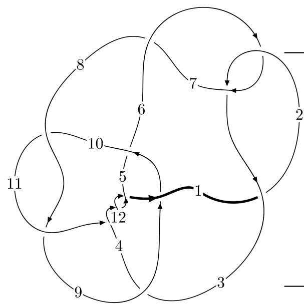
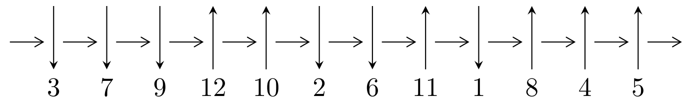
$12a_{0605}$ ($K12a_{0605}$)



A knot diagram[1]

Linearized knot diagam



Solving Sequence

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

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

$$I_1^u = \langle -1.87845 \times 10^{64} u^{82} + 1.27988 \times 10^{64} u^{81} + \cdots + 2.92888 \times 10^{64} b - 1.21244 \times 10^{64},$$
$$-1.31389 \times 10^{63} u^{82} - 1.25844 \times 10^{64} u^{81} + \cdots + 2.92888 \times 10^{64} a - 7.49424 \times 10^{64},\ u^{83} - 2u^{82} + \cdots + 2u -$$
$$I_2^u = \langle 8u^5 + 10u^4 - 20u^3 - 6u^2 + 23b + 21u - 1,\ -5u^5 + 11u^4 + u^3 - 2u^2 + 23a + 7u - 8,$$
$$u^6 - u^5 - u^4 + 2u^3 - u + 1 \rangle$$

* 2 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 89 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.

$\boldsymbol{I_1^u = \langle -1.88\times10^{64}u^{82}+1.28\times10^{64}u^{81}+\cdots+2.93\times10^{64}b-1.21\times10^{64},\ -1.31\times 10^{63}u^{82}-1.26\times10^{64}u^{81}+\cdots+2.93\times10^{64}a-7.49\times10^{64},\ u^{83}-2u^{82}+\cdots+2u-1\rangle}$

