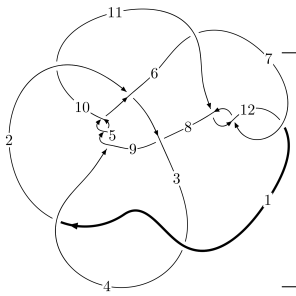
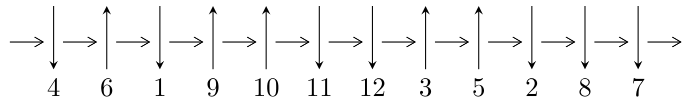
$12a_{1014}$ ($K12a_{1014}$)



A knot diagram[1]

Linearized knot diagam



Solving Sequence

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

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

$$I^u_1 = \langle -2.48028\times10^{137}u^{87} - 1.90470\times10^{137}u^{86} + \cdots + 7.25646\times10^{137}b + 2.50630\times10^{137},$$
$$2.11941\times10^{137}u^{87} + 7.24817\times10^{137}u^{86} + \cdots + 7.25646\times10^{137}a - 8.34303\times10^{136},\ u^{88} + 2u^{87} + \cdots + 4u^{2}$$
$$I^u_2 = \langle 7b - u + 2,\ 7a - 3u - 1,\ u^2 + u + 1\rangle$$

* 2 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 90 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. $\boldsymbol{I^u_1 = \langle -2.48\times10^{137}u^{87} - 1.90\times10^{137}u^{86} + \cdots + 7.26\times10^{137}b + 2.51\times10^{137},\ 2.12\times10^{137}u^{87} + 7.25\times10^{137}u^{86} + \cdots + 7.26\times10^{137}a - 8.34\times10^{136},\ u^{88} + 2u^{87} + \cdots + 4u^2 + 1\rangle}$

