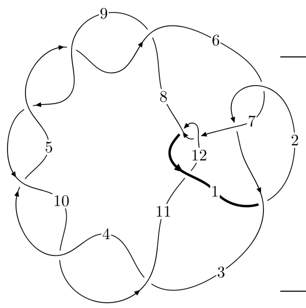
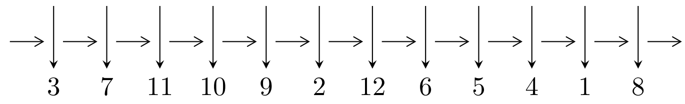
$12a_{0679}$ ($K12a_{0679}$)



A knot diagram[1]

Linearized knot diagam



Solving Sequence

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

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

$$I_1^u = \langle u^{15} + 2u^{14} + \cdots + b - 1,\ u^{18} + 3u^{17} + \cdots + 2a - 4,\ u^{19} + 3u^{18} + \cdots - 6u - 2\rangle$$

$$I_2^u = \langle -7u^{12}a + 12u^{12} + \cdots - 4a - 9,\ u^{10}a + u^{11} + \cdots + a - 1,$$
$$u^{13} - u^{12} + 10u^{11} - 9u^{10} + 37u^9 - 29u^8 + 62u^7 - 40u^6 + 46u^5 - 22u^4 + 12u^3 - 3u^2 + u - 1\rangle$$

$$I_3^u = \langle b + u - 2,\ 3a + 2u - 3,\ u^2 + 3\rangle$$

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

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

* 5 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 50 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.

$$I_1^u = \langle u^{15}+2u^{14}+\cdots+b-1,\ u^{18}+3u^{17}+\cdots+2a-4,\ u^{19}+3u^{18}+\cdots-6u-2\rangle$$

