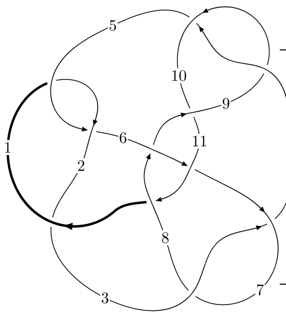
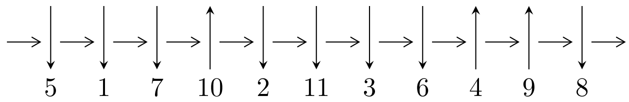
$11a_{114}$ ($K11a_{114}$)



A knot diagram[1]

Linearized knot diagam



Solving Sequence

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

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

$$\begin{aligned}
I_1^u = \langle & -4.17956 \times 10^{143} u^{89} - 2.07764 \times 10^{143} u^{88} + \cdots + 4.99667 \times 10^{143} b - 9.30374 \times 10^{144}, \\
& 3.79072 \times 10^{144} u^{89} + 1.75627 \times 10^{145} u^{88} + \cdots + 9.49368 \times 10^{144} a + 8.40941 \times 10^{146}, \\
& u^{90} - 2u^{89} + \cdots - 27u - 19 \rangle \\
I_2^u = \langle & u^{13} - 3u^{11} + 6u^9 - u^8 - 7u^7 + u^6 + 5u^5 - u^4 - 2u^3 + b + 2u, \\
& 5u^{14} + 3u^{13} - 15u^{12} - 7u^{11} + 35u^{10} + 11u^9 - 48u^8 - 11u^7 + 46u^6 + 5u^5 - 30u^4 - 4u^3 + 17u^2 + a + 2u - 4, \\
& u^{15} + u^{14} - 3u^{13} - 3u^{12} + 7u^{11} + 6u^{10} - 10u^9 - 8u^8 + 10u^7 + 7u^6 - 7u^5 - 5u^4 + 4u^3 + 3u^2 - u - 1 \rangle
\end{aligned}$$

* 2 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 105 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. $\boldsymbol{I_1^u = \langle -4.18 \times 10^{143} u^{89} - 2.08 \times 10^{143} u^{88} + \cdots + 5.00 \times 10^{143} b - 9.30 \times 10^{144},\ 3.79 \times 10^{144} u^{89} + 1.76 \times 10^{145} u^{88} + \cdots + 9.49 \times 10^{144} a + 8.41 \times 10^{146},\ u^{90} - 2u^{89} + \cdots - 27u - 19 \rangle}$

