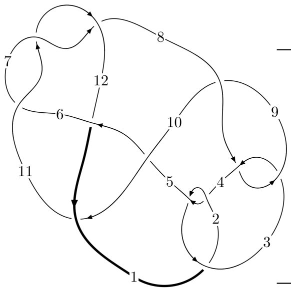
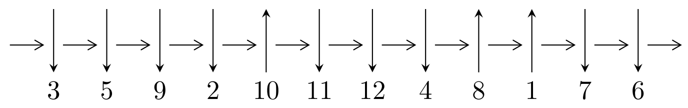
$12a_{0142}$ ($K12a_{0142}$)



A knot diagram[1]

Linearized knot diagam



Solving Sequence

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

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

$$I_1^u = \langle -u^{96} - u^{95} + \cdots - u^2 + b,\ -2u^{96} - 2u^{95} + \cdots + a - 3,\ u^{97} + 2u^{96} + \cdots + u + 1\rangle$$
$$I_2^u = \langle b + 1,\ u^3 + a - 2u,\ u^5 + u^4 - 2u^3 - u^2 + u - 1\rangle$$

* 2 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 102 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.

$$\boldsymbol{I_1^u = \langle -u^{96}-u^{95}+\cdots-u^2+b,\ -2u^{96}-2u^{95}+\cdots+a-3,\ u^{97}+2u^{96}+\cdots+u+1\rangle}$$

