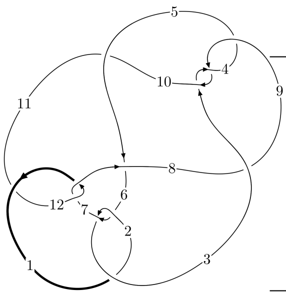
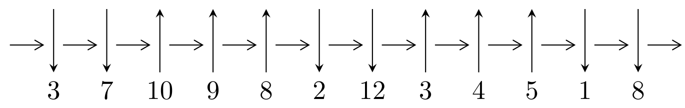
$12n_{0573}$ ($K12n_{0573}$)



A knot diagram[1]

Linearized knot diagam



Solving Sequence

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

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

$$\begin{aligned}
I_1^u &= \langle u^{16} - u^{15} + \cdots + b + 1,\ -u^{18} + 3u^{17} + \cdots + 2a - 6,\ u^{19} - 3u^{18} + \cdots + 6u - 2\rangle \\
I_2^u &= \langle 24u^8a + 207u^8 + \cdots + 31a - 237, \\
&\quad 2u^8a + u^8 + 6u^6a + 5u^6 + 6u^4a - u^5 + 8u^4 - 2u^2a - 2u^3 + a^2 + au + 2u^2 - 4a - 3, \\
&\quad u^9 + u^8 + 4u^7 + 3u^6 + 5u^5 + 3u^4 - 3u - 1\rangle \\
I_3^u &= \langle b - 1,\ -2u^3 - 3u^2 + 3a - 3u - 3,\ u^4 + 3u^2 + 3\rangle \\
I_4^u &= \langle b + 1,\ -u^2 + a - u - 1,\ u^4 + u^2 - 1\rangle
\end{aligned}$$

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

* 5 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 46 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.

$$I_1^u = \langle u^{16} - u^{15} + \cdots + b + 1,\ -u^{18} + 3u^{17} + \cdots + 2a - 6,\ u^{19} - 3u^{18} + \cdots + 6u - 2\rangle$$

(i) Arc colorings

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

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

$$a_4 = \begin{pmatrix} 1 \\ -u^2 \end{pmatrix}$$

$$a_7 = \begin{pmatrix} \frac{1}{2}u^{18} - \frac{3}{2}u^{17} + \cdots - \frac{7}{2}u + 3 \\ -u^{16} + u^{15} + \cdots + u - 1 \end{pmatrix}$$

$$a_2 = \begin{pmatrix} -\frac{3}{2}u^{18} + \frac{5}{2}u^{17} + \cdots + \frac{7}{2}u - 1 \\ u^{18} - 2u^{17} + \cdots - 2u + 1 \end{pmatrix}$$

$$a_1 = \begin{pmatrix} -\frac{1}{2}u^{18} + \frac{1}{2}u^{17} + \cdots - \frac{5}{2}u^2 + \frac{3}{2}u \\ u^{18} - 2u^{17} + \cdots - 2u + 1 \end{pmatrix}$$

$$a_6 = \begin{pmatrix} -u^{10} - 5u^8 - 8u^6 - 3u^4 + 3u^2 + 1 \\ u^{10} + 4u^8 + 5u^6 - 3u^2 \end{pmatrix}$$

$$a_9 = \begin{pmatrix} -u \\ u^3 + u \end{pmatrix}$$

$$a_5 = \begin{pmatrix} u^2 + 1 \\ -u^4 - 2u^2 \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} u^5 + 2u^3 + u \\ -u^7 - 3u^5 - 2u^3 + u \end{pmatrix}$$