(i) Arc colorings

$$a_1 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$
$$a_5 = \begin{pmatrix} 0 \\ u \end{pmatrix}$$
$$a_2 = \begin{pmatrix} 1 \\ u^2 \end{pmatrix}$$
$$a_3 = \begin{pmatrix} -u^2 + 1 \\ u^2 \end{pmatrix}$$
$$a_6 = \begin{pmatrix} -u \\ -u^3 + u \end{pmatrix}$$
$$a_8 = \begin{pmatrix} -0.399289u^{89} - 1.84994u^{88} + \cdots - 7.29052u - 88.5790 \\ 0.836469u^{89} + 0.415805u^{88} + \cdots + 4.57551u + 18.6199 \end{pmatrix}$$
$$a_9 = \begin{pmatrix} 0.448249u^{89} - 2.43674u^{88} + \cdots - 17.3037u - 79.2582 \\ 1.12539u^{89} - 0.745407u^{88} + \cdots + 60.6152u + 30.3562 \end{pmatrix}$$
$$a_7 = \begin{pmatrix} -0.293951u^{89} - 1.08523u^{88} + \cdots - 26.8622u - 77.8477 \\ 0.974855u^{89} + 0.138613u^{88} + \cdots + 35.5301u + 37.1441 \end{pmatrix}$$
$$a_{11} = \begin{pmatrix} 1.15515u^{89} - 3.50727u^{88} + \cdots + 2.25961u - 59.7862 \\ 0.319935u^{89} - 1.61002u^{88} + \cdots + 46.5135u + 4.38365 \end{pmatrix}$$
$$a_{10} = \begin{pmatrix} 1.82489u^{89} - 2.48029u^{88} + \cdots + 64.3706u + 4.28799 \\ -1.71061u^{89} - 1.12630u^{88} + \cdots + 89.5560u + 27.6819 \end{pmatrix}$$
$$a_4 = \begin{pmatrix} -1.07864u^{89} + 1.63188u^{88} + \cdots + 7.78149u + 61.1802 \\ 1.34253u^{89} - 1.08046u^{88} + \cdots - 0.725013u - 7.91859 \end{pmatrix}$$
$$a_4 = \begin{pmatrix} -1.07864u^{89} + 1.63188u^{88} + \cdots + 7.78149u + 61.1802 \\ 1.34253u^{89} - 1.08046u^{88} + \cdots - 0.725013u - 7.91859 \end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= 0.323377u^{89} - 3.05080u^{88} + \cdots + 135.617u - 107.451$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1, c_5	$u^{90} + 2u^{89} + \cdots + 27u - 19$
c_2	$u^{90} + 36u^{89} + \cdots + 11673u + 361$
c_3, c_7	$u^{90} + u^{89} + \cdots + 270u - 9$
c_4, c_9	$u^{90} + u^{89} + \cdots - 5u^2 + 1$
c_6	$u^{90} + 2u^{89} + \cdots + 33u - 1$
c_8	$u^{90} - 14u^{89} + \cdots - 9u + 1$
c_{10}	$u^{90} - 41u^{89} + \cdots - 10u + 1$
c_{11}	$u^{90} - 8u^{89} + \cdots + 8205u - 1673$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_5	$y^{90} - 36y^{89} + \cdots - 11673y + 361$
c_2	$y^{90} + 44y^{89} + \cdots - 4387073y + 130321$
c_3, c_7	$y^{90} + 67y^{89} + \cdots - 85896y + 81$
c_4, c_9	$y^{90} - 41y^{89} + \cdots - 10y + 1$
c_6	$y^{90} + 4y^{89} + \cdots - 89y + 1$
c_8	$y^{90} - 4y^{89} + \cdots + 7y + 1$
c_{10}	$y^{90} + 23y^{89} + \cdots - 198y + 1$
c_{11}	$y^{90} + 20y^{89} + \cdots + 12841443y + 2798929$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.872945 + 0.501934I$ $a = -0.353599 + 1.137060I$ $b = 1.94991 + 0.34028I$	$-1.65776 + 2.02775I$	0
$u = -0.872945 - 0.501934I$ $a = -0.353599 - 1.137060I$ $b = 1.94991 - 0.34028I$	$-1.65776 - 2.02775I$	0
$u = 0.887662 + 0.444502I$ $a = 0.35902 - 2.01369I$ $b = 0.894026 + 1.049230I$	$-1.87083 - 2.34624I$	0
$u = 0.887662 - 0.444502I$ $a = 0.35902 + 2.01369I$ $b = 0.894026 - 1.049230I$	$-1.87083 + 2.34624I$	0
$u = -0.736112 + 0.693083I$ $a = 0.602880 + 1.051170I$ $b = -0.351565 - 0.763113I$	$3.42582 + 0.72145I$	0
$u = -0.736112 - 0.693083I$ $a = 0.602880 - 1.051170I$ $b = -0.351565 + 0.763113I$	$3.42582 - 0.72145I$	0
$u = 0.610400 + 0.816519I$ $a = 1.10218 - 1.06449I$ $b = -0.82176 + 1.50141I$	$8.88297 + 2.76328I$	0
$u = 0.610400 - 0.816519I$ $a = 1.10218 + 1.06449I$ $b = -0.82176 - 1.50141I$	$8.88297 - 2.76328I$	0
$u = 0.851253 + 0.574688I$ $a = 0.238775 + 1.278400I$ $b = 0.388781 - 1.039950I$	$5.10240 - 3.43208I$	0
$u = 0.851253 - 0.574688I$ $a = 0.238775 - 1.278400I$ $b = 0.388781 + 1.039950I$	$5.10240 + 3.43208I$	0