(i) Arc colorings

$$a_5 = \begin{pmatrix}1\\0\end{pmatrix}$$
$$a_{10} = \begin{pmatrix}0\\u\end{pmatrix}$$
$$a_2 = \begin{pmatrix}-0.292072u^{87} - 0.998857u^{86} + \cdots + 4.58008u + 0.114974\\0.341803u^{87} + 0.262483u^{86} + \cdots - 0.159539u - 0.345389\end{pmatrix}$$
$$a_6 = \begin{pmatrix}1\\-u^2\end{pmatrix}$$
$$a_3 = \begin{pmatrix}-0.264668u^{87} - 0.894639u^{86} + \cdots + 4.71261u + 0.184298\\0.325117u^{87} + 0.233773u^{86} + \cdots - 0.132136u - 0.295978\end{pmatrix}$$
$$a_{11} = \begin{pmatrix}-0.138518u^{87} + 2.23892u^{86} + \cdots - 0.340831u - 3.88428\\3.10091u^{87} + 1.52591u^{86} + \cdots - 1.72649u + 2.45169\end{pmatrix}$$
$$a_7 = \begin{pmatrix}-0.963044u^{87} - 0.180143u^{86} + \cdots + 3.28975u + 3.23650\\2.30375u^{87} + 1.20769u^{86} + \cdots - 1.34975u + 1.52417\end{pmatrix}$$
$$a_9 = \begin{pmatrix}-u\\u\end{pmatrix}$$
$$a_4 = \begin{pmatrix}-u^2+1\\u^2\end{pmatrix}$$
$$a_1 = \begin{pmatrix}-0.215669u^{87} - 0.801951u^{86} + \cdots + 4.52640u - 1.04103\\0.321531u^{87} + 0.203061u^{86} + \cdots - 0.215669u - 0.370612\end{pmatrix}$$
$$a_8 = \begin{pmatrix}2.84777u^{87} + 3.42425u^{86} + \cdots - 8.89289u - 1.49021\\-3.51383u^{87} - 2.67370u^{86} + \cdots + 1.69517u - 2.18337\end{pmatrix}$$
$$a_{12} = \begin{pmatrix}0.209783u^{87} + 1.31979u^{86} + \cdots + 1.71885u - 2.35314\\1.79542u^{87} + 1.30105u^{86} + \cdots - 0.315595u + 1.00197\end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= -3.67403u^{87} - 4.82309u^{86} + \cdots - 7.57749u - 3.42504$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1, c_3	$u^{88} - 3u^{87} + \cdots - 295u + 49$
c_2	$u^{88} - 7u^{87} + \cdots - 980u + 196$
c_4, c_5, c_9	$u^{88} + 2u^{87} + \cdots + 4u^2 + 1$
c_6	$u^{88} - 2u^{87} + \cdots - 218u + 65$
c_7, c_{11}, c_{12}	$u^{88} + 2u^{87} + \cdots + 2u + 1$
c_8	$7(7u^{88} - 36u^{87} + \cdots - 40832u + 4553)$
c_{10}	$7(7u^{88} + 71u^{87} + \cdots + 449u + 1459)$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_3	$y^{88} - 53y^{87} + \cdots - 18915y + 2401$
c_2	$y^{88} - 15y^{87} + \cdots - 201880y + 38416$
c_4, c_5, c_9	$y^{88} - 82y^{87} + \cdots + 8y + 1$
c_6	$y^{88} - 34y^{87} + \cdots + 196616y + 4225$
c_7, c_{11}, c_{12}	$y^{88} + 74y^{87} + \cdots + 8y + 1$
c_8	$49(49y^{88} + 3926y^{87} + \cdots - 8.10942 \times 10^8 y + 2.07298 \times 10^7)$
c_{10}	$49(49y^{88} + 4003y^{87} + \cdots - 2854063y + 2128681)$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.465025 + 0.870255I$ $a = 0.208785 + 1.159280I$ $b = 0.309065 - 0.370721I$	$-2.82358 + 4.12952I$	0
$u = 0.465025 - 0.870255I$ $a = 0.208785 - 1.159280I$ $b = 0.309065 + 0.370721I$	$-2.82358 - 4.12952I$	0
$u = 0.678542 + 0.774022I$ $a = -0.907312 + 0.128470I$ $b = 0.806388 + 0.235769I$	$0.40735 - 7.71051I$	0
$u = 0.678542 - 0.774022I$ $a = -0.907312 - 0.128470I$ $b = 0.806388 - 0.235769I$	$0.40735 + 7.71051I$	0
