0.928117 + 0.741160I$ $a = 0.337411 + 0.848534I$ $b = -0.58284 + 1.69048I$	$6.60007 - 11.77380I$	0
$u = 0.928117 - 0.741160I$ $a = 0.337411 - 0.848534I$ $b = -0.58284 - 1.69048I$	$6.60007 + 11.77380I$	0
$u = -1.011650 + 0.638671I$ $a = 1.67181 + 1.44667I$ $b = 2.93495 + 0.26954I$	$0.50905 + 2.66430I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = -1.011650 - 0.638671I$ $a = 1.67181 - 1.44667I$ $b = 2.93495 - 0.26954I$	$0.50905 - 2.66430I$	0
$u = -1.046890 + 0.594762I$ $a = -0.53509 + 2.74044I$ $b = 0.80652 + 2.79685I$	$-1.98888 - 4.93290I$	0
$u = -1.046890 - 0.594762I$ $a = -0.53509 - 2.74044I$ $b = 0.80652 - 2.79685I$	$-1.98888 + 4.93290I$	0
$u = -1.037180 + 0.621147I$ $a = 0.88395 - 2.99412I$ $b = -0.71547 - 3.33350I$	$-5.05757 + 1.20063I$	0
$u = -1.037180 - 0.621147I$ $a = 0.88395 + 2.99412I$ $b = -0.71547 + 3.33350I$	$-5.05757 - 1.20063I$	0
$u = -1.014490 + 0.664031I$ $a = -0.46293 + 4.23970I$ $b = 2.29950 + 4.29878I$	$2.53292 + 6.06945I$	0
$u = -1.014490 - 0.664031I$ $a = -0.46293 - 4.23970I$ $b = 2.29950 - 4.29878I$	$2.53292 - 6.06945I$	0
$u = 1.024620 + 0.648504I$ $a = -2.47570 - 1.16291I$ $b = -0.72033 - 2.52150I$	$-0.80282 - 5.66630I$	0
$u = 1.024620 - 0.648504I$ $a = -2.47570 + 1.16291I$ $b = -0.72033 + 2.52150I$	$-0.80282 + 5.66630I$	0
$u = -0.961973 + 0.739674I$ $a = -0.434326 - 0.081275I$ $b = -0.831220 + 0.339474I$	$5.78307 + 2.22906I$	0

