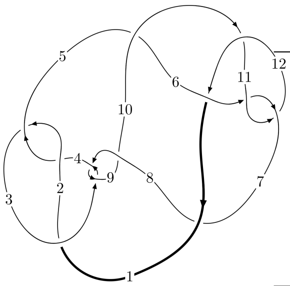
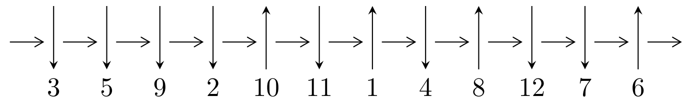
$12a_{0149}$ ($K12a_{0149}$)



A knot diagram[1]

Linearized knot diagam



Solving Sequence

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

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

$$I_1^u = \langle -u^{104} - u^{103} + \cdots + b - 2u,\ -u^{102} - u^{101} + \cdots + a - 1,\ u^{105} + 2u^{104} + \cdots + 3u + 1 \rangle$$
$$I_2^u = \langle b + 1,\ -u^4 + u^2 + a + u,\ u^6 + u^5 - u^4 - 2u^3 + u + 1 \rangle$$

* 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. $I^u_1 = \langle -u^{104}-u^{103}+\cdots+b-2u,\ -u^{102}-u^{101}+\cdots+a-1,\ u^{105}+2u^{104}+\cdots+3u+1\rangle$