$$a_8 = \begin{pmatrix} -u^3 - 2u \\ u^3 + u \end{pmatrix}$$

$$a_{12} = \begin{pmatrix} \frac{3}{2}u^{18} - \frac{5}{2}u^{17} + \cdots - \frac{5}{2}u + 2 \\ -u^{18} + 2u^{17} + \cdots + 3u - 1 \end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= -2u^{17} + 6u^{16} - 22u^{15} + 44u^{14} - 88u^{13} + 124u^{12} - 164u^{11} + 158u^{10} - 134u^9 + 68u^8 - 10u^7 - 26u^6 + 42u^5 - 14u^4 + 2u^3 + 18u^2 - 20u + 8$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1, c_{11}	$u^{19} + 3u^{18} + \cdots + 7u + 1$
c_2, c_6, c_7 c_{12}	$u^{19} - u^{18} + \cdots - u - 1$
c_3, c_4, c_9	$u^{19} - 3u^{18} + \cdots + 6u - 2$
c_5	$u^{19} + 21u^{18} + \cdots + 2406u + 562$
c_8, c_{10}	$u^{19} + 3u^{18} + \cdots + 14u - 10$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_{11}	$y^{19} + 37y^{18} + \cdots + 7y - 1$
c_2, c_6, c_7 c_{12}	$y^{19} - 3y^{18} + \cdots + 7y - 1$
c_3, c_4, c_9	$y^{19} + 15y^{18} + \cdots - 16y - 4$
c_5	$y^{19} - 45y^{18} + \cdots - 2597328y - 315844$
c_8, c_{10}	$y^{19} - 21y^{18} + \cdots - 384y - 100$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.304317+0.981930I$ $a=-0.73640+1.23198I$ $b=\ \ 0.534624-0.866654I$	$0.619243+0.825287I$	$1.58746-1.31207I$
$u=-0.304317-0.981930I$ $a=-0.73640-1.23198I$ $b=\ \ 0.534624+0.866654I$	$0.619243-0.825287I$	$1.58746+1.31207I$
$u=\ \ 0.929404+0.054061I$ $a=-1.85707+2.86205I$ $b=\ \ 1.16834-0.97470I$	$11.9496+7.7615I$	$2.99197-4.29762I$
$u=\ \ 0.929404-0.054061I$ $a=-1.85707-2.86205I$ $b=\ \ 1.16834+0.97470I$	$11.9496-7.7615I$	$2.99197+4.29762I$
$u=\ \ 0.744027$ $a=\ \ 0.660757$ $b=-0.577590$	2.21133	4.57840
$u=-0.689684+0.229296I$ $a=\ \ 0.50396+2.44275I$ $b=-0.768036-0.810356I$	$2.79530-4.62119I$	$3.18170+6.56238I$
$u=-0.689684-0.229296I$ $a=\ \ 0.50396-2.44275I$ $b=-0.768036+0.810356I$	$2.79530+4.62119I$	$3.18170-6.56238I$
$u=\ \ 0.315935+1.282700I$ $a=-0.038879+0.454563I$ $b=\ \ 0.606078+0.079526I$	$-1.79110+3.82280I$	$-0.01419-2.05902I$
$u=\ \ 0.315935-1.282700I$ $a=-0.038879-0.454563I$ $b=\ \ 0.606078-0.079526I$	$-1.79110-3.82280I$	$-0.01419+2.05902I$
$u=\ \ 0.473566+1.246700I$ $a=\ \ 1.69399+1.30200I$ $b=-1.12434-1.01004I$	$8.26951-2.76755I$	$0.165642+1.152780I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.473566 - 1.246700I$ $a = 1.69399 - 1.30200I$ $b = -1.12434 + 1.01004I$	$8.26951 + 2.76755I$	$0.165642 - 1.152780I$
$u = -0.000906 + 1.344200I$ $a = -0.628189 - 0.110568I$ $b = -0.631711 + 0.410114I$	$-5.42437 + 1.46948I$	$-4.90135 - 4.71907I$
$u = -0.000906 - 1.344200I$ $a = -0.628189 + 0.110568I$ $b = -0.631711 - 0.410114I$	$-5.42437 - 1.46948I$	$-4.90135 + 4.71907I$
$u = -0.250312 + 1.349130I$ $a = 0.61482 - 1.58026I$ $b = 0.876351 + 0.702623I$	$-2.18836 - 7.94720I$	$-2.76731 + 8.17106I$
$u = -0.250312 - 1.349130I$ $a = 0.61482 + 1.58026I$ $b = 0.876351 - 0.702623I$	$-2.18836 + 7.94720I$	$-2.76731 - 8.17106I$
$u = 0.435648 + 1.328780I$ $a = 0.25932 - 2.69648I$ $b = -1.19156 + 0.93252I$	$7.6280 + 12.6384I$	$-0.71689 - 6.92034I$
$u = 0.435648 - 1.328780I$ $a = 0.25932 + 2.69648I$ $b = -1.19156 - 0.93252I$	$7.6280 - 12.6384I$	$-0.71689 + 6.92034I$
$u = 0.218652 + 0.470395I$ $a = 0.358071 + 0.971620I$ $b = 0.319050 - 0.558488I$	$0.065587 + 1.130710I$	$1.18374 - 5.82659I$
$u = 0.218652 - 0.470395I$ $a = 0.358071 - 0.971620I$ $b = 0.319050 + 0.558488I$	$0.065587 - 1.130710I$	$1.18374 + 5.82659I$