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.961973 - 0.739674I$ $a = -0.434326 + 0.081275I$ $b = -0.831220 - 0.339474I$	$5.78307 - 2.22906I$	0
$u = 1.029530 + 0.662893I$ $a = 2.71706 - 1.51859I$ $b = 2.59884 + 0.37989I$	$-0.52575 - 7.05915I$	0
$u = 1.029530 - 0.662893I$ $a = 2.71706 + 1.51859I$ $b = 2.59884 - 0.37989I$	$-0.52575 + 7.05915I$	0
$u = 0.373115 + 0.678425I$ $a = 1.045530 - 0.419105I$ $b = 0.754473 + 0.291109I$	$-1.73113 - 2.17029I$	$-6.14984 + 5.57417I$
$u = 0.373115 - 0.678425I$ $a = 1.045530 + 0.419105I$ $b = 0.754473 - 0.291109I$	$-1.73113 + 2.17029I$	$-6.14984 - 5.57417I$
$u = 1.053960 + 0.631883I$ $a = -0.28333 + 1.98057I$ $b = -1.32023 + 1.65990I$	$-4.03502 - 6.55520I$	0
$u = 1.053960 - 0.631883I$ $a = -0.28333 - 1.98057I$ $b = -1.32023 - 1.65990I$	$-4.03502 + 6.55520I$	0
$u = -1.028400 + 0.673061I$ $a = -2.14664 + 0.43493I$ $b = -2.23064 + 1.87677I$	$1.20856 + 9.85607I$	0
$u = -1.028400 - 0.673061I$ $a = -2.14664 - 0.43493I$ $b = -2.23064 - 1.87677I$	$1.20856 - 9.85607I$	0
$u = 1.048640 + 0.664938I$ $a = 0.40775 + 2.24315I$ $b = -1.10078 + 2.26013I$	$-3.50445 - 7.03464I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 1.048640 - 0.664938I$ $a = 0.40775 - 2.24315I$ $b = -1.10078 - 2.26013I$	$-3.50445 + 7.03464I$	0
$u = -1.043320 + 0.675778I$ $a = -0.08893 - 3.76415I$ $b = -2.70958 - 3.52447I$	$-4.11798 + 12.04070I$	0
$u = -1.043320 - 0.675778I$ $a = -0.08893 + 3.76415I$ $b = -2.70958 + 3.52447I$	$-4.11798 - 12.04070I$	0
$u = 1.043940 + 0.694354I$ $a = -0.59728 - 1.74412I$ $b = 0.72812 - 2.12482I$	$-1.65997 - 10.61880I$	0
$u = 1.043940 - 0.694354I$ $a = -0.59728 + 1.74412I$ $b = 0.72812 + 2.12482I$	$-1.65997 + 10.61880I$	0
$u = -1.049290 + 0.688773I$ $a = -0.18855 + 3.56370I$ $b = 2.32267 + 3.47589I$	$-0.4394 + 18.4589I$	0
$u = -1.049290 - 0.688773I$ $a = -0.18855 - 3.56370I$ $b = 2.32267 - 3.47589I$	$-0.4394 - 18.4589I$	0
$u = 0.706498$ $a = -0.0111555$ $b = -0.535397$	-1.05404	-9.43790
$u = -0.591090 + 0.373954I$ $a = 0.31083 + 2.36392I$ $b = 1.075670 + 0.841264I$	$1.75394 + 2.45459I$	$-0.68718 - 7.90365I$
$u = -0.591090 - 0.373954I$ $a = 0.31083 - 2.36392I$ $b = 1.075670 - 0.841264I$	$1.75394 - 2.45459I$	$-0.68718 + 7.90365I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.609979 + 0.110142I$ $a = 0.79231 - 1.59624I$ $b = -0.20225 + 1.68508I$	$0.682945 - 0.214746I$	$18.6792 - 10.7483I$
$u = 0.609979 - 0.110142I$ $a = 0.79231 + 1.59624I$ $b = -0.20225 - 1.68508I$	$0.682945 + 0.214746I$	$18.6792 + 10.7483I$
$u = -0.052506 + 0.610247I$ $a = -0.630009 + 1.005690I$ $b = 0.269341 - 0.259411I$	$2.98188 - 5.07563I$	$0.63916 + 5.59882I$
$u = -0.052506 - 0.610247I$ $a = -0.630009 - 1.005690I$ $b = 0.269341 + 0.259411I$	$2.98188 + 5.07563I$	$0.63916 - 5.59882I$
$u = 0.057854 + 0.400580I$ $a = 1.40916 - 1.04721I$ $b = -0.047273 - 0.137594I$	$-0.20071 - 1.41520I$	$-2.43522 + 4.05127I$
$u = 0.057854 - 0.400580I$ $a = 1.40916 + 1.04721I$ $b = -0.047273 + 0.137594I$	$-0.20071 + 1.41520I$	$-2.43522 - 4.05127I$
$u = -0.236398 + 0.289876I$ $a = 2.52381 + 0.86338I$ $b = 1.209010 - 0.646641I$	$2.61999 - 0.25288I$	$3.52663 - 3.05550I$
$u = -0.236398 - 0.289876I$ $a = 2.52381 - 0.86338I$ $b = 1.209010 + 0.646641I$	$2.61999 + 0.25288I$	$3.52663 + 3.05550I$