(i) Arc colorings

$$a_6 = \begin{pmatrix}1\\0\end{pmatrix}$$
$$a_{11} = \begin{pmatrix}0\\u\end{pmatrix}$$
$$a_7 = \begin{pmatrix}1\\u^2\end{pmatrix}$$
$$a_{12} = \begin{pmatrix}-u\\-u^3+u\end{pmatrix}$$
$$a_1 = \begin{pmatrix}-u^3\\-u^3+u\end{pmatrix}$$
$$a_3 = \begin{pmatrix}u^{102}+u^{101}+\cdots-5u+1\\u^{104}+u^{103}+\cdots-2u^2+2u\end{pmatrix}$$
$$a_2 = \begin{pmatrix}-u^{104}-u^{103}+\cdots+6u^2-5u\\u^{104}+u^{103}+\cdots-u^2+3u\end{pmatrix}$$
$$a_8 = \begin{pmatrix}u^8-u^6+u^4+1\\u^8-2u^6+2u^4\end{pmatrix}$$
$$a_{10} = \begin{pmatrix}u^3\\u^5-u^3+u\end{pmatrix}$$
$$a_5 = \begin{pmatrix}u^8-u^6+u^4+1\\u^{10}-2u^8+3u^6-2u^4+u^2\end{pmatrix}$$
$$a_4 = \begin{pmatrix}-2u^{104}-2u^{103}+\cdots+8u^2-7u\\u^{104}+u^{103}+\cdots-12u^3+3u\end{pmatrix}$$
$$a_9 = \begin{pmatrix}-u^{21}+4u^{19}+\cdots+2u^3-u\\-u^{21}+5u^{19}-13u^{17}+20u^{15}-20u^{13}+13u^{11}-7u^9+4u^7-u^5-u^3+u\end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= -2u^{103}+47u^{101}+\cdots+4u-10$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{105} + 55u^{104} + \cdots + 8u + 1$
c_2, c_4	$u^{105} - 7u^{104} + \cdots - 6u + 1$
c_3, c_8	$u^{105} - u^{104} + \cdots + 64u + 64$
c_5, c_7	$u^{105} - 2u^{104} + \cdots + 333u + 9$
c_6, c_{11}	$u^{105} + 2u^{104} + \cdots + 3u + 1$
c_9	$u^{105} - 39u^{104} + \cdots - 81920u + 4096$
c_{10}	$u^{105} + 48u^{104} + \cdots + 15u + 1$
c_{12}	$u^{105} + 6u^{104} + \cdots + 99u + 5$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{105} - 3y^{104} + \cdots - 8y - 1$
c_2, c_4	$y^{105} - 55y^{104} + \cdots + 8y - 1$
c_3, c_8	$y^{105} + 39y^{104} + \cdots - 81920y - 4096$
c_5, c_7	$y^{105} - 72y^{104} + \cdots + 23067y - 81$
c_6, c_{11}	$y^{105} - 48y^{104} + \cdots + 15y - 1$
c_9	$y^{105} + 43y^{104} + \cdots + 486539264y - 16777216$
c_{10}	$y^{105} + 20y^{104} + \cdots + 143y - 1$
c_{12}	$y^{105} + 8y^{104} + \cdots - 29y - 25$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.871041 + 0.511708I$ $a = -0.369393 - 0.110166I$ $b = 0.440206 - 0.618461I$	$1.88999 - 2.94964I$	0
$u = 0.871041 - 0.511708I$ $a = -0.369393 + 0.110166I$ $b = 0.440206 + 0.618461I$	$1.88999 + 2.94964I$	0
$u = 0.922799 + 0.352325I$ $a = -1.77246 + 0.60448I$ $b = -1.312370 + 0.212834I$	$-2.93812 - 1.40462I$	0
$u = 0.922799 - 0.352325I$ $a = -1.77246 - 0.60448I$ $b = -1.312370 - 0.212834I$	$-2.93812 + 1.40462I$	0
$u = -0.921835 + 0.433717I$ $a = -1.18386 - 2.01805I$ $b = -1.236050 + 0.589796I$	$-2.05807 + 3.12857I$	0
$u = -0.921835 - 0.433717I$ $a = -1.18386 + 2.01805I$ $b = -1.236050 - 0.589796I$	$-2.05807 - 3.12857I$	0
$u = -1.020100 + 0.189153I$ $a = 0.430373 - 1.257180I$ $b = -0.437411 - 0.526557I$	$-1.85386 + 0.21349I$	0
$u = -1.020100 - 0.189153I$ $a = 0.430373 + 1.257180I$ $b = -0.437411 + 0.526557I$	$-1.85386 - 0.21349I$	0
$u = 1.058570 + 0.031241I$ $a = -0.73900 + 2.50720I$ $b = -0.281684 + 1.135380I$	$2.93779 + 2.55382I$	0
$u = 1.058570 - 0.031241I$ $a = -0.73900 - 2.50720I$ $b = -0.281684 - 1.135380I$	$2.93779 - 2.55382I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.921723 + 0.557628I$ $a = 1.06654 - 1.37317I$ $b = 0.838100 + 0.698342I$	$0.10374 - 7.55958I$	0
$u = 0.921723 - 0.557628I$ $a = 1.06654 + 1.37317I$ $b = 0.838100 - 0.698342I$	$0.10374 + 7.55958I$	0