(i) Arc colorings

$$a_6 = \begin{pmatrix}1\\0\end{pmatrix}$$
$$a_{11} = \begin{pmatrix}0\\u\end{pmatrix}$$
$$a_7 = \begin{pmatrix}1\\u^2\end{pmatrix}$$
$$a_{12} = \begin{pmatrix}-u\\-u^3+u\end{pmatrix}$$
$$a_8 = \begin{pmatrix}-u^2+1\\-u^4+2u^2\end{pmatrix}$$
$$a_1 = \begin{pmatrix}u^3-2u\\-u^3+u\end{pmatrix}$$
$$a_3 = \begin{pmatrix}2u^{96}+2u^{95}+\cdots-2u^2+3\\u^{96}+u^{95}+\cdots+6u^3+u^2\end{pmatrix}$$
$$a_2 = \begin{pmatrix}u^{96}+u^{95}+\cdots-u^2+2\\u^{96}+u^{95}+\cdots+2u^2+u\end{pmatrix}$$
$$a_{10} = \begin{pmatrix}-u^7+4u^5-4u^3\\u^7-3u^5+2u^3+u\end{pmatrix}$$
$$a_5 = \begin{pmatrix}-u^{14}+7u^{12}-18u^{10}+19u^8-4u^6-4u^4+1\\u^{14}-6u^{12}+13u^{10}-10u^8-2u^6+4u^4+u^2\end{pmatrix}$$
$$a_4 = \begin{pmatrix}u^{83}-38u^{81}+\cdots-9u^3+2\\u^{96}+u^{95}+\cdots+3u^2+u\end{pmatrix}$$
$$a_9 = \begin{pmatrix}-u^{13}+6u^{11}-13u^9+10u^7+2u^5-4u^3-u\\-u^{15}+7u^{13}-18u^{11}+19u^9-4u^7-4u^5+u\end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= 6u^{96}+4u^{95}+\cdots+5u-2$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{97} + 52u^{96} + \cdots + 7u + 1$
c_2, c_4	$u^{97} - 6u^{96} + \cdots - 5u + 1$
c_3, c_8	$u^{97} - u^{96} + \cdots + 32u + 32$
c_5	$u^{97} - 2u^{96} + \cdots - 939u + 137$
c_6, c_7, c_{11}	$u^{97} + 2u^{96} + \cdots + u + 1$
c_9	$u^{97} - 33u^{96} + \cdots - 22016u + 1024$
c_{10}	$u^{97} + 20u^{96} + \cdots + 152213u + 6497$
c_{12}	$u^{97} - 6u^{96} + \cdots - 63u + 5$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{97} - 8y^{96} + \cdots + 23y - 1$
c_2, c_4	$y^{97} - 52y^{96} + \cdots + 7y - 1$
c_3, c_8	$y^{97} + 33y^{96} + \cdots - 22016y - 1024$
c_5	$y^{97} + 86y^{95} + \cdots + 940357y - 18769$
c_6, c_7, c_{11}	$y^{97} - 88y^{96} + \cdots + 5y - 1$
c_9	$y^{97} + 53y^{96} + \cdots + 30015488y - 1048576$
c_{10}	$y^{97} + 36y^{96} + \cdots + 514538009y - 42211009$
c_{12}	$y^{97} - 8y^{96} + \cdots + 569y - 25$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.943941 + 0.121484I$ $a = -0.496423 - 0.405418I$ $b = 0.061982 - 0.953000I$	$2.92060 - 2.48348I$	0
$u = 0.943941 - 0.121484I$ $a = -0.496423 + 0.405418I$ $b = 0.061982 + 0.953000I$	$2.92060 + 2.48348I$	0
$u = 1.111500 + 0.195710I$ $a = -0.991198 + 0.480915I$ $b = 0.157594 + 0.050205I$	$0.42510 - 4.54620I$	0
$u = 1.111500 - 0.195710I$ $a = -0.991198 - 0.480915I$ $b = 0.157594 - 0.050205I$	$0.42510 + 4.54620I$	0
$u = -1.132700 + 0.052850I$ $a = 0.910466 + 0.414617I$ $b = 0.450519 + 0.261516I$	$-1.77925 + 0.16252I$	0
$u = -1.132700 - 0.052850I$ $a = 0.910466 - 0.414617I$ $b = 0.450519 - 0.261516I$	$-1.77925 - 0.16252I$	0
$u = 1.134230 + 0.229902I$ $a = 0.951922 - 0.710835I$ $b = -0.076764 - 0.808674I$	$-2.13303 - 9.58468I$	0