(i) Arc colorings

$$a_5 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$
$$a_{10} = \begin{pmatrix} 0 \\ u \end{pmatrix}$$
$$a_4 = \begin{pmatrix} 1 \\ -u^2 \end{pmatrix}$$
$$a_1 = \begin{pmatrix} -\frac{1}{2}u^{18} - \frac{3}{2}u^{17} + \cdots + \frac{7}{2}u + 2 \\ -u^{15} - 2u^{14} + \cdots + 2u + 1 \end{pmatrix}$$
$$a_{11} = \begin{pmatrix} -u \\ u^3 + u \end{pmatrix}$$
$$a_{12} = \begin{pmatrix} \frac{1}{2}u^{18} + \frac{3}{2}u^{17} + \cdots - \frac{9}{2}u - 2 \\ u^{16} + 2u^{15} + \cdots - u - 1 \end{pmatrix}$$
$$a_3 = \begin{pmatrix} u^2 + 1 \\ -u^4 - 2u^2 \end{pmatrix}$$
$$a_2 = \begin{pmatrix} -\frac{1}{2}u^{18} - \frac{3}{2}u^{17} + \cdots + \frac{7}{2}u + 1 \\ -u^{16} - 2u^{15} + \cdots + 2u + 1 \end{pmatrix}$$
$$a_9 = \begin{pmatrix} u \\ u \end{pmatrix}$$
$$a_6 = \begin{pmatrix} u^2 + 1 \\ u^2 \end{pmatrix}$$
$$a_8 = \begin{pmatrix} u^3 + 2u \\ u^3 + u \end{pmatrix}$$
$$a_7 = \begin{pmatrix} \frac{1}{2}u^{18} + \frac{3}{2}u^{17} + \cdots - \frac{7}{2}u - 1 \\ -u^{14} - 2u^{13} + \cdots + u + 1 \end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes
$= 2u^{18} + 6u^{17} + 36u^{16} + 86u^{15} + 264u^{14} + 506u^{13} + 1022u^{12} + 1566u^{11} + 2248u^{10} + 2704u^9 + 2794u^8 + 2526u^7 + 1806u^6 + 1106u^5 + 464u^4 + 122u^3 - 16u^2 - 28u - 20$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1, c_{11}	$u^{19} + 7u^{18} + \cdots + 13u + 1$
c_2, c_6, c_7 c_{12}	$u^{19} - u^{18} + \cdots + u + 1$
c_3, c_4, c_5 c_8, c_9, c_{10}	$u^{19} - 3u^{18} + \cdots - 6u + 2$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_{11}	$y^{19} + 17y^{18} + \cdots + 37y - 1$
c_2, c_6, c_7 c_{12}	$y^{19} - 7y^{18} + \cdots + 13y - 1$
c_3, c_4, c_5 c_8, c_9, c_{10}	$y^{19} + 27y^{18} + \cdots + 24y - 4$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.273151 + 0.815941I$ $a = -0.390307 - 0.220948I$ $b = -0.608791 + 0.652934I$	$1.82620 - 1.77807I$	$-6.92820 + 2.34039I$
$u = -0.273151 - 0.815941I$ $a = -0.390307 + 0.220948I$ $b = -0.608791 - 0.652934I$	$1.82620 + 1.77807I$	$-6.92820 - 2.34039I$
$u = 0.077265 + 0.786380I$ $a = -0.374812 - 0.399284I$ $b = -0.419169 + 0.348987I$	$1.76915 - 1.42092I$	$-5.09647 + 5.54292I$
$u = 0.077265 - 0.786380I$ $a = -0.374812 + 0.399284I$ $b = -0.419169 - 0.348987I$	$1.76915 + 1.42092I$	$-5.09647 - 5.54292I$
$u = -0.246012 + 1.236810I$ $a = -1.197950 + 0.527520I$ $b = 0.428066 - 0.067299I$	$5.58686 + 10.56180I$	$-7.44680 - 7.73425I$
$u = -0.246012 - 1.236810I$ $a = -1.197950 - 0.527520I$ $b = 0.428066 + 0.067299I$	$5.58686 - 10.56180I$	$-7.44680 + 7.73425I$
$u = -0.487418 + 0.522631I$ $a = 0.993393 - 0.218685I$ $b = 1.221660 + 0.201552I$	$-0.06851 + 8.01058I$	$-10.52385 - 9.28102I$
$u = -0.487418 - 0.522631I$ $a = 0.993393 + 0.218685I$ $b = 1.221660 - 0.201552I$	$-0.06851 - 8.01058I$	$-10.52385 + 9.28102I$
$u = -0.076466 + 1.310960I$ $a = 0.792972 - 0.747592I$ $b = -0.069397 - 0.530421I$	$8.75335 - 0.83971I$	$-3.29462 + 2.18721I$
$u = -0.076466 - 1.310960I$ $a = 0.792972 + 0.747592I$ $b = -0.069397 + 0.530421I$	$8.75335 + 0.83971I$	$-3.29462 - 2.18721I$

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.550052 + 0.150551I$ $a = 0.41192 + 1.61654I$ $b = -0.276507 + 0.224858I$	$-1.18097 - 4.60134I$	$-13.18408 + 3.99244I$
$u = -0.550052 - 0.150551I$ $a = 0.41192 - 1.61654I$ $b = -0.276507 - 0.224858I$	$-1.18097 + 4.60134I$	$-13.18408 - 3.99244I$
$u = 0.308487$ $a = -0.641715$ $b = 0.245608$	-0.592779	-16.7390
$u = -0.01455 + 1.70648I$ $a = -0.003380 - 1.097050I$ $b = -0.23251 - 1.76936I$	$10.80000 - 1.26776I$	$-5.99488 + 5.70666I$
$u = -0.01455 - 1.70648I$ $a = -0.003380 + 1.097050I$ $b = -0.23251 + 1.76936I$	$10.80000 + 1.26776I$	$-5.99488 - 5.70666I$
$u = -0.06366 + 1.79454I$ $a = -2.87448 + 0.37712I$ $b = -5.52313 + 0.65502I$	$16.6584 + 11.9628I$	$-6.98346 - 6.50856I$
$u = -0.06366 - 1.79454I$ $a = -2.87448 - 0.37712I$ $b = -5.52313 - 0.65502I$	$16.6584 - 11.9628I$	$-6.98346 + 6.50856I$
$u = -0.02020 + 1.81069I$ $a = 1.96350 - 0.53377I$ $b = 3.85697 - 1.33560I$	$-19.1741 - 0.3767I$	$-3.17814 + 1.98776I$
$u = -0.02020 - 1.81069I$ $a = 1.96350 + 0.53377I$ $b = 3.85697 + 1.33560I$	$-19.1741 + 0.3767I$	$-3.17814 - 1.98776I$