II. $I_2^u = \langle b+1,\ -u^2+a-u,\ u^3+u^2-1\rangle$

(i) Arc colorings

$$a_2 = \begin{pmatrix}1\\0\end{pmatrix}$$
$$a_7 = \begin{pmatrix}0\\u\end{pmatrix}$$
$$a_3 = \begin{pmatrix}1\\u^2\end{pmatrix}$$
$$a_1 = \begin{pmatrix}-u^2+1\\-u^2-u+1\end{pmatrix}$$
$$a_6 = \begin{pmatrix}u\\u\end{pmatrix}$$
$$a_8 = \begin{pmatrix}u^2-1\\u^2+u-1\end{pmatrix}$$
$$a_4 = \begin{pmatrix}u\\u\end{pmatrix}$$
$$a_{11} = \begin{pmatrix}u^2+u\\-1\end{pmatrix}$$
$$a_9 = \begin{pmatrix}u^2-1\\u^2+u-1\end{pmatrix}$$
$$a_5 = \begin{pmatrix}1\\u^2\end{pmatrix}$$
$$a_{10} = \begin{pmatrix}2u^2+2u\\u^2+u-1\end{pmatrix}$$
$$a_{12} = \begin{pmatrix}u^2+2u+1\\0\end{pmatrix}$$

(ii) Obstruction class $= 1$

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

(iv) u-Polynomials at the component

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

(v) Riley Polynomials at the component

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

(vi) Complex Volumes and Cusp Shapes

Solutions to I_2^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.877439 + 0.744862I$ $a = -0.662359 - 0.562280I$ $b = -1.00000$	$4.66906 + 2.82812I$	$4.21508 - 1.30714I$
$u = -0.877439 - 0.744862I$ $a = -0.662359 + 0.562280I$ $b = -1.00000$	$4.66906 - 2.82812I$	$4.21508 + 1.30714I$
$u = 0.754878$ $a = 1.32472$ $b = -1.00000$	0.531480	4.56980

III. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1	$(u^3 - u^2 + 2u - 1)(u^{108} + 38u^{107} + \cdots + 7u + 1)$
c_2	$(u^3 + u^2 - 1)(u^{108} - 2u^{107} + \cdots - 3u + 1)$
c_3	$(u^3 - u^2 + 2u - 1)(u^{108} + 2u^{107} + \cdots + 9913u + 8017)$
c_4	$(u^3 - u^2 + 2u - 1)(u^{108} - 2u^{107} + \cdots + u - 1)$
c_5	$(u^3 + u^2 + 2u + 1)(u^{108} + 2u^{107} + \cdots + 9913u + 8017)$
c_6	$(u^3 - u^2 + 1)(u^{108} - 2u^{107} + \cdots - 3u + 1)$
c_7	$(u^3 + u^2 + 2u + 1)(u^{108} + 38u^{107} + \cdots + 7u + 1)$
c_8	$u^3(u^{108} - 17u^{107} + \cdots - 20u + 8)$
c_9	$((u + 1)^3)(u^{108} + 4u^{107} + \cdots - 28u - 1)$
c_{10}	$(u^3 - 2u^2 + u - 1)(u^{108} + 3u^{107} + \cdots + 1284u + 109)$
c_{11}	$(u^3 - 2u^2 + u - 1)(u^{108} + u^{107} + \cdots + 54u + 1)$
c_{12}	$((u - 1)^3)(u^{108} + 4u^{107} + \cdots - 28u - 1)$

IV. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1, c_7	$(y^3+3y^2+2y-1)(y^{108}+66y^{107}+\cdots+49y+1)$
c_2, c_6	$(y^3-y^2+2y-1)(y^{108}-38y^{107}+\cdots-7y+1)$
c_3, c_5	$(y^3+3y^2+2y-1)(y^{108}-78y^{107}+\cdots-1.54583\times10^9y+6.42723\times10^7)$
c_4	$(y^3+3y^2+2y-1)(y^{108}-14y^{107}+\cdots-7y+1)$
c_8	$y^3(y^{108}-21y^{107}+\cdots-2256y+64)$
c_9, c_{12}	$((y-1)^3)(y^{108}-64y^{107}+\cdots-780y+1)$
c_{10}	$(y^3-2y^2-3y-1)(y^{108}+105y^{107}+\cdots+224182y+11881)$
c_{11}	$(y^3-2y^2-3y-1)(y^{108}+97y^{107}+\cdots-3282y+1)$