(i) Arc colorings

$$a_2 = \begin{pmatrix}0\\u\end{pmatrix}$$
$$a_6 = \begin{pmatrix}1\\0\end{pmatrix}$$
$$a_7 = \begin{pmatrix}1\\u^2\end{pmatrix}$$
$$a_3 = \begin{pmatrix}-u\\-u^3+u\end{pmatrix}$$
$$a_8 = \begin{pmatrix}-u^2+1\\u^2\end{pmatrix}$$
$$a_{10} = \begin{pmatrix}0.0448598u^{82}+0.429664u^{81}+\cdots-0.168626u+2.55874\\0.641352u^{82}-0.436985u^{81}+\cdots-2.72216u+0.413960\end{pmatrix}$$
$$a_{11} = \begin{pmatrix}0.0314267u^{82}+0.354611u^{81}+\cdots-0.923848u+1.65310\\0.640827u^{82}-0.379524u^{81}+\cdots-2.64509u+0.368450\end{pmatrix}$$
$$a_1 = \begin{pmatrix}u^3\\u^5-u^3+u\end{pmatrix}$$
$$a_5 = \begin{pmatrix}1.40123u^{82}-2.52242u^{81}+\cdots-2.31312u+0.870884\\1.07497u^{82}-1.14368u^{81}+\cdots+2.45617u+0.923234\end{pmatrix}$$
$$a_9 = \begin{pmatrix}-0.000305313u^{82}+0.492328u^{81}+\cdots-0.144340u+2.50567\\0.594051u^{82}-0.368881u^{81}+\cdots-2.46994u+0.309558\end{pmatrix}$$
$$a_{12} = \begin{pmatrix}1.27948u^{82}-1.88951u^{81}+\cdots-2.58516u+1.03474\\1.29851u^{82}-1.69376u^{81}+\cdots+1.45034u+1.55967\end{pmatrix}$$
$$a_4 = \begin{pmatrix}-1.24128u^{82}+0.934848u^{81}+\cdots-0.924884u-1.12049\\-1.26658u^{82}+1.49098u^{81}+\cdots+5.74887u-2.52264\end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= -5.63470u^{82}+9.65125u^{81}+\cdots-3.31630u-0.497855$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1, c_7	$u^{83} + 24u^{82} + \cdots + 8u + 1$
c_2, c_6	$u^{83} - 2u^{82} + \cdots + 2u - 1$
c_3	$23(23u^{83} - 133u^{82} + \cdots + 1.50077 \times 10^7 u - 1502291)$
c_4, c_{11}, c_{12}	$u^{83} - 2u^{82} + \cdots - 4u^2 + 1$
c_5	$23(23u^{83} + 64u^{82} + \cdots + 8416615u + 1304033)$
c_8, c_{10}	$u^{83} + 7u^{82} + \cdots - 1641u - 529$
c_9	$u^{83} + 7u^{82} + \cdots - 69184u + 33856$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_7	$y^{83} + 72y^{82} + \cdots + 44y - 1$
c_2, c_6	$y^{83} - 24y^{82} + \cdots + 8y - 1$
c_3	$529 \cdot (529y^{83} + 28081y^{82} + \cdots + 38188375604614y - 2256878248681)$
c_4, c_{11}, c_{12}	$y^{83} - 84y^{82} + \cdots + 8y - 1$
c_5	$529 \cdot (529y^{83} - 32708y^{82} + \cdots + 39172776651029y - 1700502065089)$
c_8, c_{10}	$y^{83} - 75y^{82} + \cdots + 5875345y - 279841$
c_9	$y^{83} + 39y^{82} + \cdots - 8242446336y - 1146228736$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = -0.889482 + 0.456836I$ $a = 0.534958 - 0.131930I$ $b = 0.104167 - 0.719375I$	$-1.41772 + 1.74895I$	0
$u = -0.889482 - 0.456836I$ $a = 0.534958 + 0.131930I$ $b = 0.104167 + 0.719375I$	$-1.41772 - 1.74895I$	0
$u = -0.935965 + 0.259286I$ $a = -1.04483 + 1.50530I$ $b = 0.900121 + 0.852842I$	$3.42942 + 5.61464I$	$0. - 7.27404I$
$u = -0.935965 - 0.259286I$ $a = -1.04483 - 1.50530I$ $b = 0.900121 - 0.852842I$	$3.42942 - 5.61464I$	$0. + 7.27404I$
$u = 0.941175 + 0.204587I$ $a = -0.721363 - 0.988163I$ $b = 0.592450 - 0.675808I$	$-2.60762 - 3.23702I$	$-5.49466 + 7.80005I$
$u = 0.941175 - 0.204587I$ $a = -0.721363 + 0.988163I$ $b = 0.592450 + 0.675808I$	$-2.60762 + 3.23702I$	$-5.49466 - 7.80005I$