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.701758 + 0.763935I$ $a = 0.087700 + 0.920133I$ $b = -0.305002 - 0.900231I$	$3.66503 + 0.99650I$	0
$u = -0.701758 - 0.763935I$ $a = 0.087700 - 0.920133I$ $b = -0.305002 + 0.900231I$	$3.66503 - 0.99650I$	0
$u = 0.857462 + 0.584959I$ $a = 1.76238 - 0.77479I$ $b = 0.495062 + 0.649066I$	$5.07632 - 1.17400I$	0
$u = 0.857462 - 0.584959I$ $a = 1.76238 + 0.77479I$ $b = 0.495062 - 0.649066I$	$5.07632 + 1.17400I$	0
$u = 0.774750 + 0.567973I$ $a = -0.19680 + 1.83254I$ $b = -1.87636 - 0.42388I$	$2.30569 + 3.30607I$	0
$u = 0.774750 - 0.567973I$ $a = -0.19680 - 1.83254I$ $b = -1.87636 + 0.42388I$	$2.30569 - 3.30607I$	0
$u = -0.496582 + 0.913249I$ $a = -0.88468 - 1.12826I$ $b = 0.73357 + 1.33284I$	$3.23883 - 5.87656I$	0
$u = -0.496582 - 0.913249I$ $a = -0.88468 + 1.12826I$ $b = 0.73357 - 1.33284I$	$3.23883 + 5.87656I$	0
$u = 1.006990 + 0.383697I$ $a = -0.990900 + 0.589869I$ $b = -0.128969 - 0.889913I$	$-1.94313 - 0.77906I$	0
$u = 1.006990 - 0.383697I$ $a = -0.990900 - 0.589869I$ $b = -0.128969 + 0.889913I$	$-1.94313 + 0.77906I$	0

