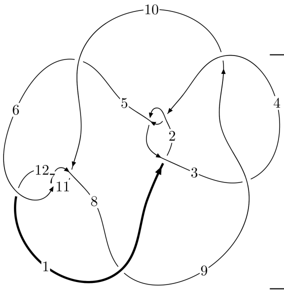
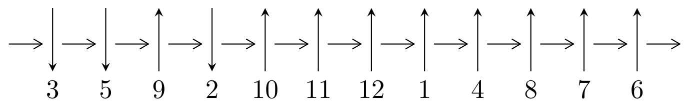
$12a_{0148}$ $(K12a_{0148})$



A knot diagram[1]

Linearized knot diagam



Solving Sequence

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

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

$$I_1^u = \langle 4.42539 \times 10^{200} u^{87} - 3.64946 \times 10^{199} u^{86} + \cdots + 1.99958 \times 10^{199} b + 9.22932 \times 10^{202},$$
$$3.50341 \times 10^{201} u^{87} + 1.47839 \times 10^{201} u^{86} + \cdots + 1.59966 \times 10^{200} a + 1.35973 \times 10^{204},$$
$$u^{88} + u^{87} + \cdots + 896u + 256 \rangle$$

$$I_1^v = \langle a,\ b-1,\ v^8 - v^7 - v^6 + 2v^5 + v^4 - 2v^3 + 2v - 1 \rangle$$

* 2 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 96 representations.

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[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. $I^u_1 = \langle 4.43 \times 10^{200} u^{87} - 3.65 \times 10^{199} u^{86} + \cdots + 2.00 \times 10^{199} b + 9.23 \times 10^{202},\ 3.50 \times 10^{201} u^{87} + 1.48 \times 10^{201} u^{86} + \cdots + 1.60 \times 10^{200} a + 1.36 \times 10^{204},\ u^{88} + u^{87} + \cdots + 896u + 256 \rangle$