$u = 1.134230 - 0.229902I$ $a = 0.951922 + 0.710835I$ $b = -0.076764 + 0.808674I$	$-2.13303 + 9.58468I$	0
$u = -1.145920 + 0.167609I$ $a = -0.559216 - 1.229480I$ $b = -0.169401 - 1.056630I$	$-3.77103 + 3.82064I$	0
$u = -1.145920 - 0.167609I$ $a = -0.559216 + 1.229480I$ $b = -0.169401 + 1.056630I$	$-3.77103 - 3.82064I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 1.168790 + 0.130280I$ $a = 0.892219 - 0.513776I$ $b = -1.193000 + 0.490171I$	$-4.25351 - 1.40778I$	0
$u = 1.168790 - 0.130280I$ $a = 0.892219 + 0.513776I$ $b = -1.193000 - 0.490171I$	$-4.25351 + 1.40778I$	0
$u = 0.312759 + 0.712439I$ $a = 2.39656 + 3.11419I$ $b = -2.56647 - 1.59551I$	$-1.81149 - 13.02420I$	$-6.49881 + 10.34514I$
$u = 0.312759 - 0.712439I$ $a = 2.39656 - 3.11419I$ $b = -2.56647 + 1.59551I$	$-1.81149 + 13.02420I$	$-6.49881 - 10.34514I$
$u = 0.300843 + 0.702322I$ $a = -1.91199 - 2.03390I$ $b = 1.65378 + 0.88080I$	$1.08712 - 7.85100I$	$-3.11991 + 7.31455I$
$u = 0.300843 - 0.702322I$ $a = -1.91199 + 2.03390I$ $b = 1.65378 - 0.88080I$	$1.08712 + 7.85100I$	$-3.11991 - 7.31455I$
$u = -0.308505 + 0.689688I$ $a = -3.08907 + 2.22676I$ $b = 2.80515 - 0.95593I$	$-3.16701 + 6.77469I$	$-8.01279 - 6.91414I$
$u = -0.308505 - 0.689688I$ $a = -3.08907 - 2.22676I$ $b = 2.80515 + 0.95593I$	$-3.16701 - 6.77469I$	$-8.01279 + 6.91414I$
$u = 0.623987 + 0.420887I$ $a = 2.44137 + 1.67780I$ $b = -1.90511 + 0.66513I$	$-3.01492 + 9.05165I$	$-8.99353 - 5.05015I$
$u = 0.623987 - 0.420887I$ $a = 2.44137 - 1.67780I$ $b = -1.90511 - 0.66513I$	$-3.01492 - 9.05165I$	$-8.99353 + 5.05015I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = -0.353257 + 0.664610I$ $a = -2.80675 - 0.31529I$ $b = 1.59380 + 1.22211I$	$-3.61011 - 0.93729I$	$-8.61161 + 0.95257I$
$u = -0.353257 - 0.664610I$ $a = -2.80675 + 0.31529I$ $b = 1.59380 - 1.22211I$	$-3.61011 + 0.93729I$	$-8.61161 - 0.95257I$
$u = 0.729778 + 0.164872I$ $a = -0.173384 + 0.743443I$ $b = -0.170411 + 0.615315I$	$2.85417 + 2.45539I$	$-3.14691 - 2.99420I$
$u = 0.729778 - 0.164872I$ $a = -0.173384 - 0.743443I$ $b = -0.170411 - 0.615315I$	$2.85417 - 2.45539I$	$-3.14691 + 2.99420I$
$u = 0.311458 + 0.677389I$ $a = 3.11096 + 0.73852I$ $b = -2.00323 + 0.70708I$	$-3.56160 - 4.04042I$	$-8.16281 + 6.14210I$
$u = 0.311458 - 0.677389I$ $a = 3.11096 - 0.73852I$ $b = -2.00323 - 0.70708I$	$-3.56160 + 4.04042I$	$-8.16281 - 6.14210I$
$u = 0.234210 + 0.696927I$ $a = 0.505572 + 0.362097I$ $b = -0.947702 - 0.309326I$	$4.69343 - 5.97822I$	$-0.22935 + 7.86187I$
$u = 0.234210 - 0.696927I$ $a = 0.505572 - 0.362097I$ $b = -0.947702 + 0.309326I$	$4.69343 + 5.97822I$	$-0.22935 - 7.86187I$
