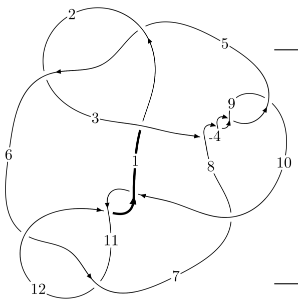
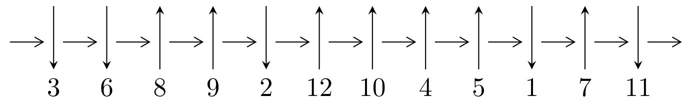
$12a_{0278}$ $(K12a_{0278})$



A knot diagram[1]

Linearized knot diagam



Solving Sequence

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

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

$$I_1^u = \langle 9.38441 \times 10^{39} u^{74} + 5.67453 \times 10^{39} u^{73} + \cdots + 1.90771 \times 10^{40} b - 5.20911 \times 10^{40},$$
$$- 1.62029 \times 10^{40} u^{74} - 8.80257 \times 10^{39} u^{73} + \cdots + 1.90771 \times 10^{40} a + 1.14013 \times 10^{41},\ u^{75} + u^{74} + \cdots - 12u -$$
$$I_2^u = \langle b^2 - 2bu - b + u + 3,\ 2a + u,\ u^2 - 2\rangle$$

$$I_1^v = \langle a,\ b - v - 1,\ v^2 + v + 1\rangle$$

* 3 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 81 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.

$\boldsymbol{I_1^u = \langle 9.38\times10^{39}u^{74}+5.67\times10^{39}u^{73}+\cdots+1.91\times10^{40}b-5.21\times10^{40},\ -1.62\times10^{40}u^{74}-8.80\times10^{39}u^{73}+\cdots+1.91\times10^{40}a+1.14\times10^{41},\ u^{75}+u^{74}+\cdots-12u-4\rangle}$

(i) Arc colorings

$$a_5 = \begin{pmatrix}0\\u\end{pmatrix}$$

$$a_9 = \begin{pmatrix}1\\0\end{pmatrix}$$

$$a_1 = \begin{pmatrix}0.849339u^{74}+0.461421u^{73}+\cdots-10.4833u-5.97644\\-0.491921u^{74}-0.297453u^{73}+\cdots+0.593748u+2.73056\end{pmatrix}$$

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

$$a_{11} = \begin{pmatrix}0.524536u^{74}-0.696711u^{73}+\cdots-8.34076u-5.63903\\-1.23043u^{74}+1.30629u^{73}+\cdots+12.6838u+6.35323\end{pmatrix}$$

$$a_4 = \begin{pmatrix}-u\\u\end{pmatrix}$$

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

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

$$a_2 = \begin{pmatrix}0.871842u^{74}-0.0410241u^{73}+\cdots-10.2878u-6.19131\\-0.374527u^{74}+0.413670u^{73}+\cdots+1.18849u+2.97556\end{pmatrix}$$

$$a_7 = \begin{pmatrix}u^4-3u^2+1\\-u^6+2u^4+u^2\end{pmatrix}$$

$$a_{12} = \begin{pmatrix}0.519955u^{74}-0.395542u^{73}+\cdots-8.23310u-4.93826\\-1.16106u^{74}+0.963015u^{73}+\cdots+11.8087u+6.08819\end{pmatrix}$$