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.621493 + 0.885684I$ $a = 0.069658 + 0.683614I$ $b = -0.226329 - 0.871694I$	$3.75525 + 1.11582I$	0
$u = -0.621493 - 0.885684I$ $a = 0.069658 - 0.683614I$ $b = -0.226329 + 0.871694I$	$3.75525 - 1.11582I$	0
$u = 0.805011 + 0.723930I$ $a = 0.000178 + 1.241640I$ $b = 0.402112 - 0.956324I$	$5.11520 + 2.40414I$	0
$u = 0.805011 - 0.723930I$ $a = 0.000178 - 1.241640I$ $b = 0.402112 + 0.956324I$	$5.11520 - 2.40414I$	0
$u = -0.913503 + 0.079203I$ $a = -0.501241 + 1.245300I$ $b = -0.705898 + 0.492074I$	$2.89768 + 2.60574I$	0
$u = -0.913503 - 0.079203I$ $a = -0.501241 - 1.245300I$ $b = -0.705898 - 0.492074I$	$2.89768 - 2.60574I$	0
$u = 0.915800$ $a = -0.955871$ $b = -0.493066$	-1.55660	-5.00000
$u = 0.918511 + 0.576128I$ $a = 1.006050 + 0.579665I$ $b = -1.93814 + 0.98297I$	$1.83988 - 7.87904I$	0
$u = 0.918511 - 0.576128I$ $a = 1.006050 - 0.579665I$ $b = -1.93814 - 0.98297I$	$1.83988 + 7.87904I$	0
$u = -1.066380 + 0.198905I$ $a = 0.370881 + 0.038702I$ $b = 1.102150 + 0.474228I$	$-4.90537 + 0.82863I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-1.066380-0.198905I$ $a=\ 0.370881-0.038702I$ $b=\ 1.102150-0.474228I$	$-4.90537-0.82863I$	0
$u=\ 0.533194+0.973241I$ $a=\ 0.853278-1.053140I$ $b=-0.79058+1.29478I$	$5.57367+11.40460I$	0
$u=\ 0.533194-0.973241I$ $a=\ 0.853278+1.053140I$ $b=-0.79058-1.29478I$	$5.57367-11.40460I$	0
$u=-0.829414+0.315657I$ $a=-0.76244-2.14466I$ $b=-0.76353+1.45828I$	$0.23371-3.50455I$	0
$u=-0.829414-0.315657I$ $a=-0.76244+2.14466I$ $b=-0.76353-1.45828I$	$0.23371+3.50455I$	0
$u=\ 0.259644+1.086570I$ $a=-0.003044+0.482911I$ $b=\ 0.081154-0.850794I$	$6.46351+1.09920I$	0
$u=\ 0.259644-1.086570I$ $a=-0.003044-0.482911I$ $b=\ 0.081154+0.850794I$	$6.46351-1.09920I$	0
$u=\ 1.075840+0.314619I$ $a=-0.932582-0.563589I$ $b=\ 0.862432-0.970765I$	$-2.59949-0.41889I$	0
$u=\ 1.075840-0.314619I$ $a=-0.932582+0.563589I$ $b=\ 0.862432+0.970765I$	$-2.59949+0.41889I$	0
$u=-0.750139+0.431514I$ $a=-0.458402+1.189240I$ $b=-0.336805-1.096300I$	$4.12746-0.06763I$	$-5.00000+0.I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = -0.750139 - 0.431514I$ $a = -0.458402 - 1.189240I$ $b = -0.336805 + 1.096300I$	$4.12746 + 0.06763I$	$-5.00000 + 0.I$
$u = 1.130920 + 0.112054I$ $a = -0.435009 - 0.151586I$ $b = -0.968053 + 0.539467I$	$-4.06860 + 3.93905I$	0
$u = 1.130920 - 0.112054I$ $a = -0.435009 + 0.151586I$ $b = -0.968053 - 0.539467I$	$-4.06860 - 3.93905I$	0
$u = 0.906289 + 0.696953I$ $a = 1.34768 - 1.32182I$ $b = 0.497588 + 0.734318I$	$4.80179 - 7.83323I$	0
$u = 0.906289 - 0.696953I$ $a = 1.34768 + 1.32182I$ $b = 0.497588 - 0.734318I$	$4.80179 + 7.83323I$	0
$u = -0.893897 + 0.720474I$ $a = -0.347044 - 1.362470I$ $b = -0.675805 + 0.773415I$	$2.92181 + 4.66361I$	0
$u = -0.893897 - 0.720474I$ $a = -0.347044 + 1.362470I$ $b = -0.675805 - 0.773415I$	$2.92181 - 4.66361I$	0
$u = -0.481220 + 0.674909I$ $a = 0.86086 + 1.65314I$ $b = -0.518390 - 0.630908I$	$0.76902 - 5.82157I$	$-2.53875 + 6.05910I$
$u = -0.481220 - 0.674909I$ $a = 0.86086 - 1.65314I$ $b = -0.518390 + 0.630908I$	$0.76902 + 5.82157I$	$-2.53875 - 6.05910I$
$u = 1.022490 + 0.579602I$ $a = 0.53864 - 1.78720I$ $b = 0.648451 + 0.951250I$	$-2.49493 - 5.56780I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 1.022490 - 0.579602I$ $a = 0.53864 + 1.78720I$ $b = 0.648451 - 0.951250I$	$-2.49493 + 5.56780I$	0
$u = -1.063110 + 0.501451I$ $a = 1.41649 + 0.97024I$ $b = 0.32696 - 1.69396I$	$-1.39911 + 6.64640I$	0
$u = -1.063110 - 0.501451I$ $a = 1.41649 - 0.97024I$ $b = 0.32696 + 1.69396I$	$-1.39911 - 6.64640I$	0
$u = -0.988063 + 0.637660I$ $a = -1.028120 - 0.832488I$ $b = -0.568669 + 0.693404I$	$2.64990 + 4.39254I$	0
$u = -0.988063 - 0.637660I$ $a = -1.028120 + 0.832488I$ $b = -0.568669 - 0.693404I$	$2.64990 - 4.39254I$	0
$u = -0.965090 + 0.711279I$ $a = -0.65456 - 1.29507I$ $b = -0.612386 + 0.775291I$	$2.85757 + 4.68949I$	0
$u = -0.965090 - 0.711279I$ $a = -0.65456 + 1.29507I$ $b = -0.612386 - 0.775291I$	$2.85757 - 4.68949I$	0
$u = -1.051130 + 0.615181I$ $a = -0.59658 - 1.78715I$ $b = -0.610037 + 0.942966I$	$-0.84298 + 10.85530I$	0
$u = -1.051130 - 0.615181I$ $a = -0.59658 + 1.78715I$ $b = -0.610037 - 0.942966I$	$-0.84298 - 10.85530I$	0
$u = -1.108590 + 0.519036I$ $a = 0.828820 + 0.255791I$ $b = -0.373453 - 0.967630I$	$-0.97957 + 6.41665I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-1.108590-0.519036I$ $a=\ \ 0.828820-0.255791I$ $b=-0.373453+0.967630I$	$-0.97957-6.41665I$	0
$u=\ \ 1.042590+0.678364I$ $a=-0.90823+1.70348I$ $b=-1.16671-1.52341I$	$7.56245-8.36995I$	0
$u=\ \ 1.042590-0.678364I$ $a=-0.90823-1.70348I$ $b=-1.16671+1.52341I$	$7.56245+8.36995I$	0
$u=\ \ 0.511180+0.540860I$ $a=-1.20005+1.47804I$ $b=\ \ 0.442537-0.546796I$	$-1.049170+0.940254I$	$-5.85900-0.91173I$
$u=\ \ 0.511180-0.540860I$ $a=-1.20005-1.47804I$ $b=\ \ 0.442537+0.546796I$	$-1.049170-0.940254I$	$-5.85900+0.91173I$
$u=\ \ 0.604167+1.106380I$ $a=-0.100891+0.538097I$ $b=\ \ 0.180036-0.809574I$	$5.46758-5.10647I$	0
$u=\ \ 0.604167-1.106380I$ $a=-0.100891-0.538097I$ $b=\ \ 0.180036+0.809574I$	$5.46758+5.10647I$	0
$u=\ \ 1.290880+0.017382I$ $a=\ \ 0.001498+0.322257I$ $b=\ \ 0.673182+0.657722I$	$-3.41690-3.45588I$	0
$u=\ \ 1.290880-0.017382I$ $a=\ \ 0.001498-0.322257I$ $b=\ \ 0.673182-0.657722I$	$-3.41690+3.45588I$	0
$u=-1.120970+0.682813I$ $a=\ \ 0.82993+1.50396I$ $b=\ \ 1.01291-1.41116I$	$1.33548+11.74020I$	0