$u = -0.953043 + 0.078413I$ $a = -0.334788 + 0.276834I$ $b = 0.331892 + 0.225291I$	$-1.83683 + 0.10839I$	$-5.40972 + 0.I$
$u = -0.953043 - 0.078413I$ $a = -0.334788 - 0.276834I$ $b = 0.331892 - 0.225291I$	$-1.83683 - 0.10839I$	$-5.40972 + 0.I$
$u = 0.849141 + 0.242956I$ $a = 1.018340 - 0.060762I$ $b = 0.905830 + 0.798266I$	$3.46734 + 0.71154I$	$-0.47127 + 2.15369I$
$u = 0.849141 - 0.242956I$ $a = 1.018340 + 0.060762I$ $b = 0.905830 - 0.798266I$	$3.46734 - 0.71154I$	$-0.47127 - 2.15369I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.816703 + 0.768943I$ $a = 1.75089 + 0.20685I$ $b = -1.082510 + 0.403406I$	$3.52701 - 1.42228I$	0
$u = 0.816703 - 0.768943I$ $a = 1.75089 - 0.20685I$ $b = -1.082510 - 0.403406I$	$3.52701 + 1.42228I$	0
$u = -0.835455 + 0.753520I$ $a = 3.50927 + 0.93237I$ $b = -1.97135 - 2.14558I$	$9.03093 + 2.89498I$	0
$u = -0.835455 - 0.753520I$ $a = 3.50927 - 0.93237I$ $b = -1.97135 + 2.14558I$	$9.03093 - 2.89498I$	0
$u = -0.802716 + 0.802162I$ $a = 1.54959 - 0.71704I$ $b = -0.933558 + 0.245697I$	$3.74533 - 1.60662I$	0
$u = -0.802716 - 0.802162I$ $a = 1.54959 + 0.71704I$ $b = -0.933558 - 0.245697I$	$3.74533 + 1.60662I$	0
$u = 0.027665 + 0.862785I$ $a = -0.867205 - 0.219871I$ $b = 1.133800 + 0.169437I$	$4.74686 + 2.93300I$	$8.76121 - 3.91326I$
$u = 0.027665 - 0.862785I$ $a = -0.867205 + 0.219871I$ $b = 1.133800 - 0.169437I$	$4.74686 - 2.93300I$	$8.76121 + 3.91326I$
$u = -1.105370 + 0.315329I$ $a = 0.014499 - 1.098310I$ $b = -1.29278 - 0.74240I$	$8.45345 + 11.00130I$	0
$u = -1.105370 - 0.315329I$ $a = 0.014499 + 1.098310I$ $b = -1.29278 + 0.74240I$	$8.45345 - 11.00130I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.807856 + 0.824094I$ $a = 1.75320 + 0.96864I$ $b = -1.040670 - 0.534905I$	$10.24590 + 3.75990I$	0
$u = 0.807856 - 0.824094I$ $a = 1.75320 - 0.96864I$ $b = -1.040670 + 0.534905I$	$10.24590 - 3.75990I$	0
$u = 0.834963$ $a = 3.68259$ $b = 4.90505$	5.65010	-26.1310
$u = 0.515647 + 0.654524I$ $a = 0.414145 - 0.145965I$ $b = 0.261027 + 0.341321I$	$2.62411 + 0.87584I$	$0.235931 + 0.049304I$
$u = 0.515647 - 0.654524I$ $a = 0.414145 + 0.145965I$ $b = 0.261027 - 0.341321I$	$2.62411 - 0.87584I$	$0.235931 - 0.049304I$
$u = 1.140330 + 0.259412I$ $a = -0.706300 + 0.694710I$ $b = -1.008980 - 0.277275I$	$8.05514 + 3.48111I$	0
$u = 1.140330 - 0.259412I$ $a = -0.706300 - 0.694710I$ $b = -1.008980 + 0.277275I$	$8.05514 - 3.48111I$	0
$u = -0.033678 + 0.823507I$ $a = -1.127770 + 0.564262I$ $b = 1.337490 - 0.420345I$	$12.04910 - 7.13476I$	$9.25485 + 4.05212I$
$u = -0.033678 - 0.823507I$ $a = -1.127770 - 0.564262I$ $b = 1.337490 + 0.420345I$	$12.04910 + 7.13476I$	$9.25485 - 4.05212I$
$u = 0.884797 + 0.775848I$ $a = -1.77395 + 1.63904I$ $b = -0.07694 - 2.70204I$	$5.37866 - 2.92461I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.884797 - 0.775848I$ $a = -1.77395 - 1.63904I$ $b = -0.07694 + 2.70204I$	$5.37866 + 2.92461I$	0