$$a_6 = \begin{pmatrix}-0.174957u^{74}-0.182489u^{73}+\cdots-8.40404u+0.258482\\0.672272u^{74}+0.555135u^{73}+\cdots-0.695264u-3.47423\end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= -2.15821u^{74}+0.754780u^{73}+\cdots+41.7200u+28.2560$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{75} + 39u^{74} + \cdots + 417u + 49$
c_2, c_5	$u^{75} + 3u^{74} + \cdots - 9u - 7$
c_3, c_4, c_8 c_9	$u^{75} + u^{74} + \cdots - 12u - 4$
c_6, c_{11}	$u^{75} - 2u^{74} + \cdots + 6u + 1$
c_7	$u^{75} + 15u^{74} + \cdots + 11264u + 1792$
c_{10}, c_{12}	$u^{75} + 26u^{74} + \cdots + 40u - 1$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{75} + y^{74} + \cdots - 65623y - 2401$
c_2, c_5	$y^{75} - 39y^{74} + \cdots + 417y - 49$
c_3, c_4, c_8 c_9	$y^{75} - 85y^{74} + \cdots + 272y - 16$
c_6, c_{11}	$y^{75} + 26y^{74} + \cdots + 40y - 1$
c_7	$y^{75} + 19y^{74} + \cdots + 128483328y - 3211264$
c_{10}, c_{12}	$y^{75} + 50y^{74} + \cdots + 1936y - 1$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.992360 + 0.148515I$ $a = 0.576542 + 0.197096I$ $b = -0.309129 + 0.852785I$	$4.89966 - 0.48043I$	0
$u = 0.992360 - 0.148515I$ $a = 0.576542 - 0.197096I$ $b = -0.309129 - 0.852785I$	$4.89966 + 0.48043I$	0
$u = -0.931734 + 0.252335I$ $a = -0.485930 + 0.342374I$ $b = 0.456955 + 0.767589I$	$4.81883 - 5.04031I$	0
$u = -0.931734 - 0.252335I$ $a = -0.485930 - 0.342374I$ $b = 0.456955 - 0.767589I$	$4.81883 + 5.04031I$	0
$u = 0.653012 + 0.614677I$ $a = -2.17237 + 0.30058I$ $b = 0.915870 + 0.280175I$	$-0.19940 + 12.18710I$	0
$u = 0.653012 - 0.614677I$ $a = -2.17237 - 0.30058I$ $b = 0.915870 - 0.280175I$	$-0.19940 - 12.18710I$	0
$u = -0.665614 + 0.580959I$ $a = 1.80487 + 0.31047I$ $b = -0.671344 + 0.328501I$	$0.97505 - 6.50542I$	0
$u = -0.665614 - 0.580959I$ $a = 1.80487 - 0.31047I$ $b = -0.671344 - 0.328501I$	$0.97505 + 6.50542I$	0
$u = -0.675215 + 0.522999I$ $a = -1.99689 + 0.08186I$ $b = 0.802298 - 0.038855I$	$2.37245 - 7.04723I$	$0. + 7.05593I$
$u = -0.675215 - 0.522999I$ $a = -1.99689 - 0.08186I$ $b = 0.802298 + 0.038855I$	$2.37245 + 7.04723I$	$0. - 7.05593I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.697751 + 0.462610I$ $a = 1.71652 - 0.07976I$ $b = -0.612037 - 0.027947I$	$3.26431 + 1.50095I$	$7.89789 - 1.80538I$
$u = 0.697751 - 0.462610I$ $a = 1.71652 + 0.07976I$ $b = -0.612037 + 0.027947I$	$3.26431 - 1.50095I$	$7.89789 + 1.80538I$
$u = 0.567607 + 0.560344I$ $a = -1.81116 - 0.63783I$ $b = 0.795511 + 0.950961I$	$-5.29697 + 5.95713I$	$-3.09818 - 7.38755I$
$u = 0.567607 - 0.560344I$ $a = -1.81116 + 0.63783I$ $b = 0.795511 - 0.950961I$	$-5.29697 - 5.95713I$	$-3.09818 + 7.38755I$