$u = -0.302548 + 0.652337I$ $a = 1.69438 - 1.39167I$ $b = -1.276750 + 0.594963I$	$-0.47477 + 2.56834I$	$-4.93539 - 3.16377I$
$u = -0.302548 - 0.652337I$ $a = 1.69438 + 1.39167I$ $b = -1.276750 - 0.594963I$	$-0.47477 - 2.56834I$	$-4.93539 + 3.16377I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.607220 + 0.381444I$ $a = -1.51037 - 1.12452I$ $b = 1.240080 - 0.073557I$	$-0.15886 + 4.01632I$	$-5.76175 - 1.99933I$
$u = 0.607220 - 0.381444I$ $a = -1.51037 + 1.12452I$ $b = 1.240080 + 0.073557I$	$-0.15886 - 4.01632I$	$-5.76175 + 1.99933I$
$u = -0.520379 + 0.490382I$ $a = 0.35702 + 2.38031I$ $b = 1.09071 - 1.54215I$	$-4.31532 + 4.81391I$	$-10.30909 - 7.09591I$
$u = -0.520379 - 0.490382I$ $a = 0.35702 - 2.38031I$ $b = 1.09071 + 1.54215I$	$-4.31532 - 4.81391I$	$-10.30909 + 7.09591I$
$u = 0.198968 + 0.686527I$ $a = -0.629727 - 1.247650I$ $b = 0.923922 + 0.937313I$	$5.13223 - 0.90715I$	$1.37210 + 1.29920I$
$u = 0.198968 - 0.686527I$ $a = -0.629727 + 1.247650I$ $b = 0.923922 - 0.937313I$	$5.13223 + 0.90715I$	$1.37210 - 1.29920I$
$u = -1.278380 + 0.233147I$ $a = -0.144124 - 0.663246I$ $b = 0.813649 + 0.516215I$	$-3.08467 - 2.82936I$	0
$u = -1.278380 - 0.233147I$ $a = -0.144124 + 0.663246I$ $b = 0.813649 - 0.516215I$	$-3.08467 + 2.82936I$	0
$u = -0.567881 + 0.398456I$ $a = -1.90800 + 2.59584I$ $b = 1.73968 - 0.00180I$	$-4.28231 - 2.99360I$	$-10.93115 + 1.06271I$
$u = -0.567881 - 0.398456I$ $a = -1.90800 - 2.59584I$ $b = 1.73968 + 0.00180I$	$-4.28231 + 2.99360I$	$-10.93115 - 1.06271I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.068167 + 0.685266I$ $a = 0.172272 + 1.080270I$ $b = 0.519079 + 0.016412I$	$1.06783 + 6.16150I$	$-2.45385 - 4.75788I$
$u = 0.068167 - 0.685266I$ $a = 0.172272 - 1.080270I$ $b = 0.519079 - 0.016412I$	$1.06783 - 6.16150I$	$-2.45385 + 4.75788I$
$u = -0.375160 + 0.561170I$ $a = 0.268255 + 0.166885I$ $b = 0.1081490 + 0.0316957I$	$-1.03389 + 1.75402I$	$-2.33100 - 5.04441I$
$u = -0.375160 - 0.561170I$ $a = 0.268255 - 0.166885I$ $b = 0.1081490 - 0.0316957I$	$-1.03389 - 1.75402I$	$-2.33100 + 5.04441I$
$u = 0.535382 + 0.408739I$ $a = 0.20878 + 2.11033I$ $b = -1.56265 - 1.13569I$	$-4.57857 + 0.32685I$	$-11.21882 + 0.05170I$
$u = 0.535382 - 0.408739I$ $a = 0.20878 - 2.11033I$ $b = -1.56265 + 1.13569I$	$-4.57857 - 0.32685I$	$-11.21882 - 0.05170I$
$u = 0.105616 + 0.661702I$ $a = -0.41822 - 1.42393I$ $b = 0.045797 + 0.498373I$	$3.40166 + 1.28266I$	$1.322307 - 0.278436I$
$u = 0.105616 - 0.661702I$ $a = -0.41822 + 1.42393I$ $b = 0.045797 - 0.498373I$	$3.40166 - 1.28266I$	$1.322307 + 0.278436I$
$u = -0.217493 + 0.618562I$ $a = -0.39149 - 1.70038I$ $b = 0.474158 + 1.007980I$	$0.49581 + 2.43913I$	$-3.27691 - 6.47368I$