(i) Arc colorings

$$a_3 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$
$$a_9 = \begin{pmatrix} 0 \\ u \end{pmatrix}$$
$$a_4 = \begin{pmatrix} 1 \\ -u^2 \end{pmatrix}$$
$$a_5 = \begin{pmatrix} -21.9009u^{87} - 9.24189u^{86} + \cdots - 17882.8u - 8500.07 \\ -22.1316u^{87} + 1.82512u^{86} + \cdots - 13328.4u - 4615.63 \end{pmatrix}$$
$$a_{10} = \begin{pmatrix} u \\ -u^3 + u \end{pmatrix}$$
$$a_6 = \begin{pmatrix} -36.3315u^{87} - 7.56623u^{86} + \cdots - 26362.6u - 11326.7 \\ -20.1398u^{87} + 4.15579u^{86} + \cdots - 11071.2u - 3319.07 \end{pmatrix}$$
$$a_2 = \begin{pmatrix} -21.9009u^{87} - 9.24189u^{86} + \cdots - 17882.8u - 8500.07 \\ 27.4223u^{87} + 3.72173u^{86} + \cdots + 19064.3u + 7856.34 \end{pmatrix}$$
$$a_1 = \begin{pmatrix} 5.52139u^{87} - 5.52016u^{86} + \cdots + 1181.43u - 643.728 \\ 27.4223u^{87} + 3.72173u^{86} + \cdots + 19064.3u + 7856.34 \end{pmatrix}$$
$$a_8 = \begin{pmatrix} -57.6042u^{87} - 9.93484u^{86} + \cdots - 40728.9u - 17176.4 \\ -9.77552u^{87} + 1.20789u^{86} + \cdots - 5709.00u - 1880.73 \end{pmatrix}$$
$$a_{11} = \begin{pmatrix} 10.1990u^{87} - 4.09790u^{86} + \cdots + 4767.62u + 1155.77 \\ -16.1258u^{87} - 3.46355u^{86} + \cdots - 11668.8u - 5093.69 \end{pmatrix}$$
$$a_{12} = \begin{pmatrix} 22.0367u^{87} - 6.36866u^{86} + \cdots + 11313.4u + 3063.28 \\ -4.70307u^{87} - 3.57832u^{86} + \cdots - 4496.61u - 2419.16 \end{pmatrix}$$
$$a_7 = \begin{pmatrix} -69.8135u^{87} - 16.6900u^{86} + \cdots - 51473.6u - 22702.9 \\ -35.6897u^{87} + 7.12445u^{86} + \cdots - 19702.9u - 5719.85 \end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= -61.0516u^{87} - 11.3428u^{86} + \cdots - 43625.8u - 18291.7$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{88} + 39u^{87} + \cdots + 48u + 1$
c_2, c_4	$u^{88} - 9u^{87} + \cdots - 16u + 1$
c_3, c_9	$u^{88} - u^{87} + \cdots - 896u + 256$
c_5, c_8	$u^{88} + 2u^{87} + \cdots + 7868u + 1960$
c_6, c_7, c_{11}	$u^{88} - 2u^{87} + \cdots + 2u^2 + 1$
c_{10}, c_{12}	$u^{88} + 6u^{87} + \cdots + 4u + 1$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{88} + 29y^{87} + \cdots - 2128y + 1$
c_2, c_4	$y^{88} - 39y^{87} + \cdots - 48y + 1$
c_3, c_9	$y^{88} - 51y^{87} + \cdots - 1949696y + 65536$
c_5, c_8	$y^{88} - 66y^{87} + \cdots + 35490896y + 3841600$
c_6, c_7, c_{11}	$y^{88} - 74y^{87} + \cdots + 4y + 1$
c_{10}, c_{12}	$y^{88} + 46y^{87} + \cdots + 4y + 1$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 1.00435$ $a = 0.429782$ $b = 1.32676$	6.57645	0
$u = -1.001690 + 0.149224I$ $a = 0.429739 + 0.012969I$ $b = 1.324880 - 0.070161I$	$2.39022 - 7.28873I$	0
$u = -1.001690 - 0.149224I$ $a = 0.429739 - 0.012969I$ $b = 1.324880 + 0.070161I$	$2.39022 + 7.28873I$	0
$u = 0.957734 + 0.153558I$ $a = 0.433584 - 0.013510I$ $b = 1.304120 + 0.071792I$	$-2.38943 + 3.43455I$	0
$u = 0.957734 - 0.153558I$ $a = 0.433584 + 0.013510I$ $b = 1.304120 - 0.071792I$	$-2.38943 - 3.43455I$	0
$u = -0.219203 + 1.015630I$ $a = 0.500350 + 0.146984I$ $b = 0.839830 - 0.540473I$	$1.67070 + 2.16357I$	0
$u = -0.219203 - 1.015630I$ $a = 0.500350 - 0.146984I$ $b = 0.839830 + 0.540473I$	$1.67070 - 2.16357I$	0
$u = -1.031030 + 0.152271I$ $a = 0.58647 + 1.56663I$ $b = -0.790418 - 0.559855I$	$1.37194 - 0.87864I$	0
$u = -1.031030 - 0.152271I$ $a = 0.58647 - 1.56663I$ $b = -0.790418 + 0.559855I$	$1.37194 + 0.87864I$	0
$u = 0.098155 + 1.040920I$ $a = 0.515677 - 0.169679I$ $b = 0.749756 + 0.575742I$	$-0.582374 + 1.270130I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.098155 - 1.040920I$ $a = 0.515677 + 0.169679I$ $b = 0.749756 - 0.575742I$	$-0.582374 - 1.270130I$	0
$u = 0.576718 + 0.732950I$ $a = 0.466275 - 0.078251I$ $b = 1.085910 + 0.350059I$	$-1.59869 - 4.94887I$	0
$u = 0.576718 - 0.732950I$ $a = 0.466275 + 0.078251I$ $b = 1.085910 - 0.350059I$	$-1.59869 + 4.94887I$	0
$u = -0.305706 + 1.023880I$ $a = 0.486178 + 0.137784I$ $b = 0.903940 - 0.539582I$	$1.49354 + 2.08175I$	0
$u = -0.305706 - 1.023880I$ $a = 0.486178 - 0.137784I$ $b = 0.903940 + 0.539582I$	$1.49354 - 2.08175I$	0
$u = 0.977964 + 0.448688I$ $a = -0.00055 - 1.99302I$ $b = -1.000140 + 0.501752I$	$-0.69091 + 1.55122I$	0
$u = 0.977964 - 0.448688I$ $a = -0.00055 + 1.99302I$ $b = -1.000140 - 0.501752I$	$-0.69091 - 1.55122I$	0
$u = -0.087736 + 1.086640I$ $a = 0.509047 + 0.178283I$ $b = 0.749823 - 0.612838I$	$4.24013 - 5.02346I$	0
$u = -0.087736 - 1.086640I$ $a = 0.509047 - 0.178283I$ $b = 0.749823 + 0.612838I$	$4.24013 + 5.02346I$	0
$u = -0.601343 + 0.667675I$ $a = 0.464910 + 0.069332I$ $b = 1.104160 - 0.313793I$	$-5.59798 + 1.13427I$	0