$u = 0.323852 + 0.694398I$ $a = -0.48580 - 1.64617I$ $b = -0.386203 + 0.980438I$	$-1.18225 - 7.78836I$	$0.62681 + 5.55340I$
$u = 0.323852 - 0.694398I$ $a = -0.48580 + 1.64617I$ $b = -0.386203 - 0.980438I$	$-1.18225 + 7.78836I$	$0.62681 - 5.55340I$
$u = -0.591460 + 0.442465I$ $a = 0.851460 - 0.535667I$ $b = -0.167713 + 0.970251I$	$-0.68077 - 3.94349I$	$4.08468 + 7.42217I$
$u = -0.591460 - 0.442465I$ $a = 0.851460 + 0.535667I$ $b = -0.167713 - 0.970251I$	$-0.68077 + 3.94349I$	$4.08468 - 7.42217I$
$u = -0.282851 + 0.667116I$ $a = 0.407429 - 1.153780I$ $b = 0.460517 + 0.731193I$	$-0.16240 + 2.29905I$	$2.31301 - 0.75455I$
$u = -0.282851 - 0.667116I$ $a = 0.407429 + 1.153780I$ $b = 0.460517 - 0.731193I$	$-0.16240 - 2.29905I$	$2.31301 + 0.75455I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.399552 + 0.588174I$ $a = -1.69508 - 1.30618I$ $b = 0.152200 + 0.661165I$	$-5.79484 - 2.02438I$	$-5.06771 + 0.43859I$
$u = 0.399552 - 0.588174I$ $a = -1.69508 + 1.30618I$ $b = 0.152200 - 0.661165I$	$-5.79484 + 2.02438I$	$-5.06771 - 0.43859I$
$u = 1.287660 + 0.137546I$ $a = 0.108222 + 0.102118I$ $b = -0.041567 - 1.232660I$	$4.69216 + 0.68186I$	0
$u = 1.287660 - 0.137546I$ $a = 0.108222 - 0.102118I$ $b = -0.041567 + 1.232660I$	$4.69216 - 0.68186I$	0
$u = -0.477179 + 0.487322I$ $a = -1.37904 + 0.78397I$ $b = 0.597926 - 0.495834I$	$-2.38002 - 1.71377I$	$-0.33796 + 4.28154I$
$u = -0.477179 - 0.487322I$ $a = -1.37904 - 0.78397I$ $b = 0.597926 + 0.495834I$	$-2.38002 + 1.71377I$	$-0.33796 - 4.28154I$
$u = 0.511035 + 0.444098I$ $a = -2.87952 - 0.72570I$ $b = 0.418047 + 0.120094I$	$-2.37090 + 3.74638I$	$0.22703 - 6.74943I$
$u = 0.511035 - 0.444098I$ $a = -2.87952 + 0.72570I$ $b = 0.418047 - 0.120094I$	$-2.37090 - 3.74638I$	$0.22703 + 6.74943I$
$u = 0.473672 + 0.440581I$ $a = -0.80128 - 1.37475I$ $b = 0.17379 + 1.52146I$	$-2.48507 - 0.60256I$	$-0.45284 - 3.01495I$
$u = 0.473672 - 0.440581I$ $a = -0.80128 + 1.37475I$ $b = 0.17379 - 1.52146I$	$-2.48507 + 0.60256I$	$-0.45284 + 3.01495I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-1.342850+0.195956I$ $a=\ \ 0.162252+0.343427I$ $b=-0.00168-1.80697I$	$4.05099+4.57027I$	0
$u=-1.342850-0.195956I$ $a=\ \ 0.162252-0.343427I$ $b=-0.00168+1.80697I$	$4.05099-4.57027I$	0
$u=-0.208285+0.606015I$ $a=-0.37413+1.46044I$ $b=-0.050477-0.875409I$	$1.01708+3.22485I$	$3.29952-1.53483I$
$u=-0.208285-0.606015I$ $a=-0.37413-1.46044I$ $b=-0.050477+0.875409I$	$1.01708-3.22485I$	$3.29952+1.53483I$
$u=\ \ 0.107932+0.597520I$ $a=\ \ 0.058053+1.205490I$ $b=\ \ 0.304582-0.660951I$	$1.52734+2.01025I$	$4.15237-4.38381I$
$u=\ \ 0.107932-0.597520I$ $a=\ \ 0.058053-1.205490I$ $b=\ \ 0.304582+0.660951I$	$1.52734-2.01025I$	$4.15237+4.38381I$