$u = -0.217493 - 0.618562I$ $a = -0.39149 + 1.70038I$ $b = 0.474158 - 1.007980I$	$0.49581 - 2.43913I$	$-3.27691 + 6.47368I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = -1.326350 + 0.232749I$ $a = 0.341783 + 0.812780I$ $b = 0.219491 - 0.801362I$	$-1.07006 + 1.93167I$	0
$u = -1.326350 - 0.232749I$ $a = 0.341783 - 0.812780I$ $b = 0.219491 + 0.801362I$	$-1.07006 - 1.93167I$	0
$u = -1.365960 + 0.054249I$ $a = -0.218600 - 0.681410I$ $b = 0.273700 + 0.033467I$	$-3.12013 - 1.90937I$	0
$u = -1.365960 - 0.054249I$ $a = -0.218600 + 0.681410I$ $b = 0.273700 - 0.033467I$	$-3.12013 + 1.90937I$	0
$u = -0.467096 + 0.419960I$ $a = 0.90569 - 1.35055I$ $b = -0.820519 + 0.455130I$	$-1.34526 + 0.92967I$	$-7.49316 - 3.69890I$
$u = -0.467096 - 0.419960I$ $a = 0.90569 + 1.35055I$ $b = -0.820519 - 0.455130I$	$-1.34526 - 0.92967I$	$-7.49316 + 3.69890I$
$u = 1.361400 + 0.206058I$ $a = 0.723724 + 0.180323I$ $b = -1.75482 + 0.80199I$	$-5.27906 - 1.90423I$	0
$u = 1.361400 - 0.206058I$ $a = 0.723724 - 0.180323I$ $b = -1.75482 - 0.80199I$	$-5.27906 + 1.90423I$	0
$u = -0.089375 + 0.596895I$ $a = 1.24278 + 1.08334I$ $b = -1.095750 + 0.055567I$	$-0.654118 - 0.881098I$	$-4.24003 + 0.39048I$
$u = -0.089375 - 0.596895I$ $a = 1.24278 - 1.08334I$ $b = -1.095750 - 0.055567I$	$-0.654118 + 0.881098I$	$-4.24003 - 0.39048I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = -1.373470 + 0.266918I$ $a = 0.479744 + 0.763399I$ $b = 1.43196 - 0.71930I$	$0.14596 + 4.36125I$	0
$u = -1.373470 - 0.266918I$ $a = 0.479744 - 0.763399I$ $b = 1.43196 + 0.71930I$	$0.14596 - 4.36125I$	0
$u = -1.383370 + 0.219886I$ $a = -0.61670 - 1.52897I$ $b = -1.54081 + 0.33905I$	$-6.34678 + 3.87671I$	0
$u = -1.383370 - 0.219886I$ $a = -0.61670 + 1.52897I$ $b = -1.54081 - 0.33905I$	$-6.34678 - 3.87671I$	0
$u = 1.385740 + 0.240581I$ $a = -0.777813 + 0.354416I$ $b = 0.50379 - 1.82800I$	$-4.61803 - 5.57776I$	0
$u = 1.385740 - 0.240581I$ $a = -0.777813 - 0.354416I$ $b = 0.50379 + 1.82800I$	$-4.61803 + 5.57776I$	0
$u = -1.39052 + 0.27429I$ $a = -0.183283 - 0.415905I$ $b = -1.247440 - 0.130862I$	$-0.47363 + 9.50479I$	0
$u = -1.39052 - 0.27429I$ $a = -0.183283 + 0.415905I$ $b = -1.247440 + 0.130862I$	$-0.47363 - 9.50479I$	0
$u = 0.187132 + 0.543748I$ $a = 1.14094 + 2.10115I$ $b = -1.284210 - 0.281999I$	$-1.29274 - 1.03812I$	$-1.55594 - 0.13944I$
$u = 0.187132 - 0.543748I$ $a = 1.14094 - 2.10115I$ $b = -1.284210 + 0.281999I$	$-1.29274 + 1.03812I$	$-1.55594 + 0.13944I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 1.43202 + 0.16090I$ $a = -0.448090 + 0.955833I$ $b = -1.47938 - 1.33154I$	$-7.33738 - 3.08646I$	0
$u = 1.43202 - 0.16090I$ $a = -0.448090 - 0.955833I$ $b = -1.47938 + 1.33154I$	$-7.33738 + 3.08646I$	0