Solutions to I_1^u	$\sqrt{-1}(\text{vol}+\sqrt{-1}CS)$	Cusp shape
$u = -0.601343 - 0.667675I$ $a = 0.464910 - 0.069332I$ $b = 1.104160 + 0.313793I$	$-5.59798 - 1.13427I$	0
$u = 0.647327 + 0.605586I$ $a = 0.460593 - 0.060958I$ $b = 1.133740 + 0.282394I$	$-1.76809 + 2.65293I$	0
$u = 0.647327 - 0.605586I$ $a = 0.460593 + 0.060958I$ $b = 1.133740 - 0.282394I$	$-1.76809 - 2.65293I$	0
$u = -1.007440 + 0.484362I$ $a = -0.08958 + 1.91917I$ $b = -1.024270 - 0.519926I$	$-4.28846 - 5.63711I$	0
$u = -1.007440 - 0.484362I$ $a = -0.08958 - 1.91917I$ $b = -1.024270 + 0.519926I$	$-4.28846 + 5.63711I$	0
$u = 1.096010 + 0.287738I$ $a = 0.28422 - 1.63973I$ $b = -0.897374 + 0.592068I$	$1.01324 + 3.73408I$	0
$u = 1.096010 - 0.287738I$ $a = 0.28422 + 1.63973I$ $b = -0.897374 - 0.592068I$	$1.01324 - 3.73408I$	0
$u = 0.213348 + 1.117470I$ $a = 0.487187 - 0.162434I$ $b = 0.847254 + 0.615896I$	$8.14434 - 2.42174I$	0
$u = 0.213348 - 1.117470I$ $a = 0.487187 + 0.162434I$ $b = 0.847254 - 0.615896I$	$8.14434 + 2.42174I$	0
$u = 0.322387 + 1.091330I$ $a = 0.476315 - 0.145185I$ $b = 0.920976 + 0.585529I$	$-1.11718 - 5.91216I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.322387 - 1.091330I$ $a = 0.476315 + 0.145185I$ $b = 0.920976 - 0.585529I$	$-1.11718 + 5.91216I$	0
$u = -0.859307$ $a = 0.442580$ $b = 1.25948$	0.232477	11.3810
$u = -0.830025 + 0.174817I$ $a = 0.445016 + 0.015816I$ $b = 1.244270 - 0.079764I$	$0.314091 + 0.198621I$	0
$u = -0.830025 - 0.174817I$ $a = 0.445016 - 0.015816I$ $b = 1.244270 + 0.079764I$	$0.314091 - 0.198621I$	0
$u = 1.032070 + 0.514380I$ $a = -0.15414 - 1.85794I$ $b = -1.044350 + 0.534552I$	$-0.12676 + 9.73288I$	0
$u = 1.032070 - 0.514380I$ $a = -0.15414 + 1.85794I$ $b = -1.044350 - 0.534552I$	$-0.12676 - 9.73288I$	0
$u = -0.051824 + 0.840631I$ $a = 0.562713 + 0.136610I$ $b = 0.678195 - 0.407415I$	$2.05221 + 1.93040I$	$6.00000 - 3.49207I$
$u = -0.051824 - 0.840631I$ $a = 0.562713 - 0.136610I$ $b = 0.678195 + 0.407415I$	$2.05221 - 1.93040I$	$6.00000 + 3.49207I$
$u = -0.823823 + 0.171820I$ $a = 1.08150 + 2.00827I$ $b = -0.792131 - 0.385999I$	$0.29466 - 2.12175I$	$6.00000 + 4.57537I$
$u = -0.823823 - 0.171820I$ $a = 1.08150 - 2.00827I$ $b = -0.792131 + 0.385999I$	$0.29466 + 2.12175I$	$6.00000 - 4.57537I$