II. $\boldsymbol{I_2^u = \langle 24u^8a + 207u^8 + \cdots + 31a - 237,\ 2u^8a + u^8 + \cdots - 4a - 3,\ u^9 + u^8 + 4u^7 + 3u^6 + 5u^5 + 3u^4 - 3u - 1\rangle}$

(i) Arc colorings

$$a_3 = \begin{pmatrix}1\\0\end{pmatrix}$$
$$a_{10} = \begin{pmatrix}0\\u\end{pmatrix}$$
$$a_4 = \begin{pmatrix}1\\-u^2\end{pmatrix}$$
$$a_7 = \begin{pmatrix}a\\-0.0892193au^8 - 0.769517u^8 + \cdots - 0.115242a + 0.881041\end{pmatrix}$$
$$a_2 = \begin{pmatrix}-0.769517au^8 - 0.762082u^8 + \cdots + 0.881041a + 1.97398\\0.163569au^8 - 0.0892193u^8 + \cdots + 0.0446097a - 1.11524\end{pmatrix}$$
$$a_1 = \begin{pmatrix}-0.605948au^8 - 0.851301u^8 + \cdots + 0.925651a + 0.858736\\0.163569au^8 - 0.0892193u^8 + \cdots + 0.0446097a - 1.11524\end{pmatrix}$$
$$a_6 = \begin{pmatrix}-2u^8 - u^7 - 6u^6 - 2u^5 - 6u^4 + 2u + 2\\u^8 + u^7 + 3u^6 + 2u^5 + 3u^4 - 2u - 1\end{pmatrix}$$
$$a_9 = \begin{pmatrix}-u\\u^3 + u\end{pmatrix}$$
$$a_5 = \begin{pmatrix}u^2 + 1\\-u^4 - 2u^2\end{pmatrix}$$
$$a_{11} = \begin{pmatrix}u^5 + 2u^3 + u\\-u^7 - 3u^5 - 2u^3 + u\end{pmatrix}$$
$$a_8 = \begin{pmatrix}-u^3 - 2u\\u^3 + u\end{pmatrix}$$
$$a_{12} = \begin{pmatrix}-0.769517au^8 - 0.762082u^8 + \cdots + 0.881041a - 0.0260223\\-1\end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= -4u^8 - 4u^7 - 12u^6 - 8u^5 - 8u^4 - 4u^3 + 8u^2 + 4u + 6$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1, c_{11}	$u^{18} + 5u^{17} + \cdots + 4u + 1$
c_2, c_6, c_7 c_{12}	$u^{18} - u^{17} + \cdots + 2u - 1$
c_3, c_4, c_9	$(u^9 + u^8 + 4u^7 + 3u^6 + 5u^5 + 3u^4 - 3u - 1)^2$
c_5	$(u^9 - 7u^8 + 6u^7 + 37u^6 - 21u^5 - 89u^4 - 66u^3 - 54u^2 - 39u - 7)^2$
c_8, c_{10}	$(u^9 - u^8 - 6u^7 + 5u^6 + 11u^5 - 7u^4 - 6u^3 + 4u^2 - u - 1)^2$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_{11}	$y^{18} + 15y^{17} + \cdots - 52y + 1$
c_2, c_6, c_7 c_{12}	$y^{18} - 5y^{17} + \cdots - 4y + 1$
c_3, c_4, c_9	$(y^9 + 7y^8 + 20y^7 + 25y^6 + y^5 - 31y^4 - 24y^3 + 6y^2 + 9y - 1)^2$
c_5	$(y^9 - 37y^8 + \cdots + 765y - 49)^2$
c_8, c_{10}	$(y^9 - 13y^8 + 68y^7 - 183y^6 + 269y^5 - 211y^4 + 80y^3 - 18y^2 + 9y - 1)^2$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_2^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.940385$ $a = -1.67785 + 2.94580I$ $b = \;\; 0.88600 - 1.16403I$	12.9028	4.12280
$u = -0.940385$ $a = -1.67785 - 2.94580I$ $b = \;\; 0.88600 + 1.16403I$	12.9028	4.12280
$u = -0.105528 + 1.193370I$ $a = -0.612327 - 0.108328I$ $b = -1.214940 + 0.117733I$	$-6.13776 - 1.55423I$	$-5.05960 + 4.30527I$
$u = -0.105528 + 1.193370I$ $a = -0.85424 - 2.40749I$ $b = \;\; 0.870781 + 0.348555I$	$-6.13776 - 1.55423I$	$-5.05960 + 4.30527I$
$u = -0.105528 - 1.193370I$ $a = -0.612327 + 0.108328I$ $b = -1.214940 - 0.117733I$	$-6.13776 + 1.55423I$	$-5.05960 - 4.30527I$
$u = -0.105528 - 1.193370I$ $a = -0.85424 + 2.40749I$ $b = \;\; 0.870781 - 0.348555I$	$-6.13776 + 1.55423I$	$-5.05960 - 4.30527I$
$u = \;\; 0.743788$ $a = \;\; 0.661558 + 0.082738I$ $b = -0.577633 - 0.031295I$	2.21133	4.57530
$u = \;\; 0.743788$ $a = \;\; 0.661558 - 0.082738I$ $b = -0.577633 + 0.031295I$	2.21133	4.57530
$u = \;\; 0.328404 + 1.225450I$ $a = \;\; 0.279234 - 0.828501I$ $b = \;\; 0.067133 + 0.481523I$	$-1.53180 + 3.86354I$	$0.03791 - 4.00946I$
$u = \;\; 0.328404 + 1.225450I$ $a = -0.455774 + 1.279350I$ $b = \;\; 1.048570 - 0.263166I$	$-1.53180 + 3.86354I$	$0.03791 - 4.00946I$