$u = 1.41933 + 0.25558I$ $a = -0.012553 + 1.400220I$ $b = -2.01561 - 0.87988I$	$-5.98214 - 5.89543I$	0
$u = 1.41933 - 0.25558I$ $a = -0.012553 - 1.400220I$ $b = -2.01561 + 0.87988I$	$-5.98214 + 5.89543I$	0
$u = -1.43824 + 0.12743I$ $a = 0.263451 + 1.016370I$ $b = 1.92173 - 0.86852I$	$-6.50701 - 2.29026I$	0
$u = -1.43824 - 0.12743I$ $a = 0.263451 - 1.016370I$ $b = 1.92173 + 0.86852I$	$-6.50701 + 2.29026I$	0
$u = -1.43864 + 0.14807I$ $a = -1.32009 - 0.89318I$ $b = -1.84164 + 1.95956I$	$-10.76520 + 1.67811I$	0
$u = -1.43864 - 0.14807I$ $a = -1.32009 + 0.89318I$ $b = -1.84164 - 1.95956I$	$-10.76520 - 1.67811I$	0
$u = 1.43979 + 0.13950I$ $a = 0.44600 - 1.88435I$ $b = 2.30164 + 1.55417I$	$-10.55100 + 1.09910I$	0
$u = 1.43979 - 0.13950I$ $a = 0.44600 + 1.88435I$ $b = 2.30164 - 1.55417I$	$-10.55100 - 1.09910I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = -1.42444 + 0.26341I$ $a = 0.92067 - 1.92713I$ $b = -2.38606 - 0.59877I$	$-9.11571 + 7.47577I$	0
$u = -1.42444 - 0.26341I$ $a = 0.92067 + 1.92713I$ $b = -2.38606 + 0.59877I$	$-9.11571 - 7.47577I$	0
$u = -1.42255 + 0.27432I$ $a = 0.21487 + 1.75795I$ $b = 2.20011 - 1.19121I$	$-4.42341 + 11.40850I$	0
$u = -1.42255 - 0.27432I$ $a = 0.21487 - 1.75795I$ $b = 2.20011 + 1.19121I$	$-4.42341 - 11.40850I$	0
$u = 1.42451 + 0.26845I$ $a = 0.02143 - 2.31717I$ $b = 3.74912 + 1.01151I$	$-8.71124 - 10.26900I$	0
$u = 1.42451 - 0.26845I$ $a = 0.02143 + 2.31717I$ $b = 3.74912 - 1.01151I$	$-8.71124 + 10.26900I$	0
$u = 1.43397 + 0.21556I$ $a = 0.232723 - 0.151810I$ $b = 0.0590316 - 0.0776960I$	$-6.82096 - 4.62626I$	0
$u = 1.43397 - 0.21556I$ $a = 0.232723 + 0.151810I$ $b = 0.0590316 + 0.0776960I$	$-6.82096 + 4.62626I$	0
$u = -1.42861 + 0.27754I$ $a = -0.65259 - 2.39504I$ $b = -3.29315 + 1.85894I$	$-7.3834 + 16.6288I$	0
$u = -1.42861 - 0.27754I$ $a = -0.65259 + 2.39504I$ $b = -3.29315 - 1.85894I$	$-7.3834 - 16.6288I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = -1.45265 + 0.12554I$ $a = -0.02515 - 1.78570I$ $b = -2.63824 + 0.60627I$	$-9.55042 - 7.23704I$	0
$u = -1.45265 - 0.12554I$ $a = -0.02515 + 1.78570I$ $b = -2.63824 - 0.60627I$	$-9.55042 + 7.23704I$	0
$u = 1.43834 + 0.25272I$ $a = -1.21346 - 1.31458I$ $b = 2.01713 - 1.23238I$	$-9.35467 - 2.41231I$	0
$u = 1.43834 - 0.25272I$ $a = -1.21346 + 1.31458I$ $b = 2.01713 + 1.23238I$	$-9.35467 + 2.41231I$	0
$u = 1.45325 + 0.16584I$ $a = 1.40656 - 0.73172I$ $b = 1.09821 + 2.30833I$	$-10.60000 - 7.15506I$	0
$u = 1.45325 - 0.16584I$ $a = 1.40656 + 0.73172I$ $b = 1.09821 - 2.30833I$	$-10.60000 + 7.15506I$	0
$u = -0.317685$ $a = 2.49633$ $b = -0.369663$	-1.03010	-10.3530