$u=\ \ 0.574225+0.154605I$ $a=\ \ 0.895573+0.119935I$ $b=-0.453435-0.321110I$	$1.012190+0.224702I$	$10.07500-1.39244I$
$u=\ \ 0.574225-0.154605I$ $a=\ \ 0.895573-0.119935I$ $b=-0.453435+0.321110I$	$1.012190-0.224702I$	$10.07500+1.39244I$
$u=\ \ 1.44015$ $a=\ \ 0.864467$ $b=-1.81545$	3.34202	0
$u=-0.443389+0.313223I$ $a=\ \ 2.92248-0.01185I$ $b=-0.146346+0.009497I$	$-1.45213+1.13937I$	$2.80069+2.68006I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.443389 - 0.313223I$ $a = 2.92248 + 0.01185I$ $b = -0.146346 - 0.009497I$	$-1.45213 - 1.13937I$	$2.80069 - 2.68006I$
$u = -1.46267 + 0.14512I$ $a = -0.479150 + 1.024860I$ $b = 1.54755 - 2.32447I$	$0.219652 - 0.514414I$	0
$u = -1.46267 - 0.14512I$ $a = -0.479150 - 1.024860I$ $b = 1.54755 + 2.32447I$	$0.219652 + 0.514414I$	0
$u = -0.478987 + 0.106396I$ $a = -0.928822 - 0.554161I$ $b = 0.976701 + 0.733060I$	$-1.09010 - 2.70453I$	$5.06111 + 8.24534I$
$u = -0.478987 - 0.106396I$ $a = -0.928822 + 0.554161I$ $b = 0.976701 - 0.733060I$	$-1.09010 + 2.70453I$	$5.06111 - 8.24534I$
$u = 1.53018 + 0.01645I$ $a = -0.378473 - 0.019636I$ $b = 1.78911 + 0.93630I$	$5.67752 - 2.80166I$	0
$u = 1.53018 - 0.01645I$ $a = -0.378473 + 0.019636I$ $b = 1.78911 - 0.93630I$	$5.67752 + 2.80166I$	0
$u = -0.217271 + 0.415338I$ $a = 1.48058 + 0.60711I$ $b = 0.0853380 + 0.1067120I$	$-1.61290 + 0.93401I$	$-1.58237 + 0.39943I$
$u = -0.217271 - 0.415338I$ $a = 1.48058 - 0.60711I$ $b = 0.0853380 - 0.1067120I$	$-1.61290 - 0.93401I$	$-1.58237 - 0.39943I$
$u = 1.52988 + 0.11797I$ $a = -0.623400 - 0.558838I$ $b = 2.34549 + 1.16028I$	$4.31442 + 3.77841I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 1.52988 - 0.11797I$ $a = -0.623400 + 0.558838I$ $b = 2.34549 - 1.16028I$	$4.31442 - 3.77841I$	0
$u = -1.53683 + 0.11028I$ $a = -0.320595 + 0.307458I$ $b = 1.52621 - 1.97759I$	$4.29005 - 1.28143I$	0
$u = -1.53683 - 0.11028I$ $a = -0.320595 - 0.307458I$ $b = 1.52621 + 1.97759I$	$4.29005 + 1.28143I$	0
$u = 1.54396 + 0.08769I$ $a = 1.58184 + 1.09398I$ $b = -3.48311 - 1.98660I$	$5.37828 + 0.28224I$	0
$u = 1.54396 - 0.08769I$ $a = 1.58184 - 1.09398I$ $b = -3.48311 + 1.98660I$	$5.37828 - 0.28224I$	0
$u = -1.54768 + 0.11773I$ $a = -1.40777 + 1.47039I$ $b = 3.29966 - 2.66855I$	$4.57897 - 5.71211I$	0
$u = -1.54768 - 0.11773I$ $a = -1.40777 - 1.47039I$ $b = 3.29966 + 2.66855I$	$4.57897 + 5.71211I$	0
$u = -1.55261 + 0.16241I$ $a = -0.864693 + 0.634138I$ $b = 3.02044 - 1.66426I$	$1.77533 - 8.56700I$	0
$u = -1.55261 - 0.16241I$ $a = -0.864693 - 0.634138I$ $b = 3.02044 + 1.66426I$	$1.77533 + 8.56700I$	0
$u = -1.56486 + 0.06219I$ $a = 0.713620 - 0.067510I$ $b = -2.18755 + 0.52995I$	$8.30846 - 1.13053I$	0