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 1.164840 + 0.015673I$ $a = 0.519545 - 1.240270I$ $b = -0.712673 + 0.685914I$	$6.62329 - 0.64955I$	0
$u = 1.164840 - 0.015673I$ $a = 0.519545 + 1.240270I$ $b = -0.712673 - 0.685914I$	$6.62329 + 0.64955I$	0
$u = -0.322346 + 1.120770I$ $a = 0.472940 + 0.148909I$ $b = 0.923722 - 0.605700I$	$3.70264 + 9.83487I$	0
$u = -0.322346 - 1.120770I$ $a = 0.472940 - 0.148909I$ $b = 0.923722 + 0.605700I$	$3.70264 - 9.83487I$	0
$u = -0.691641 + 0.455798I$ $a = 0.853629 - 0.525545I$ $b = -0.150516 + 0.522993I$	$1.87270 - 5.60259I$	$6.00000 + 6.15186I$
$u = -0.691641 - 0.455798I$ $a = 0.853629 + 0.525545I$ $b = -0.150516 - 0.522993I$	$1.87270 + 5.60259I$	$6.00000 - 6.15186I$
$u = 0.776541 + 0.121597I$ $a = 1.41349 - 1.89153I$ $b = -0.746497 + 0.339237I$	$-2.93128 - 1.87221I$	$6.00000 + 0.I$
$u = 0.776541 - 0.121597I$ $a = 1.41349 + 1.89153I$ $b = -0.746497 - 0.339237I$	$-2.93128 + 1.87221I$	$6.00000 + 0.I$
$u = -0.735694 + 0.094036I$ $a = 1.70267 + 1.78739I$ $b = -0.720592 - 0.293311I$	$1.54881 + 5.88294I$	$11.49151 - 1.84085I$
$u = -0.735694 - 0.094036I$ $a = 1.70267 - 1.78739I$ $b = -0.720592 + 0.293311I$	$1.54881 - 5.88294I$	$11.49151 + 1.84085I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -1.226590 + 0.300164I$ $a = 0.16868 + 1.45270I$ $b = -0.921134 - 0.679217I$	$6.02695 - 5.91537I$	0
$u = -1.226590 - 0.300164I$ $a = 0.16868 - 1.45270I$ $b = -0.921134 + 0.679217I$	$6.02695 + 5.91537I$	0
$u = 0.569700 + 0.462149I$ $a = 0.874864 + 0.418521I$ $b = -0.069835 - 0.444976I$	$-2.39619 + 1.83979I$	$5.06407 - 4.03961I$
$u = 0.569700 - 0.462149I$ $a = 0.874864 - 0.418521I$ $b = -0.069835 + 0.444976I$	$-2.39619 - 1.83979I$	$5.06407 + 4.03961I$
$u = -0.427991 + 0.540581I$ $a = 0.816176 - 0.306811I$ $b = 0.073526 + 0.403552I$	$1.16464 + 1.76346I$	$8.83454 + 0.17315I$
$u = -0.427991 - 0.540581I$ $a = 0.816176 + 0.306811I$ $b = 0.073526 - 0.403552I$	$1.16464 - 1.76346I$	$8.83454 - 0.17315I$
$u = 1.301580 + 0.388579I$ $a = 0.479272 + 0.832451I$ $b = -0.480564 - 0.902214I$	$6.52418 + 2.29472I$	0
$u = 1.301580 - 0.388579I$ $a = 0.479272 - 0.832451I$ $b = -0.480564 + 0.902214I$	$6.52418 - 2.29472I$	0
$u = 1.320800 + 0.324605I$ $a = 0.463895 + 0.875320I$ $b = -0.527305 - 0.891925I$	$6.81647 + 2.12430I$	0
$u = 1.320800 - 0.324605I$ $a = 0.463895 - 0.875320I$ $b = -0.527305 + 0.891925I$	$6.81647 - 2.12430I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = -1.357440 + 0.262000I$ $a = 0.430943 - 0.915034I$ $b = -0.578746 + 0.894462I$	$4.81467 + 1.57988I$	0
$u = -1.357440 - 0.262000I$ $a = 0.430943 + 0.915034I$ $b = -0.578746 - 0.894462I$	$4.81467 - 1.57988I$	0
$u = -1.327820 + 0.430064I$ $a = 0.462500 - 0.806106I$ $b = -0.464521 + 0.933303I$	$4.02843 - 6.29523I$	0
$u = -1.327820 - 0.430064I$ $a = 0.462500 + 0.806106I$ $b = -0.464521 - 0.933303I$	$4.02843 + 6.29523I$	0
$u = 0.601538$ $a = 1.84428$ $b = -0.457784$	5.87336	17.3130
$u = -1.29156 + 0.57696I$ $a = -0.20838 + 1.42034I$ $b = -1.101120 - 0.689224I$	$5.07279 - 7.95878I$	0
$u = -1.29156 - 0.57696I$ $a = -0.20838 - 1.42034I$ $b = -1.101120 + 0.689224I$	$5.07279 + 7.95878I$	0
$u = 1.31363 + 0.52509I$ $a = -0.143157 - 1.398570I$ $b = -1.072430 + 0.707601I$	$3.30771 + 4.32222I$	0
$u = 1.31363 - 0.52509I$ $a = -0.143157 + 1.398570I$ $b = -1.072430 - 0.707601I$	$3.30771 - 4.32222I$	0
$u = -1.27396 + 0.62381I$ $a = -0.26980 + 1.43160I$ $b = -1.127130 - 0.674560I$	$4.55871 - 8.10417I$	0