II.
$\boldsymbol{I_2^u = \langle -7u^{12}a+12u^{12}+\cdots-4a-9,\ u^{10}a+u^{11}+\cdots+a-1,\ u^{13}-u^{12}+\cdots+u-1\rangle}$

(i) Arc colorings

$$a_5 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$
$$a_{10} = \begin{pmatrix} 0 \\ u \end{pmatrix}$$
$$a_4 = \begin{pmatrix} 1 \\ -u^2 \end{pmatrix}$$
$$a_1 = \begin{pmatrix} a \\ 0.189189au^{12} - 0.324324u^{12} + \cdots + 0.108108a + 0.243243 \end{pmatrix}$$
$$a_{11} = \begin{pmatrix} -u \\ u^3 + u \end{pmatrix}$$
$$a_{12} = \begin{pmatrix} -0.567568au^{12} - 0.0270270u^{12} + \cdots + 0.675676a + 0.270270 \\ -0.0810811au^{12} - 0.432432u^{12} + \cdots - 0.189189a + 0.324324 \end{pmatrix}$$
$$a_3 = \begin{pmatrix} u^2 + 1 \\ -u^4 - 2u^2 \end{pmatrix}$$
$$a_2 = \begin{pmatrix} 0.108108au^{12} + 0.243243u^{12} + \cdots + 0.918919a - 0.432432 \\ -0.0810811au^{12} - 0.432432u^{12} + \cdots - 0.189189a + 0.324324 \end{pmatrix}$$
$$a_9 = \begin{pmatrix} u \\ u \end{pmatrix}$$
$$a_6 = \begin{pmatrix} u^2 + 1 \\ u^2 \end{pmatrix}$$
$$a_8 = \begin{pmatrix} u^3 + 2u \\ u^3 + u \end{pmatrix}$$
$$a_7 = \begin{pmatrix} -0.108108au^{12} - 0.243243u^{12} + \cdots - 0.918919a + 0.432432 \\ u^{11} - 2u^{10} + \cdots + au + u \end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes
$= -4u^{11} + 4u^{10} - 36u^9 + 32u^8 - 116u^7 + 88u^6 - 160u^5 + 96u^4 - 88u^3 + 36u^2 - 12u - 6$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1, c_{11}	$u^{26} + 13u^{25} + \cdots + 385u + 64$
c_2, c_6, c_7 c_{12}	$u^{26} - u^{25} + \cdots - 7u + 8$
c_3, c_4, c_5 c_8, c_9, c_{10}	$(u^{13} + u^{12} + \cdots + u + 1)^2$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_{11}	$y^{26} - y^{25} + \cdots + 33151y + 4096$
c_2, c_6, c_7 c_{12}	$y^{26} - 13y^{25} + \cdots - 385y + 64$
c_3, c_4, c_5 c_8, c_9, c_{10}	$(y^{13} + 19y^{12} + \cdots - 5y - 1)^2$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = -0.083038 + 1.167020I$ $a = -0.182812 + 0.329365I$ $b = -0.28373 + 1.50091I$	$1.55956 + 1.92579I$	$-8.00122 - 3.82169I$
$u = -0.083038 + 1.167020I$ $a = -1.82248 - 0.57547I$ $b = 0.180439 - 0.168950I$	$1.55956 + 1.92579I$	$-8.00122 - 3.82169I$
$u = -0.083038 - 1.167020I$ $a = -0.182812 - 0.329365I$ $b = -0.28373 - 1.50091I$	$1.55956 - 1.92579I$	$-8.00122 + 3.82169I$
$u = -0.083038 - 1.167020I$ $a = -1.82248 + 0.57547I$ $b = 0.180439 + 0.168950I$	$1.55956 - 1.92579I$	$-8.00122 + 3.82169I$
$u = 0.179330 + 1.269600I$ $a = -0.753270 - 0.865498I$ $b = -0.137976 - 0.536137I$	$7.63579 - 4.78537I$	$-4.65540 + 3.59229I$
$u = 0.179330 + 1.269600I$ $a = 1.148590 + 0.147882I$ $b = -0.404842 - 0.185728I$	$7.63579 - 4.78537I$	$-4.65540 + 3.59229I$
$u = 0.179330 - 1.269600I$ $a = -0.753270 + 0.865498I$ $b = -0.137976 + 0.536137I$	$7.63579 + 4.78537I$	$-4.65540 - 3.59229I$
$u = 0.179330 - 1.269600I$ $a = 1.148590 - 0.147882I$ $b = -0.404842 + 0.185728I$	$7.63579 + 4.78537I$	$-4.65540 - 3.59229I$
$u = 0.379427 + 0.590112I$ $a = -0.841955 - 0.244681I$ $b = -1.020470 + 0.268374I$	$1.59236 - 2.83275I$	$-7.00318 + 5.17990I$
$u = 0.379427 + 0.590112I$ $a = 0.330450 - 0.407996I$ $b = 0.615126 + 0.383997I$	$1.59236 - 2.83275I$	$-7.00318 + 5.17990I$