$u = -0.474169 + 0.840049I$ $a = 0.241987 - 1.390130I$ $b = 0.299699 + 0.471165I$	$-5.23953 - 8.76456I$	0
$u = -0.474169 - 0.840049I$ $a = 0.241987 + 1.390130I$ $b = 0.299699 - 0.471165I$	$-5.23953 + 8.76456I$	0
$u = 0.475214 + 0.823836I$ $a = 0.31410 + 1.52013I$ $b = 0.268780 - 0.528112I$	$-0.16472 + 13.04760I$	0
$u = 0.475214 - 0.823836I$ $a = 0.31410 - 1.52013I$ $b = 0.268780 + 0.528112I$	$-0.16472 - 13.04760I$	0
$u = 0.224097 + 1.032390I$ $a = 0.478233 + 0.326886I$ $b = 0.155332 - 0.081088I$	$-1.55925 + 2.49981I$	0
$u = 0.224097 - 1.032390I$ $a = 0.478233 - 0.326886I$ $b = 0.155332 + 0.081088I$	$-1.55925 - 2.49981I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.709608 + 0.809911I$ $a = -0.732695 - 0.187189I$ $b = 0.708824 - 0.197729I$	$-4.61019 + 3.28116I$	0
$u = -0.709608 - 0.809911I$ $a = -0.732695 + 0.187189I$ $b = 0.708824 + 0.197729I$	$-4.61019 - 3.28116I$	0
$u = -0.355788 + 0.802924I$ $a = 0.877968 - 0.955168I$ $b = 0.043536 + 0.303056I$	$5.68213 - 4.42760I$	0
$u = -0.355788 - 0.802924I$ $a = 0.877968 + 0.955168I$ $b = 0.043536 - 0.303056I$	$5.68213 + 4.42760I$	0
$u = 0.807583 + 0.884999I$ $a = -0.454813 + 0.140604I$ $b = 0.533679 + 0.217858I$	$-2.00805 + 1.65292I$	0
$u = 0.807583 - 0.884999I$ $a = -0.454813 - 0.140604I$ $b = 0.533679 - 0.217858I$	$-2.00805 - 1.65292I$	0
$u = -0.590432 + 0.529783I$ $a = -0.598808 + 0.811973I$ $b = 0.588467 - 0.662727I$	$6.79240 + 0.03358I$	$6.01227 + 1.06957I$
$u = -0.590432 - 0.529783I$ $a = -0.598808 - 0.811973I$ $b = 0.588467 + 0.662727I$	$6.79240 - 0.03358I$	$6.01227 - 1.06957I$
$u = -1.248020 + 0.027660I$ $a = 0.971817 + 0.039767I$ $b = 0.385149 + 0.317525I$	$1.89898 - 3.61624I$	0
$u = -1.248020 - 0.027660I$ $a = 0.971817 - 0.039767I$ $b = 0.385149 - 0.317525I$	$1.89898 + 3.61624I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 1.25038$ $a = 1.00048$ $b = 0.302083$	-2.00769	0
$u = 0.428355 + 0.546083I$ $a = -0.42999 - 1.60423I$ $b = 0.289935 + 1.063610I$	$3.81209 + 7.45383I$	$1.39315 - 8.57538I$
$u = 0.428355 - 0.546083I$ $a = -0.42999 + 1.60423I$ $b = 0.289935 - 1.063610I$	$3.81209 - 7.45383I$	$1.39315 + 8.57538I$
$u = 1.313290 + 0.118441I$ $a = 0.193456 + 0.100801I$ $b = 0.78076 - 1.74527I$	$2.98306 + 0.50959I$	0
$u = 1.313290 - 0.118441I$ $a = 0.193456 - 0.100801I$ $b = 0.78076 + 1.74527I$	$2.98306 - 0.50959I$	0
$u = -1.331540 + 0.136013I$ $a = -0.065593 - 0.153457I$ $b = 0.93450 + 1.99969I$	$-0.39006 - 4.02805I$	0
$u = -1.331540 - 0.136013I$ $a = -0.065593 + 0.153457I$ $b = 0.93450 - 1.99969I$	$-0.39006 + 4.02805I$	0
$u = -0.411528 + 0.511958I$ $a = -0.21256 + 1.56445I$ $b = 0.162302 - 0.967337I$	$-1.04299 - 3.88125I$	$-3.63273 + 8.23421I$
$u = -0.411528 - 0.511958I$ $a = -0.21256 - 1.56445I$ $b = 0.162302 + 0.967337I$	$-1.04299 + 3.88125I$	$-3.63273 - 8.23421I$
$u = 1.340780 + 0.150050I$ $a = -0.236604 + 0.147537I$ $b = 1.04400 - 2.12368I$	$3.97725 + 7.70239I$	0