$u = 1.127720 + 0.337758I$ $a = -0.044991 + 0.823378I$ $b = -0.960090 + 0.541916I$	$1.04660 - 7.01205I$	0
$u = 1.127720 - 0.337758I$ $a = -0.044991 - 0.823378I$ $b = -0.960090 - 0.541916I$	$1.04660 + 7.01205I$	0
$u = -0.732275 + 0.922468I$ $a = -1.009770 + 0.052035I$ $b = 1.227170 - 0.199103I$	$16.1676 + 3.4606I$	0
$u = -0.732275 - 0.922468I$ $a = -1.009770 - 0.052035I$ $b = 1.227170 + 0.199103I$	$16.1676 - 3.4606I$	0
$u = 0.754229 + 0.905051I$ $a = -1.52604 - 0.95557I$ $b = 1.72976 + 0.81123I$	$16.6561 + 10.4380I$	0
$u = 0.754229 - 0.905051I$ $a = -1.52604 + 0.95557I$ $b = 1.72976 - 0.81123I$	$16.6561 - 10.4380I$	0
$u = -0.867281 + 0.802103I$ $a = 0.810453 - 0.423035I$ $b = -1.014500 + 0.771217I$	$7.30880 + 1.13595I$	0
$u = -0.867281 - 0.802103I$ $a = 0.810453 + 0.423035I$ $b = -1.014500 - 0.771217I$	$7.30880 - 1.13595I$	0
$u = -0.917071 + 0.745377I$ $a = -0.69179 + 3.01817I$ $b = 2.07340 - 1.42336I$	$8.78061 + 2.79415I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = -0.917071 - 0.745377I$ $a = -0.69179 - 3.01817I$ $b = 2.07340 + 1.42336I$	$8.78061 - 2.79415I$	0
$u = -0.731443 + 0.355891I$ $a = 0.99738 + 2.75342I$ $b = 0.486901 - 0.522296I$	$7.80848 + 3.23449I$	$6.54878 - 6.03977I$
$u = -0.731443 - 0.355891I$ $a = 0.99738 - 2.75342I$ $b = 0.486901 + 0.522296I$	$7.80848 - 3.23449I$	$6.54878 + 6.03977I$
$u = -0.757746 + 0.913416I$ $a = -1.21392 + 0.81604I$ $b = 1.48040 - 0.75317I$	$9.48311 - 6.48346I$	0
$u = -0.757746 - 0.913416I$ $a = -1.21392 - 0.81604I$ $b = 1.48040 + 0.75317I$	$9.48311 + 6.48346I$	0
$u = 1.034880 + 0.585496I$ $a = 0.099302 + 0.223114I$ $b = -0.135254 + 0.437889I$	$1.11865 - 5.75066I$	0
$u = 1.034880 - 0.585496I$ $a = 0.099302 - 0.223114I$ $b = -0.135254 - 0.437889I$	$1.11865 + 5.75066I$	0
$u = 0.750775 + 0.926710I$ $a = -0.987309 - 0.492800I$ $b = 1.262870 + 0.541456I$	$9.20226 + 0.93743I$	0
$u = 0.750775 - 0.926710I$ $a = -0.987309 + 0.492800I$ $b = 1.262870 - 0.541456I$	$9.20226 - 0.93743I$	0
$u = 0.870208 + 0.820915I$ $a = 1.250600 - 0.413944I$ $b = -0.905844 - 0.271334I$	$14.3924 - 0.4286I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.870208 - 0.820915I$ $a = 1.250600 + 0.413944I$ $b = -0.905844 + 0.271334I$	$14.3924 + 0.4286I$	0
$u = 0.937268 + 0.745740I$ $a = -1.19353 - 1.12183I$ $b = 1.122130 + 0.134120I$	$3.15571 - 4.31418I$	0
$u = 0.937268 - 0.745740I$ $a = -1.19353 + 1.12183I$ $b = 1.122130 - 0.134120I$	$3.15571 + 4.31418I$	0
$u = -0.909622 + 0.790683I$ $a = -1.56898 + 0.84569I$ $b = 0.853137 + 0.850342I$	$7.17818 + 4.83871I$	0
$u = -0.909622 - 0.790683I$ $a = -1.56898 - 0.84569I$ $b = 0.853137 - 0.850342I$	$7.17818 - 4.83871I$	0
$u = -1.178820 + 0.299322I$ $a = -0.340622 - 0.623463I$ $b = -0.844509 - 0.119752I$	$0.662850 + 1.033910I$	0
$u = -1.178820 - 0.299322I$ $a = -0.340622 + 0.623463I$ $b = -0.844509 + 0.119752I$	$0.662850 - 1.033910I$	0
$u = 0.916556 + 0.806377I$ $a = -1.28781 - 1.55467I$ $b = 0.779647 - 0.298397I$	$14.2487 - 5.6526I$	0