$u = -0.561631 + 0.730673I$ $a = 0.317415 + 0.482062I$ $b = 0.44589 + 2.35840I$	$3.08653 + 9.35903I$	0
$u = -0.561631 - 0.730673I$ $a = 0.317415 - 0.482062I$ $b = 0.44589 - 2.35840I$	$3.08653 - 9.35903I$	0
$u = 1.068320 + 0.168089I$ $a = -1.99637 - 0.28617I$ $b = -1.55455 - 0.55344I$	$-4.75936 + 1.13660I$	0
$u = 1.068320 - 0.168089I$ $a = -1.99637 + 0.28617I$ $b = -1.55455 + 0.55344I$	$-4.75936 - 1.13660I$	0
$u = -0.541684 + 0.731152I$ $a = -0.571433 - 0.349082I$ $b = -0.625316 - 0.742225I$	$5.63434 + 4.07144I$	0
$u = -0.541684 - 0.731152I$ $a = -0.571433 + 0.349082I$ $b = -0.625316 + 0.742225I$	$5.63434 - 4.07144I$	0
$u = -1.082220 + 0.152274I$ $a = 1.05559 + 3.81169I$ $b = 1.45512 + 1.53677I$	$-4.31563 - 3.76778I$	0
$u = -1.082220 - 0.152274I$ $a = 1.05559 - 3.81169I$ $b = 1.45512 - 1.53677I$	$-4.31563 + 3.76778I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = -0.491163 + 0.760253I$ $a = -0.303412 + 0.316758I$ $b = 0.02554 + 2.32363I$	$8.31059 + 1.25002I$	0
$u = -0.491163 - 0.760253I$ $a = -0.303412 - 0.316758I$ $b = 0.02554 - 2.32363I$	$8.31059 - 1.25002I$	0
$u = -0.468964 + 0.768998I$ $a = -0.234001 - 0.389085I$ $b = -1.11862 - 1.92816I$	$8.18758 - 4.15070I$	0
$u = -0.468964 - 0.768998I$ $a = -0.234001 + 0.389085I$ $b = -1.11862 + 1.92816I$	$8.18758 + 4.15070I$	0
$u = 1.094480 + 0.131917I$ $a = -0.02662 - 1.62635I$ $b = 0.647265 - 0.798129I$	$-0.04159 + 4.70125I$	0
$u = 1.094480 - 0.131917I$ $a = -0.02662 + 1.62635I$ $b = 0.647265 + 0.798129I$	$-0.04159 - 4.70125I$	0
$u = -1.061330 + 0.302887I$ $a = 0.650283 - 0.216021I$ $b = 0.161826 - 0.038082I$	$-2.49722 + 0.52024I$	0
$u = -1.061330 - 0.302887I$ $a = 0.650283 + 0.216021I$ $b = 0.161826 + 0.038082I$	$-2.49722 - 0.52024I$	0
$u = 0.535147 + 0.710912I$ $a = -0.144639 + 0.767528I$ $b = -0.49756 + 2.66326I$	$1.20196 - 3.31272I$	$0. + 4.05275I$
$u = 0.535147 - 0.710912I$ $a = -0.144639 - 0.767528I$ $b = -0.49756 - 2.66326I$	$1.20196 + 3.31272I$	$0. - 4.05275I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.407168 + 0.786367I$ $a = 0.366623 - 0.319641I$ $b = -0.93186 - 3.09556I$	$2.24833 - 12.15740I$	$0. + 7.45112I$
$u = -0.407168 - 0.786367I$ $a = 0.366623 + 0.319641I$ $b = -0.93186 + 3.09556I$	$2.24833 + 12.15740I$	$0. - 7.45112I$
$u = -0.418533 + 0.777892I$ $a = -0.565706 + 0.154413I$ $b = 0.12298 + 1.64263I$	$4.96689 - 6.83862I$	$0. + 4.01071I$
$u = -0.418533 - 0.777892I$ $a = -0.565706 - 0.154413I$ $b = 0.12298 - 1.64263I$	$4.96689 + 6.83862I$	$0. - 4.01071I$
$u = -1.098480 + 0.220916I$ $a = 1.82717 - 0.51460I$ $b = 1.28934 - 0.84992I$	$-4.64089 + 3.53476I$	0
$u = -1.098480 - 0.220916I$ $a = 1.82717 + 0.51460I$ $b = 1.28934 + 0.84992I$	$-4.64089 - 3.53476I$	0
$u = 1.114790 + 0.141950I$ $a = -0.62179 + 3.70068I$ $b = -1.22790 + 1.88592I$	$-2.78241 + 9.87820I$	0
$u = 1.114790 - 0.141950I$ $a = -0.62179 - 3.70068I$ $b = -1.22790 - 1.88592I$	$-2.78241 - 9.87820I$	0
$u = 0.412854 + 0.764891I$ $a = -0.329970 - 0.580550I$ $b = 1.34712 - 3.14233I$	$0.54594 + 5.90508I$	$-2.83942 - 4.16325I$
$u = 0.412854 - 0.764891I$ $a = -0.329970 + 0.580550I$ $b = 1.34712 + 3.14233I$	$0.54594 - 5.90508I$	$-2.83942 + 4.16325I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = -0.519162 + 0.696598I$ $a = 0.639391 + 0.295863I$ $b = -1.153370 - 0.377703I$	$0.550091 + 0.784462I$	$-1.20480 - 3.39624I$