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -1.56486 - 0.06219I$ $a = \quad 0.713620 + 0.067510I$ $b = -2.18755 - 0.52995I$	$8.30846 + 1.13053I$	0
$u = \quad 1.56721 + 0.12575I$ $a = \quad 0.669514 + 0.170271I$ $b = -2.06471 - 1.12705I$	$6.60902 + 6.00545I$	0
$u = \quad 1.56721 - 0.12575I$ $a = \quad 0.669514 - 0.170271I$ $b = -2.06471 + 1.12705I$	$6.60902 - 6.00545I$	0
$u = -1.58541 + 0.18980I$ $a = -1.50518 + 0.63558I$ $b = \quad 3.93186 - 0.97204I$	$7.2874 - 15.1719I$	0
$u = -1.58541 - 0.18980I$ $a = -1.50518 - 0.63558I$ $b = \quad 3.93186 + 0.97204I$	$7.2874 + 15.1719I$	0
$u = \quad 1.58960 + 0.17605I$ $a = \quad 1.40524 + 0.42225I$ $b = -3.59162 - 0.75532I$	$8.54478 + 9.31535I$	0
$u = \quad 1.58960 - 0.17605I$ $a = \quad 1.40524 - 0.42225I$ $b = -3.59162 + 0.75532I$	$8.54478 - 9.31535I$	0
$u = \quad 1.59206 + 0.15544I$ $a = -1.29051 - 0.83360I$ $b = \quad 3.33436 + 1.24733I$	$10.01660 + 9.56671I$	0
$u = \quad 1.59206 - 0.15544I$ $a = -1.29051 + 0.83360I$ $b = \quad 3.33436 - 1.24733I$	$10.01660 - 9.56671I$	0
$u = -1.59672 + 0.13586I$ $a = \quad 1.29653 - 0.58956I$ $b = -3.24169 + 0.91373I$	$11.02700 - 3.73205I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -1.59672 - 0.13586I$ $a = 1.29653 + 0.58956I$ $b = -3.24169 - 0.91373I$	$11.02700 + 3.73205I$	0
$u = -1.63713 + 0.01501I$ $a = 0.391869 - 0.910777I$ $b = -0.94477 + 1.07763I$	$13.79420 + 0.08438I$	0
$u = -1.63713 - 0.01501I$ $a = 0.391869 + 0.910777I$ $b = -0.94477 - 1.07763I$	$13.79420 - 0.08438I$	0
$u = 1.63715 + 0.03760I$ $a = -0.095026 - 0.954894I$ $b = 0.326676 + 1.124460I$	$13.6181 + 5.9211I$	0
$u = 1.63715 - 0.03760I$ $a = -0.095026 + 0.954894I$ $b = 0.326676 - 1.124460I$	$13.6181 - 5.9211I$	0