Solutions to I^u_1	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 1.340780 - 0.150050I$ $a = -0.236604 - 0.147537I$ $b = 1.04400 + 2.12368I$	$3.97725 - 7.70239I$	0
$u = 1.365900 + 0.082318I$ $a = 0.164386 + 0.923797I$ $b = 0.34928 - 2.67036I$	$2.94649 + 2.04332I$	0
$u = 1.365900 - 0.082318I$ $a = 0.164386 - 0.923797I$ $b = 0.34928 + 2.67036I$	$2.94649 - 2.04332I$	0
$u = -1.369380 + 0.013705I$ $a = 2.54977 - 0.95313I$ $b = -4.25386 + 2.03407I$	$2.02967 - 0.01294I$	0
$u = -1.369380 - 0.013705I$ $a = 2.54977 + 0.95313I$ $b = -4.25386 - 2.03407I$	$2.02967 + 0.01294I$	0
$u = 0.470844 + 0.373071I$ $a = 0.094395 - 0.945702I$ $b = 0.220554 + 0.530322I$	$0.905268 + 0.924263I$	$4.02456 - 3.18187I$
$u = 0.470844 - 0.373071I$ $a = 0.094395 + 0.945702I$ $b = 0.220554 - 0.530322I$	$0.905268 - 0.924263I$	$4.02456 + 3.18187I$
$u = 0.302426 + 0.510200I$ $a = 1.92897 + 0.17179I$ $b = -0.256677 - 0.037097I$	$3.59262 - 4.05238I$	$1.82011 + 0.64734I$
$u = 0.302426 - 0.510200I$ $a = 1.92897 - 0.17179I$ $b = -0.256677 + 0.037097I$	$3.59262 + 4.05238I$	$1.82011 - 0.64734I$
$u = -1.368850 + 0.325549I$ $a = -0.276046 + 0.686310I$ $b = 0.70201 - 1.59031I$	$8.47086 + 0.96250I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-1.368850-0.325549I$ $a=-0.276046-0.686310I$ $b=\ \ 0.70201+1.59031I$	$8.47086-0.96250I$	0
$u=\ \ 1.409890+0.029155I$ $a=-0.65909+5.45104I$ $b=\ \ 1.81784-11.09350I$	$6.42235-2.77134I$	0
$u=\ \ 1.409890-0.029155I$ $a=-0.65909-5.45104I$ $b=\ \ 1.81784+11.09350I$	$6.42235+2.77134I$	0
$u=-1.42533+0.08102I$ $a=-0.911301-0.787379I$ $b=\ \ 1.90182+2.04497I$	$7.54516-3.10813I$	0
$u=-1.42533-0.08102I$ $a=-0.911301+0.787379I$ $b=\ \ 1.90182-2.04497I$	$7.54516+3.10813I$	0
$u=\ \ 0.320807+0.471107I$ $a=\ \ 0.23879-1.74609I$ $b=-0.233979+0.856786I$	$1.63354+0.85045I$	$-1.53895-5.23910I$
$u=\ \ 0.320807-0.471107I$ $a=\ \ 0.23879+1.74609I$ $b=-0.233979-0.856786I$	$1.63354-0.85045I$	$-1.53895+5.23910I$
$u=-1.44185+0.14310I$ $a=-0.570195-0.619847I$ $b=\ \ 0.69295+2.11347I$	$7.32098-3.04286I$	0
$u=-1.44185-0.14310I$ $a=-0.570195+0.619847I$ $b=\ \ 0.69295-2.11347I$	$7.32098+3.04286I$	0
$u=-0.154069+0.519282I$ $a=\ \ 0.60767+1.59884I$ $b=-1.070580-0.771606I$	$-0.68368-5.30063I$	$-6.18473+7.46843I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.154069 - 0.519282I$ $a = 0.60767 - 1.59884I$ $b = -1.070580 + 0.771606I$	$-0.68368 + 5.30063I$	$-6.18473 - 7.46843I$
$u = 1.46093 + 0.18393I$ $a = -0.577303 + 0.740047I$ $b = 0.18603 - 2.36742I$	$5.02748 + 6.44830I$	0
$u = 1.46093 - 0.18393I$ $a = -0.577303 - 0.740047I$ $b = 0.18603 + 2.36742I$	$5.02748 - 6.44830I$	0
$u = -1.46509 + 0.19462I$ $a = -0.579534 - 0.802604I$ $b = 0.04047 + 2.47187I$	$9.9418 - 10.1764I$	0
$u = -1.46509 - 0.19462I$ $a = -0.579534 + 0.802604I$ $b = 0.04047 - 2.47187I$	$9.9418 + 10.1764I$	0
$u = 0.122670 + 0.505532I$ $a = 0.52604 - 1.34952I$ $b = -1.130960 + 0.595578I$	$-4.89818 + 1.73906I$	$-12.21356 - 4.35527I$
$u = 0.122670 - 0.505532I$ $a = 0.52604 + 1.34952I$ $b = -1.130960 - 0.595578I$	$-4.89818 - 1.73906I$	$-12.21356 + 4.35527I$
$u = -1.47349 + 0.15116I$ $a = -0.509337 - 0.629558I$ $b = 0.34252 + 1.90298I$	$7.23343 - 2.97184I$	0
$u = -1.47349 - 0.15116I$ $a = -0.509337 + 0.629558I$ $b = 0.34252 - 1.90298I$	$7.23343 + 2.97184I$	0