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -1.27396 - 0.62381I$ $a = -0.26980 - 1.43160I$ $b = -1.127130 + 0.674560I$	$4.55871 + 8.10417I$	0
$u = 1.39560 + 0.25845I$ $a = 0.404256 + 0.910869I$ $b = -0.592938 - 0.917193I$	$9.80224 - 5.29054I$	0
$u = 1.39560 - 0.25845I$ $a = 0.404256 - 0.910869I$ $b = -0.592938 + 0.917193I$	$9.80224 + 5.29054I$	0
$u = 1.34834 + 0.44357I$ $a = 0.450169 + 0.798043I$ $b = -0.463781 - 0.950589I$	$8.92156 + 10.27380I$	0
$u = 1.34834 - 0.44357I$ $a = 0.450169 - 0.798043I$ $b = -0.463781 + 0.950589I$	$8.92156 - 10.27380I$	0
$u = -1.38667 + 0.36184I$ $a = 0.423626 - 0.845767I$ $b = -0.526559 + 0.945222I$	$13.55820 - 2.57088I$	0
$u = -1.38667 - 0.36184I$ $a = 0.423626 + 0.845767I$ $b = -0.526559 - 0.945222I$	$13.55820 + 2.57088I$	0
$u = 0.231987 + 0.508335I$ $a = 0.516989 - 0.041592I$ $b = 0.921836 + 0.154614I$	$-1.61463 - 0.56356I$	$-2.54529 + 2.25978I$
$u = 0.231987 - 0.508335I$ $a = 0.516989 + 0.041592I$ $b = 0.921836 - 0.154614I$	$-1.61463 + 0.56356I$	$-2.54529 - 2.25978I$
$u = 1.28815 + 0.64947I$ $a = -0.29632 - 1.40690I$ $b = -1.143350 + 0.680591I$	$1.95879 + 12.20550I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = \quad 1.28815 - 0.64947I$ $a = -0.29632 + 1.40690I$ $b = -1.143350 - 0.680591I$	$1.95879 - 12.20550I$	0
$u = -1.34931 + 0.52189I$ $a = -0.138486 + 1.357150I$ $b = -1.074410 - 0.729244I$	$8.33102 - 0.74805I$	0
$u = -1.34931 - 0.52189I$ $a = -0.138486 - 1.357150I$ $b = -1.074410 + 0.729244I$	$8.33102 + 0.74805I$	0
$u = -1.30005 + 0.66027I$ $a = -0.30494 + 1.38969I$ $b = -1.150650 - 0.686528I$	$6.8211 - 16.2526I$	0
$u = -1.30005 - 0.66027I$ $a = -0.30494 - 1.38969I$ $b = -1.150650 + 0.686528I$	$6.8211 + 16.2526I$	0
$u = \quad 1.33561 + 0.60551I$ $a = -0.233965 - 1.363710I$ $b = -1.122210 + 0.712327I$	$11.7348 + 8.6310I$	0
$u = \quad 1.33561 - 0.60551I$ $a = -0.233965 + 1.363710I$ $b = -1.122210 - 0.712327I$	$11.7348 - 8.6310I$	0
$u = -0.381782$ $a = \quad 1.17518$ $b = -0.149070$	0.622395	16.0480

II. $I_1^v = \langle a,\ b-1,\ v^8 - v^7 - v^6 + 2v^5 + v^4 - 2v^3 + 2v - 1\rangle$

(i) Arc colorings

$$a_3 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$

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

$$a_4 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$

$$a_5 = \begin{pmatrix} 0 \\ 1 \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} v \\ 0 \end{pmatrix}$$

$$a_6 = \begin{pmatrix} v^2 \\ 1 \end{pmatrix}$$

$$a_2 = \begin{pmatrix} 1 \\ -1 \end{pmatrix}$$

$$a_1 = \begin{pmatrix} 0 \\ -1 \end{pmatrix}$$

$$a_8 = \begin{pmatrix} v \\ v \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} -v^3 + v \\ -v^3 \end{pmatrix}$$

$$a_{12} = \begin{pmatrix} v^4 \\ v^2 - 1 \end{pmatrix}$$

$$a_7 = \begin{pmatrix} -v^7 + v^6 + 2v^5 - v^4 - 2v^3 + 2v^2 + 2v - 1 \\ -v^7 + 2v^5 - 2v^3 + 2v \end{pmatrix}$$