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -1.120970 - 0.682813I$ $a = 0.82993 - 1.50396I$ $b = 1.01291 + 1.41116I$	$1.33548 - 11.74020I$	0
$u = -0.252884 + 0.636800I$ $a = 0.284561 - 1.279830I$ $b = -0.415785 + 0.664226I$	$1.41320 - 1.94621I$	$-1.171123 + 0.365453I$
$u = -0.252884 - 0.636800I$ $a = 0.284561 + 1.279830I$ $b = -0.415785 - 0.664226I$	$1.41320 + 1.94621I$	$-1.171123 - 0.365453I$
$u = -1.175540 + 0.613005I$ $a = -0.578558 - 0.462128I$ $b = -0.626877 + 0.659712I$	$2.36889 + 4.01001I$	0
$u = -1.175540 - 0.613005I$ $a = -0.578558 + 0.462128I$ $b = -0.626877 - 0.659712I$	$2.36889 - 4.01001I$	0
$u = -0.673276$ $a = 1.45304$ $b = 1.15007$	-2.44265	5.78450
$u = 1.132490 + 0.716490I$ $a = -0.75460 + 1.51586I$ $b = -1.03749 - 1.35553I$	$3.7143 - 17.5584I$	0
$u = 1.132490 - 0.716490I$ $a = -0.75460 - 1.51586I$ $b = -1.03749 + 1.35553I$	$3.7143 + 17.5584I$	0
$u = -0.159736 + 0.621015I$ $a = -0.54578 - 1.72285I$ $b = 0.239393 + 1.220240I$	$0.95414 - 2.52910I$	$-4.18110 + 4.25651I$
$u = -0.159736 - 0.621015I$ $a = -0.54578 + 1.72285I$ $b = 0.239393 - 1.220240I$	$0.95414 + 2.52910I$	$-4.18110 - 4.25651I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-1.357650+0.103776I$ $a=-0.085523+0.189079I$ $b=-0.654061+0.644799I$	$-1.88843+8.89005I$	0
$u=-1.357650-0.103776I$ $a=-0.085523-0.189079I$ $b=-0.654061-0.644799I$	$-1.88843-8.89005I$	0
$u=1.086130+0.855697I$ $a=0.309575-0.840911I$ $b=0.661642+0.704385I$	$4.01609-1.84932I$	0
$u=1.086130-0.855697I$ $a=0.309575+0.840911I$ $b=0.661642-0.704385I$	$4.01609+1.84932I$	0
$u=1.23220+0.75716I$ $a=0.358134-0.593413I$ $b=0.652919+0.671752I$	$3.62558-7.71305I$	0
$u=1.23220-0.75716I$ $a=0.358134+0.593413I$ $b=0.652919-0.671752I$	$3.62558+7.71305I$	0
$u=-0.487743+0.067756I$ $a=1.95227-2.90255I$ $b=-0.532467-0.106806I$	$0.95866+5.19089I$	$-4.80266-8.80627I$
$u=-0.487743-0.067756I$ $a=1.95227+2.90255I$ $b=-0.532467+0.106806I$	$0.95866-5.19089I$	$-4.80266+8.80627I$
$u=0.432620+0.130550I$ $a=-2.05874-1.01406I$ $b=0.431798-0.038610I$	$-1.159460-0.621456I$	$-7.48432+3.19985I$
$u=0.432620-0.130550I$ $a=-2.05874+1.01406I$ $b=0.431798+0.038610I$	$-1.159460+0.621456I$	$-7.48432-3.19985I$