$u = -0.519162 - 0.696598I$ $a = 0.639391 - 0.295863I$ $b = -1.153370 + 0.377703I$	$0.550091 - 0.784462I$	$-1.20480 + 3.39624I$
$u = 0.616023 + 0.610806I$ $a = -0.618330 + 0.417161I$ $b = 0.781913 - 0.579529I$	$0.97348 + 2.95222I$	$0. - 2.99817I$
$u = 0.616023 - 0.610806I$ $a = -0.618330 - 0.417161I$ $b = 0.781913 + 0.579529I$	$0.97348 - 2.95222I$	$0. + 2.99817I$
$u = 0.487231 + 0.710886I$ $a = 0.568469 - 0.441572I$ $b = 1.46675 - 0.61446I$	$3.00709 + 0.79659I$	$0.79816 - 1.47644I$
$u = 0.487231 - 0.710886I$ $a = 0.568469 + 0.441572I$ $b = 1.46675 + 0.61446I$	$3.00709 - 0.79659I$	$0.79816 + 1.47644I$
$u = -0.826365 + 0.242657I$ $a = 1.77436 + 0.19357I$ $b = -0.099112 - 0.575729I$	$-1.346980 + 0.143898I$	$-5.19438 + 1.02775I$
$u = -0.826365 - 0.242657I$ $a = 1.77436 - 0.19357I$ $b = -0.099112 + 0.575729I$	$-1.346980 - 0.143898I$	$-5.19438 - 1.02775I$
$u = 0.694568 + 0.503832I$ $a = 0.426503 - 1.004340I$ $b = 0.599221 + 0.208369I$	$2.38068 - 1.26624I$	$3.02682 + 3.59787I$
$u = 0.694568 - 0.503832I$ $a = 0.426503 + 1.004340I$ $b = 0.599221 - 0.208369I$	$2.38068 + 1.26624I$	$3.02682 - 3.59787I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.412674+0.751967I$ $a=0.608113-0.004611I$ $b=-1.42040+0.15308I$	$-0.02506-3.23562I$	$-2.54395+3.48237I$
$u=-0.412674-0.751967I$ $a=0.608113+0.004611I$ $b=-1.42040-0.15308I$	$-0.02506+3.23562I$	$-2.54395-3.48237I$
$u=0.431391+0.735763I$ $a=0.600136+0.213703I$ $b=0.42753+1.64026I$	$2.71628+1.63531I$	$-60.10+0.426013I$
$u=0.431391-0.735763I$ $a=0.600136-0.213703I$ $b=0.42753-1.64026I$	$2.71628-1.63531I$	$-60.10-0.426013I$
$u=-1.085710+0.396654I$ $a=0.82643-1.17997I$ $b=-0.296620-1.185670I$	$-3.45140+1.18279I$	0
$u=-1.085710-0.396654I$ $a=0.82643+1.17997I$ $b=-0.296620+1.185670I$	$-3.45140-1.18279I$	0
$u=1.095630+0.417910I$ $a=-0.02770+1.67149I$ $b=-0.70591+1.70291I$	$-6.99423-2.34770I$	0
$u=1.095630-0.417910I$ $a=-0.02770-1.67149I$ $b=-0.70591-1.70291I$	$-6.99423+2.34770I$	0
$u=-1.098070+0.430864I$ $a=-1.50322+0.79462I$ $b=0.50933+1.51246I$	$-6.90518+5.01473I$	0
$u=-1.098070-0.430864I$ $a=-1.50322-0.79462I$ $b=0.50933-1.51246I$	$-6.90518-5.01473I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = -1.116490 + 0.392750I$ $a = -0.304426 + 1.186820I$ $b = 0.17668 + 1.56892I$	$-6.38577 - 3.12199I$	0
$u = -1.116490 - 0.392750I$ $a = -0.304426 - 1.186820I$ $b = 0.17668 - 1.56892I$	$-6.38577 + 3.12199I$	0
$u = 0.358533 + 0.732179I$ $a = -0.473671 - 0.115244I$ $b = 1.248310 + 0.417986I$	$-0.180213 - 1.053090I$	$-2.77562 + 3.65050I$
$u = 0.358533 - 0.732179I$ $a = -0.473671 + 0.115244I$ $b = 1.248310 - 0.417986I$	$-0.180213 + 1.053090I$	$-2.77562 - 3.65050I$
$u = 1.097470 + 0.449471I$ $a = -0.57663 - 1.39142I$ $b = 0.655892 - 1.218070I$	$-3.08812 - 6.11758I$	0
$u = 1.097470 - 0.449471I$ $a = -0.57663 + 1.39142I$ $b = 0.655892 + 1.218070I$	$-3.08812 + 6.11758I$	0
$u = -1.014830 + 0.615237I$ $a = 3.24068 - 0.49048I$ $b = 1.02632 - 1.84070I$	$1.74031 - 4.22648I$	0
$u = -1.014830 - 0.615237I$ $a = 3.24068 + 0.49048I$ $b = 1.02632 + 1.84070I$	$1.74031 + 4.22648I$	0
$u = 1.028950 + 0.594658I$ $a = -3.74068 - 0.70363I$ $b = -1.39258 - 2.26144I$	$-0.26335 - 1.69761I$	0