II. $I_2^u = \langle b+1,\ u^3+a-2u,\ u^5+u^4-2u^3-u^2+u-1\rangle$

(i) Arc colorings

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

$a_{11} = \begin{pmatrix} 0 \\ u \end{pmatrix}$

$a_7 = \begin{pmatrix} 1 \\ u^2 \end{pmatrix}$

$a_{12} = \begin{pmatrix} -u \\ -u^3+u \end{pmatrix}$

$a_8 = \begin{pmatrix} -u^2+1 \\ -u^4+2u^2 \end{pmatrix}$

$a_1 = \begin{pmatrix} u^3-2u \\ -u^3+u \end{pmatrix}$

$a_3 = \begin{pmatrix} -u^3+2u \\ -1 \end{pmatrix}$

$a_2 = \begin{pmatrix} 0 \\ -u^3+u-1 \end{pmatrix}$

$a_{10} = \begin{pmatrix} -u^2+1 \\ -u^4+2u^2 \end{pmatrix}$

$a_5 = \begin{pmatrix} -u^3+2u \\ u^3-u \end{pmatrix}$

$a_4 = \begin{pmatrix} -u^3+2u \\ -1 \end{pmatrix}$

$a_9 = \begin{pmatrix} -u^2+1 \\ -u^4+2u^2 \end{pmatrix}$

(ii) Obstruction class $= 1$

(iii) Cusp Shapes $= -3u^3+u^2+8u-15$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1, c_2	$(u-1)^5$
c_3, c_8, c_9	u^5
c_4	$(u+1)^5$
c_5, c_{10}	$u^5 - u^4 + 2u^3 - u^2 + u - 1$
c_6, c_7	$u^5 + u^4 - 2u^3 - u^2 + u - 1$
c_{11}	$u^5 - u^4 - 2u^3 + u^2 + u + 1$
c_{12}	$u^5 + 3u^4 + 4u^3 + u^2 - u - 1$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_2, c_4	$(y-1)^5$
c_3, c_8, c_9	y^5
c_5, c_{10}	$y^5+3y^4+4y^3+y^2-y-1$
c_6, c_7, c_{11}	$y^5-5y^4+8y^3-3y^2-y-1$
c_{12}	$y^5-y^4+8y^3-3y^2+3y-1$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 1.21774$ $a = 0.629714$ $b = -1.00000$	-4.04602	-9.19250
$u = 0.309916 + 0.549911I$ $a = 0.871221 + 1.107660I$ $b = -1.00000$	$-1.97403 - 1.53058I$	$-11.97286 + 4.76366I$
$u = 0.309916 - 0.549911I$ $a = 0.871221 - 1.107660I$ $b = -1.00000$	$-1.97403 + 1.53058I$	$-11.97286 - 4.76366I$
$u = -1.41878 + 0.21917I$ $a = -0.186078 - 0.874646I$ $b = -1.00000$	$-7.51750 + 4.40083I$	$-16.4309 - 2.8075I$
$u = -1.41878 - 0.21917I$ $a = -0.186078 + 0.874646I$ $b = -1.00000$	$-7.51750 - 4.40083I$	$-16.4309 + 2.8075I$

III. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1	$((u-1)^5)(u^{97}+52u^{96}+\cdots+7u+1)$
c_2	$((u-1)^5)(u^{97}-6u^{96}+\cdots-5u+1)$
c_3, c_8	$u^5(u^{97}-u^{96}+\cdots+32u+32)$
c_4	$((u+1)^5)(u^{97}-6u^{96}+\cdots-5u+1)$
c_5	$(u^5-u^4+2u^3-u^2+u-1)(u^{97}-2u^{96}+\cdots-939u+137)$
c_6, c_7	$(u^5+u^4-2u^3-u^2+u-1)(u^{97}+2u^{96}+\cdots+u+1)$
c_9	$u^5(u^{97}-33u^{96}+\cdots-22016u+1024)$
c_{10}	$(u^5-u^4+2u^3-u^2+u-1)(u^{97}+20u^{96}+\cdots+152213u+6497)$
c_{11}	$(u^5-u^4-2u^3+u^2+u+1)(u^{97}+2u^{96}+\cdots+u+1)$
c_{12}	$(u^5+3u^4+4u^3+u^2-u-1)(u^{97}-6u^{96}+\cdots-63u+5)$

IV. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1	$((y-1)^5)(y^{97}-8y^{96}+\cdots+23y-1)$
c_2, c_4	$((y-1)^5)(y^{97}-52y^{96}+\cdots+7y-1)$
c_3, c_8	$y^5(y^{97}+33y^{96}+\cdots-22016y-1024)$
c_5	$(y^5+3y^4+4y^3+y^2-y-1)(y^{97}+86y^{95}+\cdots+940357y-18769)$
c_6, c_7, c_{11}	$(y^5-5y^4+8y^3-3y^2-y-1)(y^{97}-88y^{96}+\cdots+5y-1)$
c_9	$y^5(y^{97}+53y^{96}+\cdots+3.00155\times 10^7 y-1048576)$
c_{10}	$(y^5+3y^4+4y^3+y^2-y-1)$ $\cdot(y^{97}+36y^{96}+\cdots+514538009y-42211009)$
c_{12}	$(y^5-y^4+8y^3-3y^2+3y-1)(y^{97}-8y^{96}+\cdots+569y-25)$