$u = 0.916556 - 0.806377I$ $a = -1.28781 + 1.55467I$ $b = 0.779647 + 0.298397I$	$14.2487 + 5.6526I$	0
$u = -0.955332 + 0.764210I$ $a = -1.80085 + 0.64179I$ $b = 1.017290 + 0.386028I$	$3.27752 + 7.49822I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = -0.955332 - 0.764210I$ $a = -1.80085 - 0.64179I$ $b = 1.017290 - 0.386028I$	$3.27752 - 7.49822I$	0
$u = 0.731306 + 0.256638I$ $a = 0.78032 - 2.04828I$ $b = 0.327098 - 0.173264I$	$1.33574 - 2.24205I$	$4.43086 + 8.82898I$
$u = 0.731306 - 0.256638I$ $a = 0.78032 + 2.04828I$ $b = 0.327098 + 0.173264I$	$1.33574 + 2.24205I$	$4.43086 - 8.82898I$
$u = 0.960254 + 0.779064I$ $a = -2.28212 - 0.60862I$ $b = 1.118770 - 0.610843I$	$9.77627 - 9.76260I$	0
$u = 0.960254 - 0.779064I$ $a = -2.28212 + 0.60862I$ $b = 1.118770 + 0.610843I$	$9.77627 + 9.76260I$	0
$u = -0.730104 + 0.111818I$ $a = 0.68230 + 2.05904I$ $b = 0.07317 + 1.79240I$	$0.491768 + 0.412209I$	$3.6447 + 16.5037I$
$u = -0.730104 - 0.111818I$ $a = 0.68230 - 2.05904I$ $b = 0.07317 - 1.79240I$	$0.491768 - 0.412209I$	$3.6447 - 16.5037I$
$u = 1.024460 + 0.793490I$ $a = 2.08009 + 1.18604I$ $b = -1.72181 + 0.93118I$	$15.8084 - 16.7169I$	0
$u = 1.024460 - 0.793490I$ $a = 2.08009 - 1.18604I$ $b = -1.72181 - 0.93118I$	$15.8084 + 16.7169I$	0
$u = -1.026430 + 0.799370I$ $a = 1.78257 - 0.95986I$ $b = -1.44862 - 0.89101I$	$8.6384 + 12.8059I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -1.026430 - 0.799370I$ $a = 1.78257 + 0.95986I$ $b = -1.44862 + 0.89101I$	$8.6384 - 12.8059I$	0
$u = 1.035970 + 0.804028I$ $a = 1.33910 + 0.89568I$ $b = -1.187330 + 0.688916I$	$8.30656 - 7.31250I$	0
$u = 1.035970 - 0.804028I$ $a = 1.33910 - 0.89568I$ $b = -1.187330 - 0.688916I$	$8.30656 + 7.31250I$	0
$u = -1.046110 + 0.792804I$ $a = 0.87735 - 1.17014I$ $b = -1.099350 - 0.306452I$	$15.1856 + 2.8676I$	0
$u = -1.046110 - 0.792804I$ $a = 0.87735 + 1.17014I$ $b = -1.099350 + 0.306452I$	$15.1856 - 2.8676I$	0
$u = -0.387829 + 0.383433I$ $a = 2.84274 + 0.86881I$ $b = -1.325450 - 0.237969I$	$8.75382 - 0.29598I$	$9.26455 - 1.68799I$
$u = -0.387829 - 0.383433I$ $a = 2.84274 - 0.86881I$ $b = -1.325450 + 0.237969I$	$8.75382 + 0.29598I$	$9.26455 + 1.68799I$
$u = -0.056323 + 0.493607I$ $a = 1.90426 - 1.11553I$ $b = -0.725500 + 0.857677I$	$5.99111 - 2.95551I$	$7.65900 + 2.93684I$
$u = -0.056323 - 0.493607I$ $a = 1.90426 + 1.11553I$ $b = -0.725500 - 0.857677I$	$5.99111 + 2.95551I$	$7.65900 - 2.93684I$
$u = -0.047810 + 0.406306I$ $a = 1.37577 + 0.54247I$ $b = -0.346996 - 0.440258I$	$0.164287 + 1.105020I$	$2.26614 - 6.04116I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = -0.047810 - 0.406306I$ $a = 1.37577 - 0.54247I$ $b = -0.346996 + 0.440258I$	$0.164287 - 1.105020I$	$2.26614 + 6.04116I$
$u = 0.355483 + 0.185180I$ $a = 1.94592 - 0.44264I$ $b = -1.057690 + 0.002867I$	$2.29106 + 0.03654I$	$6.03784 + 2.48416I$
$u = 0.355483 - 0.185180I$ $a = 1.94592 + 0.44264I$ $b = -1.057690 - 0.002867I$	$2.29106 - 0.03654I$	$6.03784 - 2.48416I$