Solutions to I_2^u	$\sqrt{-1}(\text{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.379427 - 0.590112I$ $a = -0.841955 + 0.244681I$ $b = -1.020470 - 0.268374I$	$1.59236 + 2.83275I$	$-7.00318 - 5.17990I$
$u = 0.379427 - 0.590112I$ $a = 0.330450 + 0.407996I$ $b = 0.615126 - 0.383997I$	$1.59236 + 2.83275I$	$-7.00318 - 5.17990I$
$u = 0.485085$ $a = -0.500820 + 1.088090I$ $b = 0.327558 + 0.106231I$	-0.173769	-11.9170
$u = 0.485085$ $a = -0.500820 - 1.088090I$ $b = 0.327558 - 0.106231I$	-0.173769	-11.9170
$u = -0.245118 + 0.346982I$ $a = 0.833919 + 0.205281I$ $b = 1.26442 + 0.90129I$	$-3.34890 + 0.88691I$	$-13.3039 - 7.8258I$
$u = -0.245118 + 0.346982I$ $a = 0.69156 + 3.05215I$ $b = -0.067874 + 0.176233I$	$-3.34890 + 0.88691I$	$-13.3039 - 7.8258I$
$u = -0.245118 - 0.346982I$ $a = 0.833919 - 0.205281I$ $b = 1.26442 - 0.90129I$	$-3.34890 - 0.88691I$	$-13.3039 + 7.8258I$
$u = -0.245118 - 0.346982I$ $a = 0.69156 - 3.05215I$ $b = -0.067874 - 0.176233I$	$-3.34890 - 0.88691I$	$-13.3039 + 7.8258I$
$u = -0.01838 + 1.78025I$ $a = 0.031468 - 1.234190I$ $b = -0.01017 - 1.63025I$	$12.36340 + 2.35177I$	$-7.64300 - 2.76650I$
$u = -0.01838 + 1.78025I$ $a = -3.09176 - 0.79285I$ $b = -6.07832 - 1.71326I$	$12.36340 + 2.35177I$	$-7.64300 - 2.76650I$