II.
$$\boldsymbol{I_2^u = \langle u^{13}-3u^{11}+\cdots+b+2u,\ 5u^{14}+3u^{13}+\cdots+a-4,\ u^{15}+u^{14}+\cdots-u-1\rangle}$$

(i) Arc colorings

$$a_1 = \begin{pmatrix}1\\0\end{pmatrix}$$
$$a_5 = \begin{pmatrix}0\\u\end{pmatrix}$$
$$a_2 = \begin{pmatrix}1\\u^2\end{pmatrix}$$
$$a_3 = \begin{pmatrix}-u^2+1\\u^2\end{pmatrix}$$
$$a_6 = \begin{pmatrix}-u\\-u^3+u\end{pmatrix}$$
$$a_8 = \begin{pmatrix}-5u^{14}-3u^{13}+\cdots-2u+4\\-u^{13}+3u^{11}-6u^9+u^8+7u^7-u^6-5u^5+u^4+2u^3-2u\end{pmatrix}$$
$$a_9 = \begin{pmatrix}-4u^{14}-2u^{13}+\cdots-13u^2+3\\-u^{14}-2u^{13}+\cdots-3u+1\end{pmatrix}$$
$$a_7 = \begin{pmatrix}-4u^{14}-2u^{13}+\cdots-u+3\\-u^{13}+3u^{11}-6u^9+u^8+7u^7-u^6-5u^5+u^4+u^3-u\end{pmatrix}$$
$$a_{11} = \begin{pmatrix}4u^{14}-15u^{12}+\cdots-u-7\\-2u^{14}+6u^{12}-13u^{10}+2u^9+16u^8-2u^7-13u^6+3u^5+6u^4-4u^2\end{pmatrix}$$
$$a_{10} = \begin{pmatrix}-2u^{14}-2u^{13}+\cdots-2u+2\\-u^{13}+3u^{11}-7u^9+9u^7+u^6-8u^5-2u^4+4u^3+2u^2-2u-1\end{pmatrix}$$
$$a_4 = \begin{pmatrix}u^{14}-u^{13}+\cdots-3u+1\\u^{14}-4u^{12}+9u^{10}-u^9-13u^8+2u^7+12u^6-2u^5-6u^4+u^3+3u^2-1\end{pmatrix}$$
$$a_4 = \begin{pmatrix}u^{14}-u^{13}+\cdots-3u+1\\u^{14}-4u^{12}+9u^{10}-u^9-13u^8+2u^7+12u^6-2u^5-6u^4+u^3+3u^2-1\end{pmatrix}$$