II. $I_2^u = \langle 8u^5+10u^4-20u^3-6u^2+23b+21u-1,\ -5u^5+11u^4+u^3-2u^2+23a+7u-8,\ u^6-u^5-u^4+2u^3-u+1\rangle$

(i) Arc colorings

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

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

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

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

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

$$a_{10} = \begin{pmatrix}0.217391u^5-0.478261u^4+\cdots-0.304348u+0.347826\\-0.347826u^5-0.434783u^4+\cdots-0.913043u+0.0434783\end{pmatrix}$$

$$a_{11} = \begin{pmatrix}0.217391u^5-0.478261u^4+\cdots-0.304348u-0.652174\\-0.347826u^5-0.434783u^4+\cdots-0.913043u+0.0434783\end{pmatrix}$$

$$a_1 = \begin{pmatrix}u^3\\u^5-u^3+u\end{pmatrix}$$

$$a_5 = \begin{pmatrix}0.0472590u^5-0.364839u^4+\cdots-0.283554u+0.858223\\0.272212u^5-0.181474u^4+\cdots+0.366730u+0.183365\end{pmatrix}$$

$$a_9 = \begin{pmatrix}0.217391u^5-0.478261u^4+\cdots-0.304348u+0.347826\\-0.347826u^5-0.434783u^4+\cdots-0.913043u+0.0434783\end{pmatrix}$$

$$a_{12} = \begin{pmatrix}-0.676749u^5-0.215501u^4+\cdots-0.939509u+0.0302457\\0.621928u^5-0.0812854u^4+\cdots+0.268431u+0.134216\end{pmatrix}$$

$$a_4 = \begin{pmatrix}-0.00378072u^5-0.330813u^4+\cdots-0.977316u+0.0113422\\-0.141777u^5+0.0945180u^4+\cdots+0.850662u+0.425331\end{pmatrix}$$

(ii) Obstruction class $= 1$

(iii) Cusp Shapes $= -\frac{1101}{529}u^5+\frac{2321}{529}u^4+\frac{993}{529}u^3-\frac{3458}{529}u^2+\frac{2903}{529}u+\frac{4361}{529}$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^6 - 3u^5 + 5u^4 - 4u^3 + 2u^2 - u + 1$
c_2, c_4	$u^6 + u^5 - u^4 - 2u^3 + u + 1$
c_3	$23(23u^6 - 18u^5 + 25u^4 - 8u^3 + 7u^2 - u + 1)$
c_5	$23(23u^6 - 5u^5 - 17u^4 + 10u^3 + 3u^2 - 4u + 1)$
c_6, c_{11}, c_{12}	$u^6 - u^5 - u^4 + 2u^3 - u + 1$
c_7	$u^6 + 3u^5 + 5u^4 + 4u^3 + 2u^2 + u + 1$
c_8	$(u+1)^6$
c_9	u^6
c_{10}	$(u-1)^6$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_7	$y^6 + y^5 + 5y^4 + 6y^2 + 3y + 1$
c_2, c_4, c_6 c_{11}, c_{12}	$y^6 - 3y^5 + 5y^4 - 4y^3 + 2y^2 - y + 1$
c_3	$529(529y^6 + 826y^5 + 659y^4 + 296y^3 + 83y^2 + 13y + 1)$
c_5	$529(529y^6 - 807y^5 + 527y^4 - 196y^3 + 55y^2 - 10y + 1)$
c_8, c_{10}	$(y-1)^6$
c_9	y^6