$u = 1.028950 - 0.594658I$ $a = -3.74068 + 0.70363I$ $b = -1.39258 + 2.26144I$	$-0.26335 + 1.69761I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-1.038610+0.583357I$ $a=-0.86698-1.45055I$ $b=-1.123260+0.479159I$	$-0.99128+4.14969I$	0
$u=-1.038610-0.583357I$ $a=-0.86698+1.45055I$ $b=-1.123260-0.479159I$	$-0.99128-4.14969I$	0
$u=-1.028780+0.610157I$ $a=-1.38935-0.41725I$ $b=-0.846242+0.238296I$	$4.18740+1.04548I$	0
$u=-1.028780-0.610157I$ $a=-1.38935+0.41725I$ $b=-0.846242-0.238296I$	$4.18740-1.04548I$	0
$u=\ \ 1.119170+0.448157I$ $a=\ \ 0.916526+0.862413I$ $b=-0.82229+1.15840I$	$-6.01436-10.76980I$	0
$u=\ \ 1.119170-0.448157I$ $a=\ \ 0.916526-0.862413I$ $b=-0.82229-1.15840I$	$-6.01436+10.76980I$	0
$u=\ \ 1.085540+0.531264I$ $a=\ \ 0.218413-0.818317I$ $b=\ \ 0.272318-0.133470I$	$-0.96342-6.54782I$	0
$u=\ \ 1.085540-0.531264I$ $a=\ \ 0.218413+0.818317I$ $b=\ \ 0.272318+0.133470I$	$-0.96342+6.54782I$	0
$u=\ \ 1.056750+0.588724I$ $a=\ \ 1.89469-1.62052I$ $b=\ \ 1.88122+0.04481I$	$1.32189-5.78784I$	0
$u=\ \ 1.056750-0.588724I$ $a=\ \ 1.89469+1.62052I$ $b=\ \ 1.88122-0.04481I$	$1.32189+5.78784I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = -1.064960 + 0.613127I$ $a = 2.78431 - 1.21297I$ $b = 0.56806 - 2.38367I$	$6.60470 + 3.95245I$	0
$u = -1.064960 - 0.613127I$ $a = 2.78431 + 1.21297I$ $b = 0.56806 + 2.38367I$	$6.60470 - 3.95245I$	0
$u = 1.087140 + 0.587148I$ $a = -1.72430 - 1.55120I$ $b = -0.06084 - 2.05367I$	$0.78044 - 6.68037I$	0
$u = 1.087140 - 0.587148I$ $a = -1.72430 + 1.55120I$ $b = -0.06084 + 2.05367I$	$0.78044 + 6.68037I$	0
$u = -1.078250 + 0.611228I$ $a = -3.10524 - 0.23085I$ $b = -1.56999 + 1.66367I$	$6.37670 + 9.36798I$	0
$u = -1.078250 - 0.611228I$ $a = -3.10524 + 0.23085I$ $b = -1.56999 - 1.66367I$	$6.37670 - 9.36798I$	0
$u = 1.107430 + 0.568255I$ $a = 0.32467 - 1.75043I$ $b = 1.47140 - 0.35337I$	$-2.36349 - 3.89444I$	0
$u = 1.107430 - 0.568255I$ $a = 0.32467 + 1.75043I$ $b = 1.47140 + 0.35337I$	$-2.36349 + 3.89444I$	0
$u = -1.097390 + 0.588994I$ $a = -0.54573 - 1.77669I$ $b = -1.57950 - 0.02613I$	$-2.04553 + 8.32422I$	0
$u = -1.097390 - 0.588994I$ $a = -0.54573 + 1.77669I$ $b = -1.57950 + 0.02613I$	$-2.04553 - 8.32422I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 1.100740 + 0.593524I$		
$a = 4.65152 + 0.60219I$	$-1.48870 - 11.04220I$	0
$b = 2.08615 + 3.31083I$		
$u = 1.100740 - 0.593524I$		
$a = 4.65152 - 0.60219I$	$-1.48870 + 11.04220I$	0
$b = 2.08615 - 3.31083I$		
$u = -1.102420 + 0.599841I$		
$a = 1.90028 - 0.97109I$	$2.93810 + 12.03250I$	0
$b = 0.46791 - 1.98595I$		
$u = -1.102420 - 0.599841I$		
$a = 1.90028 + 0.97109I$	$2.93810 - 12.03250I$	0
$b = 0.46791 + 1.98595I$		
$u = -1.109180 + 0.599492I$		
$a = -4.19050 + 1.03594I$	$0.1644 + 17.3697I$	0
$b = -1.47349 + 3.35952I$		
$u = -1.109180 - 0.599492I$		
$a = -4.19050 - 1.03594I$	$0.1644 - 17.3697I$	0
$b = -1.47349 - 3.35952I$		
$u = 0.310775 + 0.617300I$		
$a = 0.224132 + 0.579203I$	$1.18758 + 2.03152I$	$1.33774 - 4.93844I$
$b = 0.297600 + 0.055669I$		
$u = 0.310775 - 0.617300I$		
$a = 0.224132 - 0.579203I$	$1.18758 - 2.03152I$	$1.33774 + 4.93844I$
$b = 0.297600 - 0.055669I$		
$u = 0.068881 + 0.649388I$		
$a = 0.96428 + 1.05711I$	$-3.09718 + 6.72998I$	$-5.51837 - 6.26335I$
$b = -0.112211 - 0.913961I$		
$u = 0.068881 - 0.649388I$		
$a = 0.96428 - 1.05711I$	$-3.09718 - 6.72998I$	$-5.51837 + 6.26335I$
$b = -0.112211 + 0.913961I$		