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.328404 - 1.225450I$ $a = 0.279234 + 0.828501I$ $b = 0.067133 - 0.481523I$	$-1.53180 - 3.86354I$	$0.03791 + 4.00946I$
$u = 0.328404 - 1.225450I$ $a = -0.455774 - 1.279350I$ $b = 1.048570 + 0.263166I$	$-1.53180 - 3.86354I$	$0.03791 + 4.00946I$
$u = -0.460882 + 1.295330I$ $a = 1.69755 - 1.44384I$ $b = -0.82021 + 1.17863I$	$8.87899 - 4.99486I$	$0.86627 + 2.90812I$
$u = -0.460882 + 1.295330I$ $a = 0.22926 + 2.59994I$ $b = -0.94094 - 1.12597I$	$8.87899 - 4.99486I$	$0.86627 + 2.90812I$
$u = -0.460882 - 1.295330I$ $a = 1.69755 + 1.44384I$ $b = -0.82021 - 1.17863I$	$8.87899 + 4.99486I$	$0.86627 - 2.90812I$
$u = -0.460882 - 1.295330I$ $a = 0.22926 - 2.59994I$ $b = -0.94094 + 1.12597I$	$8.87899 + 4.99486I$	$0.86627 - 2.90812I$
$u = -0.327390$ $a = -0.523848$ $b = 1.13069$	-2.72863	5.61280
$u = -0.327390$ $a = 4.98902$ $b = -0.768210$	-2.72863	5.61280

III. $I^u_3 = \langle b-1,\ -2u^3-3u^2+3a-3u-3,\ u^4+3u^2+3 \rangle$

(i) Arc colorings

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

(ii) Obstruction class $= 1$

(iii) Cusp Shapes $= -4u^2-12$

(iv) u-Polynomials at the component

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

(v) Riley Polynomials at the component

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

(vi) Complex Volumes and Cusp Shapes

Solutions to I_3^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.340625 + 1.271230I$ $a = -1.23394 + 1.06269I$ $b = 1.00000$	$-3.28987 + 4.05977I$	$-6.00000 - 3.46410I$
$u = 0.340625 - 1.271230I$ $a = -1.23394 - 1.06269I$ $b = 1.00000$	$-3.28987 - 4.05977I$	$-6.00000 + 3.46410I$
$u = -0.340625 + 1.271230I$ $a = 0.233945 - 0.669365I$ $b = 1.00000$	$-3.28987 - 4.05977I$	$-6.00000 + 3.46410I$
$u = -0.340625 - 1.271230I$ $a = 0.233945 + 0.669365I$ $b = 1.00000$	$-3.28987 + 4.05977I$	$-6.00000 - 3.46410I$