(ii) Obstruction class $= 1$

(iii) Cusp Shapes $= -13u^{14}-7u^{13}+34u^{12}+17u^{11}-72u^{10}-25u^9+83u^8+29u^7-62u^6-17u^5+26u^4+16u^3-16u^2-12u-7$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{15} + u^{14} + \cdots - u - 1$
c_2	$u^{15} + 7u^{14} + \cdots + 7u + 1$
c_3	$u^{15} + 8u^{13} + \cdots + 2u - 1$
c_4	$u^{15} - 4u^{13} + \cdots + 2u - 1$
c_5	$u^{15} - u^{14} + \cdots - u + 1$
c_6	$u^{15} + u^{14} + \cdots - u - 1$
c_7	$u^{15} + 8u^{13} + \cdots + 2u + 1$
c_8	$u^{15} - u^{14} - u^{13} + 2u^{12} - 2u^7 - u^6 + 2u^5 + u^4 + u^3 + 3u^2 + 3u + 1$
c_9	$u^{15} - 4u^{13} + \cdots + 2u + 1$
c_{10}	$u^{15} - 8u^{14} + \cdots + 12u - 1$
c_{11}	$u^{15} - u^{14} + \cdots - u + 1$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_5	$y^{15} - 7y^{14} + \cdots + 7y - 1$
c_2	$y^{15} + 9y^{14} + \cdots - 5y - 1$
c_3, c_7	$y^{15} + 16y^{14} + \cdots - 10y - 1$
c_4, c_9	$y^{15} - 8y^{14} + \cdots + 12y - 1$
c_6	$y^{15} + y^{14} + \cdots + 3y - 1$
c_8	$y^{15} - 3y^{14} + \cdots + 3y - 1$
c_{10}	$y^{15} + 4y^{14} + \cdots + 40y - 1$
c_{11}	$y^{15} - 3y^{14} + \cdots - y - 1$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.967423 + 0.260583I$ $a = 0.627804 + 1.056130I$ $b = -1.319340 + 0.362799I$	$-2.91424 - 1.01446I$	$-13.8448 + 3.4634I$
$u = 0.967423 - 0.260583I$ $a = 0.627804 - 1.056130I$ $b = -1.319340 - 0.362799I$	$-2.91424 + 1.01446I$	$-13.8448 - 3.4634I$
$u = 0.621778 + 0.693973I$ $a = 0.397335 + 0.291212I$ $b = 0.413369 - 0.750070I$	$5.16227 + 0.77044I$	$1.44992 - 1.15350I$
$u = 0.621778 - 0.693973I$ $a = 0.397335 - 0.291212I$ $b = 0.413369 + 0.750070I$	$5.16227 - 0.77044I$	$1.44992 + 1.15350I$
$u = -1.098490 + 0.430040I$ $a = -1.301070 + 0.027752I$ $b = 0.572756 + 1.038920I$	$-0.61146 + 7.14320I$	$-2.82030 - 10.67450I$
$u = -1.098490 - 0.430040I$ $a = -1.301070 - 0.027752I$ $b = 0.572756 - 1.038920I$	$-0.61146 - 7.14320I$	$-2.82030 + 10.67450I$
$u = -0.559053 + 0.594149I$ $a = -0.845016 + 1.074360I$ $b = -0.103563 - 0.865167I$	$4.82955 + 1.88334I$	$1.73721 - 3.17108I$
$u = -0.559053 - 0.594149I$ $a = -0.845016 - 1.074360I$ $b = -0.103563 + 0.865167I$	$4.82955 - 1.88334I$	$1.73721 + 3.17108I$
$u = 0.788679$ $a = -1.39709$ $b = -1.03110$	-2.80604	-17.9130
$u = -0.710332 + 0.307022I$ $a = 0.56513 + 2.82017I$ $b = 1.154600 - 0.699829I$	$0.95927 - 4.03991I$	$-4.51618 + 5.27989I$