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.089393 + 0.585636I$ $a = -0.065112 - 0.405783I$ $b = 0.243850 + 0.831568I$	$-0.37540 + 2.20380I$	$-2.28710 - 3.24292I$
$u = 0.089393 - 0.585636I$ $a = -0.065112 + 0.405783I$ $b = 0.243850 - 0.831568I$	$-0.37540 - 2.20380I$	$-2.28710 + 3.24292I$
$u = -0.022104 + 0.581743I$ $a = -1.05400 + 1.31053I$ $b = -0.262065 - 1.021320I$	$-4.04714 - 1.27003I$	$-7.86539 + 0.74571I$
$u = -0.022104 - 0.581743I$ $a = -1.05400 - 1.31053I$ $b = -0.262065 + 1.021320I$	$-4.04714 + 1.27003I$	$-7.86539 - 0.74571I$
$u = -0.294464$ $a = 2.53525$ $b = -0.625272$	-1.19254	-8.33000

II. $\boldsymbol{I^u_2 = \langle b+1,\ -u^4+u^2+a+u,\ u^6+u^5-u^4-2u^3+u+1\rangle}$

(i) Arc colorings

$$a_6 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$
$$a_{11} = \begin{pmatrix} 0 \\ u \end{pmatrix}$$
$$a_7 = \begin{pmatrix} 1 \\ u^2 \end{pmatrix}$$
$$a_{12} = \begin{pmatrix} -u \\ -u^3+u \end{pmatrix}$$
$$a_1 = \begin{pmatrix} -u^3 \\ -u^3+u \end{pmatrix}$$
$$a_3 = \begin{pmatrix} u^4-u^2-u \\ -1 \end{pmatrix}$$
$$a_2 = \begin{pmatrix} u^4-u^3-u^2-u \\ -u^3+u-1 \end{pmatrix}$$
$$a_8 = \begin{pmatrix} u^3 \\ u^5-u^3+u \end{pmatrix}$$
$$a_{10} = \begin{pmatrix} u^3 \\ u^5-u^3+u \end{pmatrix}$$
$$a_5 = \begin{pmatrix} u^3 \\ u^3-u \end{pmatrix}$$
$$a_4 = \begin{pmatrix} u^4-u^2-u \\ -1 \end{pmatrix}$$
$$a_9 = \begin{pmatrix} u^3 \\ u^5-u^3+u \end{pmatrix}$$