II. $\boldsymbol{I_2^u = \langle b^2 - 2bu - b + u + 3,\ 2a + u,\ u^2 - 2\rangle}$

(i) Arc colorings

$$a_5 = \begin{pmatrix} 0 \\ u \end{pmatrix}$$

$$a_9 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$

$$a_1 = \begin{pmatrix} -\frac{1}{2}u \\ b \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} 1 \\ -2 \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} -\frac{1}{2}bu + 2 \\ bu + b - u - 5 \end{pmatrix}$$

$$a_4 = \begin{pmatrix} -u \\ u \end{pmatrix}$$

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

$$a_3 = \begin{pmatrix} 0 \\ -u \end{pmatrix}$$

$$a_2 = \begin{pmatrix} -\frac{1}{2}u \\ b - u \end{pmatrix}$$

$$a_7 = \begin{pmatrix} -1 \\ 2 \end{pmatrix}$$

$$a_{12} = \begin{pmatrix} -\frac{1}{2}bu + b - u + 1 \\ bu - b + u - 3 \end{pmatrix}$$

$$a_6 = \begin{pmatrix} -\frac{1}{2}u \\ b \end{pmatrix}$$

(ii) Obstruction class $= 1$

(iii) Cusp Shapes $= 4b - 4u$

(iv) u-Polynomials at the component

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

(v) Riley Polynomials at the component

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

(vi) Complex Volumes and Cusp Shapes

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 1.41421$ $a = -0.707107$ $b = 1.91421 + 0.86603I$	$3.28987 - 2.02988I$	$2.00000 + 3.46410I$
$u = 1.41421$ $a = -0.707107$ $b = 1.91421 - 0.86603I$	$3.28987 + 2.02988I$	$2.00000 - 3.46410I$
$u = -1.41421$ $a = 0.707107$ $b = -0.914214 + 0.866025I$	$3.28987 - 2.02988I$	$2.00000 + 3.46410I$
$u = -1.41421$ $a = 0.707107$ $b = -0.914214 - 0.866025I$	$3.28987 + 2.02988I$	$2.00000 - 3.46410I$

III. $I_1^v = \langle a,\ b - v - 1,\ v^2 + v + 1\rangle$

(i) Arc colorings

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

(ii) Obstruction class $= 1$

(iii) Cusp Shapes $= 4v + 2$

(iv) u-Polynomials at the component

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

(v) Riley Polynomials at the component

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

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^v	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$v = -0.500000 + 0.866025I$ $a = 0$ $b = 0.500000 + 0.866025I$	$-1.64493 - 2.02988I$	$0. + 3.46410I$
$v = -0.500000 - 0.866025I$ $a = 0$ $b = 0.500000 - 0.866025I$	$-1.64493 + 2.02988I$	$0. - 3.46410I$

IV. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1	$((u-1)^6)(u^{75}+39u^{74}+\cdots+417u+49)$
c_2	$((u-1)^2)(u+1)^4(u^{75}+3u^{74}+\cdots-9u-7)$
c_3, c_4, c_8 c_9	$u^2(u^2-2)^2(u^{75}+u^{74}+\cdots-12u-4)$
c_5	$((u-1)^4)(u+1)^2(u^{75}+3u^{74}+\cdots-9u-7)$
c_6	$((u^2-u+1)^2)(u^2+u+1)(u^{75}-2u^{74}+\cdots+6u+1)$
c_7	$u^6(u^{75}+15u^{74}+\cdots+11264u+1792)$
c_{10}	$((u^2-u+1)^3)(u^{75}+26u^{74}+\cdots+40u-1)$
c_{11}	$(u^2-u+1)(u^2+u+1)^2(u^{75}-2u^{74}+\cdots+6u+1)$
c_{12}	$((u^2+u+1)^3)(u^{75}+26u^{74}+\cdots+40u-1)$

V. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1	$((y-1)^6)(y^{75}+y^{74}+\cdots-65623y-2401)$
c_2, c_5	$((y-1)^6)(y^{75}-39y^{74}+\cdots+417y-49)$
c_3, c_4, c_8 c_9	$y^2(y-2)^4(y^{75}-85y^{74}+\cdots+272y-16)$
c_6, c_{11}	$((y^2+y+1)^3)(y^{75}+26y^{74}+\cdots+40y-1)$
c_7	$y^6(y^{75}+19y^{74}+\cdots+1.28483\times10^8y-3211264)$
c_{10}, c_{12}	$((y^2+y+1)^3)(y^{75}+50y^{74}+\cdots+1936y-1)$