$u = -0.079421 + 0.507840I$ $a = 0.548744 + 0.934759I$ $b = -1.259470 - 0.407517I$	$-1.26799 + 1.70875I$	$-7.72525 - 0.49338I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = -0.079421 - 0.507840I$ $a = \ \ 0.548744 - 0.934759I$ $b = -1.259470 + 0.407517I$	$-1.26799 - 1.70875I$	$-7.72525 + 0.49338I$
$u = \ \ 1.43573 + 0.38529I$ $a = -0.007478 - 0.595504I$ $b = \ \ 0.08476 + 1.51582I$	$2.71814 + 2.73664I$	0
$u = \ \ 1.43573 - 0.38529I$ $a = -0.007478 + 0.595504I$ $b = \ \ 0.08476 - 1.51582I$	$2.71814 - 2.73664I$	0
$u = -0.269583 + 0.412174I$ $a = \ \ 1.78564 + 0.30892I$ $b = -0.214649 - 0.070213I$	$-1.25437 + 0.85817I$	$-4.51635 - 0.02662I$
$u = -0.269583 - 0.412174I$ $a = \ \ 1.78564 - 0.30892I$ $b = -0.214649 + 0.070213I$	$-1.25437 - 0.85817I$	$-4.51635 + 0.02662I$
$u = \ \ 1.48155 + 0.30360I$ $a = \ \ 0.245807 - 1.043490I$ $b = -0.22891 + 2.56472I$	$11.6500 + 8.4676I$	0
$u = \ \ 1.48155 - 0.30360I$ $a = \ \ 0.245807 + 1.043490I$ $b = -0.22891 - 2.56472I$	$11.6500 - 8.4676I$	0
$u = \ \ 1.50563 + 0.17910I$ $a = -0.348456 + 0.721440I$ $b = -0.27315 - 1.84088I$	$13.58050 + 2.56939I$	0
$u = \ \ 1.50563 - 0.17910I$ $a = -0.348456 - 0.721440I$ $b = -0.27315 + 1.84088I$	$13.58050 - 2.56939I$	0
$u = \ \ 1.52367$ $a = -0.523082$ $b = \ \ 0.691833$	4.13126	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -1.48453 + 0.34451I$ $a = 0.225794 + 0.730825I$ $b = -0.33907 - 1.91530I$	$4.19421 - 7.28551I$	0
$u = -1.48453 - 0.34451I$ $a = 0.225794 - 0.730825I$ $b = -0.33907 + 1.91530I$	$4.19421 + 7.28551I$	0
$u = 0.346362 + 0.322667I$ $a = 2.52356 - 1.29399I$ $b = -0.324707 + 0.186840I$	$1.98288 + 1.74756I$	$-0.63361 - 6.31369I$
$u = 0.346362 - 0.322667I$ $a = 2.52356 + 1.29399I$ $b = -0.324707 - 0.186840I$	$1.98288 - 1.74756I$	$-0.63361 + 6.31369I$
$u = -1.51013 + 0.31460I$ $a = 0.512292 + 0.870667I$ $b = -0.85109 - 2.34807I$	$3.54515 - 8.41526I$	0
$u = -1.51013 - 0.31460I$ $a = 0.512292 - 0.870667I$ $b = -0.85109 + 2.34807I$	$3.54515 + 8.41526I$	0
$u = -1.51365 + 0.29904I$ $a = 0.637562 + 1.039300I$ $b = -1.01287 - 2.74790I$	$6.2721 - 17.1376I$	0
$u = -1.51365 - 0.29904I$ $a = 0.637562 - 1.039300I$ $b = -1.01287 + 2.74790I$	$6.2721 + 17.1376I$	0
$u = 1.51356 + 0.30479I$ $a = 0.604525 - 0.961803I$ $b = -0.98748 + 2.57780I$	$1.18596 + 12.92690I$	0
$u = 1.51356 - 0.30479I$ $a = 0.604525 + 0.961803I$ $b = -0.98748 - 2.57780I$	$1.18596 - 12.92690I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.410125+0.089016I$ $a=\ \ 5.23763+1.01500I$ $b=-0.285000-0.082453I$	$0.82913+3.21823I$	$9.71233+3.98519I$
$u=-0.410125-0.089016I$ $a=\ \ 5.23763-1.01500I$ $b=-0.285000+0.082453I$	$0.82913-3.21823I$	$9.71233-3.98519I$
$u=\ \ 1.58966$ $a=-0.306266$ $b=\ \ 0.155878$	4.11849	0
$u=\ \ 0.374898$ $a=\ \ 6.14886$ $b=-0.307864$	-3.21214	11.9970
$u=-1.61970+0.13613I$ $a=-0.090455-0.279218I$ $b=-0.411048+0.524774I$	$8.41962+4.25598I$	0
$u=-1.61970-0.13613I$ $a=-0.090455+0.279218I$ $b=-0.411048-0.524774I$	$8.41962-4.25598I$	0
$u=-0.132203+0.327967I$ $a=-0.85319+2.73462I$ $b=-0.650413-0.230842I$	$-1.78272-0.58271I$	$-5.55303-2.81973I$
$u=-0.132203-0.327967I$ $a=-0.85319-2.73462I$ $b=-0.650413+0.230842I$	$-1.78272+0.58271I$	$-5.55303+2.81973I$