IV. $I_4^u = \langle b+1,\ -u^2+a-u-1,\ u^4+u^2-1\rangle$

(i) Arc colorings

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

(ii) Obstruction class $= 1$

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

(iv) u-Polynomials at the component

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

(v) Riley Polynomials at the component

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

(vi) Complex Volumes and Cusp Shapes

Solutions to I_4^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.786151$ $a = 2.40419$ $b = -1.00000$	0.657974	−1.52790
$u = -0.786151$ $a = 0.831883$ $b = -1.00000$	0.657974	−1.52790
$u = 1.272020I$ $a = -0.618030 + 1.272020I$ $b = -1.00000$	−7.23771	−10.4720
$u = -1.272020I$ $a = -0.618030 - 1.272020I$ $b = -1.00000$	−7.23771	−10.4720

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

(i) Arc colorings

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

(ii) Obstruction class $= 1$

(iii) Cusp Shapes $= -12$

(iv) u-Polynomials at the component

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

(v) Riley Polynomials at the component

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

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^v	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$v = -1.00000$ $a = 0$ $b = 1.00000$	-3.28987	-12.0000

VI. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1, c_{11}	$((u-1)^9)(u^{18}+5u^{17}+\cdots+4u+1)(u^{19}+3u^{18}+\cdots+7u+1)$
c_2, c_7	$((u-1)^5)(u+1)^4(u^{18}-u^{17}+\cdots+2u-1)(u^{19}-u^{18}+\cdots-u-1)$
c_3, c_4, c_9	$u(u^4+u^2-1)(u^4+3u^2+3)(u^9+u^8+\cdots-3u-1)^2$ $\cdot(u^{19}-3u^{18}+\cdots+6u-2)$
c_5	$u(u^4-3u^2+3)(u^4-u^2-1)$ $\cdot(u^9-7u^8+6u^7+37u^6-21u^5-89u^4-66u^3-54u^2-39u-7)^2$ $\cdot(u^{19}+21u^{18}+\cdots+2406u+562)$
c_6, c_{12}	$((u-1)^4)(u+1)^5(u^{18}-u^{17}+\cdots+2u-1)(u^{19}-u^{18}+\cdots-u-1)$
c_8, c_{10}	$u(u^4-3u^2+3)(u^4-u^2-1)$ $\cdot(u^9-u^8-6u^7+5u^6+11u^5-7u^4-6u^3+4u^2-u-1)^2$ $\cdot(u^{19}+3u^{18}+\cdots+14u-10)$

VII. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1, c_{11}	$((y-1)^9)(y^{18}+15y^{17}+\cdots-52y+1)(y^{19}+37y^{18}+\cdots+7y-1)$
c_2, c_6, c_7 c_{12}	$((y-1)^9)(y^{18}-5y^{17}+\cdots-4y+1)(y^{19}-3y^{18}+\cdots+7y-1)$
c_3, c_4, c_9	$y(y^2+y-1)^2(y^2+3y+3)^2$ $\cdot(y^9+7y^8+20y^7+25y^6+y^5-31y^4-24y^3+6y^2+9y-1)^2$ $\cdot(y^{19}+15y^{18}+\cdots-16y-4)$
c_5	$y(y^2-3y+3)^2(y^2-y-1)^2(y^9-37y^8+\cdots+765y-49)^2$ $\cdot(y^{19}-45y^{18}+\cdots-2597328y-315844)$
c_8, c_{10}	$y(y^2-3y+3)^2(y^2-y-1)^2$ $\cdot(y^9-13y^8+68y^7-183y^6+269y^5-211y^4+80y^3-18y^2+9y-1)^2$ $\cdot(y^{19}-21y^{18}+\cdots-384y-100)$