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.01838-1.78025I$ $a=\ 0.031468+1.234190I$ $b=-0.01017+1.63025I$	$12.36340-2.35177I$	$-7.64300+2.76650I$
$u=-0.01838-1.78025I$ $a=-3.09176+0.79285I$ $b=-6.07832+1.71326I$	$12.36340-2.35177I$	$-7.64300+2.76650I$
$u=\ 0.04523+1.80316I$ $a=-1.62778-0.56147I$ $b=-3.25509-1.42971I$	$18.9406-5.8171I$	$-4.43476+2.75393I$
$u=\ 0.04523+1.80316I$ $a=\ 2.78489+0.06061I$ $b=\ 5.37092-0.01991I$	$18.9406-5.8171I$	$-4.43476+2.75393I$
$u=\ 0.04523-1.80316I$ $a=-1.62778+0.56147I$ $b=-3.25509+1.42971I$	$18.9406+5.8171I$	$-4.43476-2.75393I$
$u=\ 0.04523-1.80316I$ $a=\ 2.78489-0.06061I$ $b=\ 5.37092+0.01991I$	$18.9406+5.8171I$	$-4.43476-2.75393I$

III. $\boldsymbol{I_3^u = \langle b + u - 2,\ 3a + 2u - 3,\ u^2 + 3\rangle}$

(i) Arc colorings

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

(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}	$(u-1)^2$
c_3, c_4, c_5 c_8, c_9, c_{10}	u^2+3
c_6, c_{12}	$(u+1)^2$

(v) Riley Polynomials at the component

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

(vi) Complex Volumes and Cusp Shapes

Solutions to I_3^u		$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u =$	$1.73205I$		
$a =$	$1.00000 - 1.15470I$	9.86960	-12.0000
$b =$	$2.00000 - 1.73205I$		
$u =$	$-1.73205I$		
$a =$	$1.00000 + 1.15470I$	9.86960	-12.0000
$b =$	$2.00000 + 1.73205I$		

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

(i) Arc colorings

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

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

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

$$a_1 = \begin{pmatrix} 1 \\ u \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} -u \\ 0 \end{pmatrix}$$

$$a_{12} = \begin{pmatrix} -u + 1 \\ u \end{pmatrix}$$

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

$$a_2 = \begin{pmatrix} 1 \\ u + 1 \end{pmatrix}$$

$$a_9 = \begin{pmatrix} u \\ u \end{pmatrix}$$

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

$$a_8 = \begin{pmatrix} u \\ 0 \end{pmatrix}$$

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

(ii) Obstruction class $= 1$

(iii) Cusp Shapes $= -12$

(iv) u-Polynomials at the component

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

(vi) Complex Volumes and Cusp Shapes

Solutions to I_4^u		$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u =$	$1.000000I$		
$a =$	1.00000	0	-12.0000
$b =$	$1.000000I$		
$u =$	$-1.000000I$		
$a =$	1.00000	0	-12.0000
$b =$	$-1.000000I$		

V. $\boldsymbol{I_1^v = \langle a,\ b+1,\ v+1\rangle}$

(i) Arc colorings

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

(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	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$v = -1.00000$ $a = \quad 0$ $b = -1.00000$	-3.28987	-12.0000

VI. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1, c_{11}	$((u-1)^5)(u^{19}+7u^{18}+\cdots+13u+1)(u^{26}+13u^{25}+\cdots+385u+64)$
c_2, c_7	$((u-1)^3)(u+1)^2(u^{19}-u^{18}+\cdots+u+1)(u^{26}-u^{25}+\cdots-7u+8)$
c_3, c_4, c_5 c_8, c_9, c_{10}	$u(u^2+1)(u^2+3)(u^{13}+u^{12}+\cdots+u+1)^2(u^{19}-3u^{18}+\cdots-6u+2)$
c_6, c_{12}	$((u-1)^2)(u+1)^3(u^{19}-u^{18}+\cdots+u+1)(u^{26}-u^{25}+\cdots-7u+8)$

VII. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1, c_{11}	$((y-1)^5)(y^{19}+17y^{18}+\cdots+37y-1)$ $\cdot(y^{26}-y^{25}+\cdots+33151y+4096)$
c_2, c_6, c_7 c_{12}	$((y-1)^5)(y^{19}-7y^{18}+\cdots+13y-1)(y^{26}-13y^{25}+\cdots-385y+64)$
c_3, c_4, c_5 c_8, c_9, c_{10}	$y(y+1)^2(y+3)^2(y^{13}+19y^{12}+\cdots-5y-1)^2$ $\cdot(y^{19}+27y^{18}+\cdots+24y-4)$