II. $I_2^u = \langle 7b - u + 2,\ 7a - 3u - 1,\ u^2 + u + 1\rangle$

(i) Arc colorings

$$a_5 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$
$$a_{10} = \begin{pmatrix} 0 \\ u \end{pmatrix}$$
$$a_2 = \begin{pmatrix} \frac{3}{7}u + \frac{1}{7} \\ \frac{1}{7}u - \frac{2}{7} \end{pmatrix}$$
$$a_6 = \begin{pmatrix} 1 \\ u + 1 \end{pmatrix}$$
$$a_3 = \begin{pmatrix} \frac{3}{7}u + \frac{1}{7} \\ \frac{1}{7}u - \frac{2}{7} \end{pmatrix}$$
$$a_{11} = \begin{pmatrix} \frac{5}{49}u - \frac{3}{49} \\ \frac{46}{49}u - \frac{8}{49} \end{pmatrix}$$
$$a_7 = \begin{pmatrix} -\frac{8}{49}u + \frac{44}{49} \\ -\frac{5}{49}u + \frac{3}{49} \end{pmatrix}$$
$$a_9 = \begin{pmatrix} -u \\ u \end{pmatrix}$$
$$a_4 = \begin{pmatrix} u + 2 \\ -u - 1 \end{pmatrix}$$
$$a_1 = \begin{pmatrix} -\frac{4}{7}u - \frac{13}{7} \\ \frac{8}{7}u + \frac{5}{7} \end{pmatrix}$$
$$a_8 = \begin{pmatrix} -\frac{47}{49}u - \frac{11}{49} \\ \frac{38}{49}u - \frac{13}{49} \end{pmatrix}$$
$$a_{12} = \begin{pmatrix} \frac{16}{49}u - \frac{39}{49} \\ \frac{59}{49}u + \frac{43}{49} \end{pmatrix}$$

(ii) Obstruction class $= 1$

(iii) Cusp Shapes $= \frac{52}{49}u + \frac{155}{49}$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$(u-1)^2$
c_2	u^2
c_3	$(u+1)^2$
c_4, c_5, c_6 c_{11}, c_{12}	u^2+u+1
c_7, c_9	u^2-u+1
c_8	$7(7u^2-3u+3)$
c_{10}	$7(7u^2-4u+1)$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_3	$(y-1)^2$
c_2	y^2
c_4, c_5, c_6 c_7, c_9, c_{11} c_{12}	y^2+y+1
c_8	$49(49y^2+33y+9)$
c_{10}	$49(49y^2-2y+1)$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.500000 + 0.866025I$ $a = -0.071429 + 0.371154I$ $b = -0.357143 + 0.123718I$	$-1.64493 - 2.02988I$	$2.63265 + 0.91905I$
$u = -0.500000 - 0.866025I$ $a = -0.071429 - 0.371154I$ $b = -0.357143 - 0.123718I$	$-1.64493 + 2.02988I$	$2.63265 - 0.91905I$

III. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1	$((u-1)^2)(u^{88}-3u^{87}+\cdots-295u+49)$
c_2	$u^2(u^{88}-7u^{87}+\cdots-980u+196)$
c_3	$((u+1)^2)(u^{88}-3u^{87}+\cdots-295u+49)$
c_4, c_5	$(u^2+u+1)(u^{88}+2u^{87}+\cdots+4u^2+1)$
c_6	$(u^2+u+1)(u^{88}-2u^{87}+\cdots-218u+65)$
c_7	$(u^2-u+1)(u^{88}+2u^{87}+\cdots+2u+1)$
c_8	$49(7u^2-3u+3)(7u^{88}-36u^{87}+\cdots-40832u+4553)$
c_9	$(u^2-u+1)(u^{88}+2u^{87}+\cdots+4u^2+1)$
c_{10}	$49(7u^2-4u+1)(7u^{88}+71u^{87}+\cdots+449u+1459)$
c_{11}, c_{12}	$(u^2+u+1)(u^{88}+2u^{87}+\cdots+2u+1)$

IV. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1, c_3	$((y-1)^2)(y^{88} - 53y^{87} + \cdots - 18915y + 2401)$
c_2	$y^2(y^{88} - 15y^{87} + \cdots - 201880y + 38416)$
c_4, c_5, c_9	$(y^2 + y + 1)(y^{88} - 82y^{87} + \cdots + 8y + 1)$
c_6	$(y^2 + y + 1)(y^{88} - 34y^{87} + \cdots + 196616y + 4225)$
c_7, c_{11}, c_{12}	$(y^2 + y + 1)(y^{88} + 74y^{87} + \cdots + 8y + 1)$
c_8	$2401(49y^2 + 33y + 9)$ $\cdot (49y^{88} + 3926y^{87} + \cdots - 810942196y + 20729809)$
c_{10}	$2401(49y^2 - 2y + 1)(49y^{88} + 4003y^{87} + \cdots - 2854063y + 2128681)$