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = -0.710332 - 0.307022I$ $a = 0.56513 - 2.82017I$ $b = 1.154600 + 0.699829I$	$0.95927 + 4.03991I$	$-4.51618 - 5.27989I$
$u = 0.973617 + 0.762418I$ $a = 0.410416 - 0.772043I$ $b = 0.766000 + 0.319664I$	$4.06880 - 6.48347I$	$-0.28338 + 5.98406I$
$u = 0.973617 - 0.762418I$ $a = 0.410416 + 0.772043I$ $b = 0.766000 - 0.319664I$	$4.06880 + 6.48347I$	$-0.28338 - 5.98406I$
$u = -1.089280 + 0.727181I$ $a = -0.656055 - 0.669590I$ $b = -0.468272 + 0.554069I$	$3.06831 + 3.47948I$	$0.734192 - 0.835862I$
$u = -1.089280 - 0.727181I$ $a = -0.656055 + 0.669590I$ $b = -0.468272 - 0.554069I$	$3.06831 - 3.47948I$	$0.734192 + 0.835862I$

III. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1	$(u^{15}+u^{14}+\cdots-u-1)(u^{90}+2u^{89}+\cdots+27u-19)$
c_2	$(u^{15}+7u^{14}+\cdots+7u+1)(u^{90}+36u^{89}+\cdots+11673u+361)$
c_3	$(u^{15}+8u^{13}+\cdots+2u-1)(u^{90}+u^{89}+\cdots+270u-9)$
c_4	$(u^{15}-4u^{13}+\cdots+2u-1)(u^{90}+u^{89}+\cdots-5u^2+1)$
c_5	$(u^{15}-u^{14}+\cdots-u+1)(u^{90}+2u^{89}+\cdots+27u-19)$
c_6	$(u^{15}+u^{14}+\cdots-u-1)(u^{90}+2u^{89}+\cdots+33u-1)$
c_7	$(u^{15}+8u^{13}+\cdots+2u+1)(u^{90}+u^{89}+\cdots+270u-9)$
c_8	$(u^{15}-u^{14}-u^{13}+2u^{12}-2u^7-u^6+2u^5+u^4+u^3+3u^2+3u+1)$ $\cdot(u^{90}-14u^{89}+\cdots-9u+1)$
c_9	$(u^{15}-4u^{13}+\cdots+2u+1)(u^{90}+u^{89}+\cdots-5u^2+1)$
c_{10}	$(u^{15}-8u^{14}+\cdots+12u-1)(u^{90}-41u^{89}+\cdots-10u+1)$
c_{11}	$(u^{15}-u^{14}+\cdots-u+1)(u^{90}-8u^{89}+\cdots+8205u-1673)$

IV. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1, c_5	$(y^{15} - 7y^{14} + \cdots + 7y - 1)(y^{90} - 36y^{89} + \cdots - 11673y + 361)$
c_2	$(y^{15} + 9y^{14} + \cdots - 5y - 1)(y^{90} + 44y^{89} + \cdots - 4387073y + 130321)$
c_3, c_7	$(y^{15} + 16y^{14} + \cdots - 10y - 1)(y^{90} + 67y^{89} + \cdots - 85896y + 81)$
c_4, c_9	$(y^{15} - 8y^{14} + \cdots + 12y - 1)(y^{90} - 41y^{89} + \cdots - 10y + 1)$
c_6	$(y^{15} + y^{14} + \cdots + 3y - 1)(y^{90} + 4y^{89} + \cdots - 89y + 1)$
c_8	$(y^{15} - 3y^{14} + \cdots + 3y - 1)(y^{90} - 4y^{89} + \cdots + 7y + 1)$
c_{10}	$(y^{15} + 4y^{14} + \cdots + 40y - 1)(y^{90} + 23y^{89} + \cdots - 198y + 1)$
c_{11}	$(y^{15} - 3y^{14} + \cdots - y - 1)(y^{90} + 20y^{89} + \cdots + 1.28414 \times 10^{7}y + 2798929)$