(ii) Obstruction class $= 1$

(iii) Cusp Shapes $= 4u^4-5u^2-5u-5$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1, c_2	$(u-1)^6$
c_3, c_8, c_9	u^6
c_4	$(u+1)^6$
c_5, c_7, c_{11}	$u^6 - u^5 - u^4 + 2u^3 - u + 1$
c_6	$u^6 + u^5 - u^4 - 2u^3 + u + 1$
c_{10}, c_{12}	$u^6 - 3u^5 + 5u^4 - 4u^3 + 2u^2 - u + 1$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_2, c_4	$(y-1)^6$
c_3, c_8, c_9	y^6
c_5, c_6, c_7 c_{11}	$y^6 - 3y^5 + 5y^4 - 4y^3 + 2y^2 - y + 1$
c_{10}, c_{12}	$y^6 + y^5 + 5y^4 + 6y^2 + 3y + 1$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = \quad 1.002190 + 0.295542I$ $a = -1.42918 + 0.19856I$ $b = -1.00000$	$-3.53554 - 0.92430I$	$-12.63596 - 0.09369I$
$u = \quad 1.002190 - 0.295542I$ $a = -1.42918 - 0.19856I$ $b = -1.00000$	$-3.53554 + 0.92430I$	$-12.63596 + 0.09369I$
$u = -0.428243 + 0.664531I$ $a = \quad 0.429179 + 0.198557I$ $b = -1.00000$	$0.245672 - 0.924305I$	$-2.59683 + 0.69886I$
$u = -0.428243 - 0.664531I$ $a = \quad 0.429179 - 0.198557I$ $b = -1.00000$	$0.245672 + 0.924305I$	$-2.59683 - 0.69886I$
$u = -1.073950 + 0.558752I$ $a = -0.50000 - 1.37764I$ $b = -1.00000$	$-1.64493 + 5.69302I$	$-6.76721 - 4.86918I$
$u = -1.073950 - 0.558752I$ $a = -0.50000 + 1.37764I$ $b = -1.00000$	$-1.64493 - 5.69302I$	$-6.76721 + 4.86918I$

III. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1	$((u-1)^6)(u^{105}+55u^{104}+\cdots+8u+1)$
c_2	$((u-1)^6)(u^{105}-7u^{104}+\cdots-6u+1)$
c_3, c_8	$u^6(u^{105}-u^{104}+\cdots+64u+64)$
c_4	$((u+1)^6)(u^{105}-7u^{104}+\cdots-6u+1)$
c_5, c_7	$(u^6-u^5-u^4+2u^3-u+1)(u^{105}-2u^{104}+\cdots+333u+9)$
c_6	$(u^6+u^5-u^4-2u^3+u+1)(u^{105}+2u^{104}+\cdots+3u+1)$
c_9	$u^6(u^{105}-39u^{104}+\cdots-81920u+4096)$
c_{10}	$(u^6-3u^5+5u^4-4u^3+2u^2-u+1)(u^{105}+48u^{104}+\cdots+15u+1)$
c_{11}	$(u^6-u^5-u^4+2u^3-u+1)(u^{105}+2u^{104}+\cdots+3u+1)$
c_{12}	$(u^6-3u^5+5u^4-4u^3+2u^2-u+1)(u^{105}+6u^{104}+\cdots+99u+5)$

IV. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1	$((y-1)^6)(y^{105}-3y^{104}+\cdots-8y-1)$
c_2, c_4	$((y-1)^6)(y^{105}-55y^{104}+\cdots+8y-1)$
c_3, c_8	$y^6(y^{105}+39y^{104}+\cdots-81920y-4096)$
c_5, c_7	$(y^6-3y^5+5y^4-4y^3+2y^2-y+1)(y^{105}-72y^{104}+\cdots+23067y-81)$
c_6, c_{11}	$(y^6-3y^5+5y^4-4y^3+2y^2-y+1)(y^{105}-48y^{104}+\cdots+15y-1)$
c_9	$y^6(y^{105}+43y^{104}+\cdots+4.86539\times10^8y-1.67772\times10^7)$
c_{10}	$(y^6+y^5+5y^4+6y^2+3y+1)(y^{105}+20y^{104}+\cdots+143y-1)$
c_{12}	$(y^6+y^5+5y^4+6y^2+3y+1)(y^{105}+8y^{104}+\cdots-29y-25)$