(vi) Complex Volumes and Cusp Shapes

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -1.002190 + 0.295542I$ $a = 0.493592 + 0.608759I$ $b = 0.396884 + 0.370811I$	$-0.245672 + 0.924305I$	$-2.14301 - 0.21731I$
$u = -1.002190 - 0.295542I$ $a = 0.493592 - 0.608759I$ $b = 0.396884 - 0.370811I$	$-0.245672 - 0.924305I$	$-2.14301 + 0.21731I$
$u = 0.428243 + 0.664531I$ $a = 0.357844 - 0.079850I$ $b = -0.757689 - 0.164486I$	$3.53554 + 0.92430I$	$10.05826 - 0.61014I$
$u = 0.428243 - 0.664531I$ $a = 0.357844 + 0.079850I$ $b = -0.757689 + 0.164486I$	$3.53554 - 0.92430I$	$10.05826 + 0.61014I$
$u = 1.073950 + 0.558752I$ $a = 0.018129 - 0.725425I$ $b = 0.469501 - 0.157241I$	$1.64493 - 5.69302I$	$9.84656 + 3.72057I$
$u = 1.073950 - 0.558752I$ $a = 0.018129 + 0.725425I$ $b = 0.469501 + 0.157241I$	$1.64493 + 5.69302I$	$9.84656 - 3.72057I$

III. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1	$(u^6-3u^5+5u^4-4u^3+2u^2-u+1)(u^{83}+24u^{82}+\cdots+8u+1)$
c_2	$(u^6+u^5-u^4-2u^3+u+1)(u^{83}-2u^{82}+\cdots+2u-1)$
c_3	$529(23u^6-18u^5+25u^4-8u^3+7u^2-u+1)$ $\cdot(23u^{83}-133u^{82}+\cdots+15007694u-1502291)$
c_4	$(u^6+u^5-u^4-2u^3+u+1)(u^{83}-2u^{82}+\cdots-4u^2+1)$
c_5	$529(23u^6-5u^5-17u^4+10u^3+3u^2-4u+1)$ $\cdot(23u^{83}+64u^{82}+\cdots+8416615u+1304033)$
c_6	$(u^6-u^5-u^4+2u^3-u+1)(u^{83}-2u^{82}+\cdots+2u-1)$
c_7	$(u^6+3u^5+5u^4+4u^3+2u^2+u+1)(u^{83}+24u^{82}+\cdots+8u+1)$
c_8	$((u+1)^6)(u^{83}+7u^{82}+\cdots-1641u-529)$
c_9	$u^6(u^{83}+7u^{82}+\cdots-69184u+33856)$
c_{10}	$((u-1)^6)(u^{83}+7u^{82}+\cdots-1641u-529)$
c_{11}, c_{12}	$(u^6-u^5-u^4+2u^3-u+1)(u^{83}-2u^{82}+\cdots-4u^2+1)$

IV. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1, c_7	$(y^6+y^5+5y^4+6y^2+3y+1)(y^{83}+72y^{82}+\cdots+44y-1)$
c_2, c_6	$(y^6-3y^5+5y^4-4y^3+2y^2-y+1)(y^{83}-24y^{82}+\cdots+8y-1)$
c_3	$279841(529y^6+826y^5+659y^4+296y^3+83y^2+13y+1)$ $\cdot(529y^{83}+28081y^{82}+\cdots+38188375604614y-2256878248681)$
c_4, c_{11}, c_{12}	$(y^6-3y^5+5y^4-4y^3+2y^2-y+1)(y^{83}-84y^{82}+\cdots+8y-1)$
c_5	$279841(529y^6-807y^5+527y^4-196y^3+55y^2-10y+1)$ $\cdot(529y^{83}-32708y^{82}+\cdots+39172776651029y-1700502065089)$
c_8, c_{10}	$((y-1)^6)(y^{83}-75y^{82}+\cdots+5875345y-279841)$
c_9	$y^6(y^{83}+39y^{82}+\cdots-8.24245\times 10^9 y-1.14623\times 10^9)$