(ii) Obstruction class $= 1$

(iii) Cusp Shapes $= 2v^7 + v^6 - 5v^5 + v^4 + 4v^3 - 2v^2 - 2v + 6$

(iv) u-Polynomials at the component

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

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_2, c_4	$(y-1)^8$
c_3, c_9	y^8
c_5, c_8	$y^8 - 3y^7 + 7y^6 - 10y^5 + 11y^4 - 10y^3 + 6y^2 - 4y + 1$
c_6, c_7, c_{11}	$y^8 - 7y^7 + 19y^6 - 22y^5 + 3y^4 + 14y^3 - 6y^2 - 4y + 1$
c_{10}, c_{12}	$y^8 + 5y^7 + 11y^6 + 6y^5 - 17y^4 - 34y^3 - 22y^2 - 4y + 1$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^v	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$v = 0.570868 + 0.730671I$ $a = 0$ $b = 1.00000$	$-0.604279 - 1.131230I$	$3.90459 + 0.80511I$
$v = 0.570868 - 0.730671I$ $a = 0$ $b = 1.00000$	$-0.604279 + 1.131230I$	$3.90459 - 0.80511I$
$v = -0.855237 + 0.665892I$ $a = 0$ $b = 1.00000$	$-3.80435 - 2.57849I$	$-0.21961 + 3.88175I$
$v = -0.855237 - 0.665892I$ $a = 0$ $b = 1.00000$	$-3.80435 + 2.57849I$	$-0.21961 - 3.88175I$
$v = -1.09818$ $a = 0$ $b = 1.00000$	4.85780	7.82890
$v = 1.031810 + 0.655470I$ $a = 0$ $b = 1.00000$	$0.73474 + 6.44354I$	$4.50908 - 6.04101I$
$v = 1.031810 - 0.655470I$ $a = 0$ $b = 1.00000$	$0.73474 - 6.44354I$	$4.50908 + 6.04101I$
$v = 0.603304$ $a = 0$ $b = 1.00000$	-0.799899	4.78300

III. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1	$((u-1)^8)(u^{88}+39u^{87}+\cdots+48u+1)$
c_2	$((u-1)^8)(u^{88}-9u^{87}+\cdots-16u+1)$
c_3, c_9	$u^8(u^{88}-u^{87}+\cdots-896u+256)$
c_4	$((u+1)^8)(u^{88}-9u^{87}+\cdots-16u+1)$
c_5, c_8	$(u^8+u^7-u^6-2u^5+u^4+2u^3-2u-1)$ $\cdot(u^{88}+2u^{87}+\cdots+7868u+1960)$
c_6, c_7	$(u^8-u^7-3u^6+2u^5+3u^4-2u-1)(u^{88}-2u^{87}+\cdots+2u^2+1)$
c_{10}, c_{12}	$(u^8-3u^7+7u^6-10u^5+11u^4-10u^3+6u^2-4u+1)$ $\cdot(u^{88}+6u^{87}+\cdots+4u+1)$
c_{11}	$(u^8+u^7-3u^6-2u^5+3u^4+2u-1)(u^{88}-2u^{87}+\cdots+2u^2+1)$

IV. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1	$((y-1)^8)(y^{88}+29y^{87}+\cdots-2128y+1)$
c_2, c_4	$((y-1)^8)(y^{88}-39y^{87}+\cdots-48y+1)$
c_3, c_9	$y^8(y^{88}-51y^{87}+\cdots-1949696y+65536)$
c_5, c_8	$(y^8-3y^7+7y^6-10y^5+11y^4-10y^3+6y^2-4y+1)$ $\cdot(y^{88}-66y^{87}+\cdots+35490896y+3841600)$
c_6, c_7, c_{11}	$(y^8-7y^7+19y^6-22y^5+3y^4+14y^3-6y^2-4y+1)$ $\cdot(y^{88}-74y^{87}+\cdots+4y+1)$
c_{10}, c_{12}	$(y^8+5y^7+11y^6+6y^5-17y^4-34y^3-22y^2-4y+1)$ $\cdot(y^{88}+46y^{87}+\cdots+4y+1)$