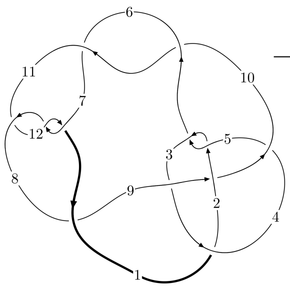
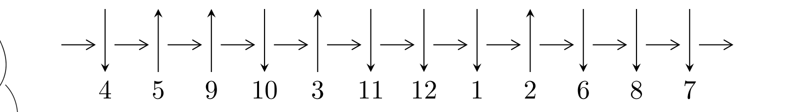
$12a_{0851}$ $(K12a_{0851})$



A knot diagram[1]

Linearized knot diagam



Solving Sequence

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

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

$$I_1^u = \langle 1.96995 \times 10^{27} u^{83} + 4.01738 \times 10^{27} u^{82} + \cdots + 7.57665 \times 10^{26} b + 2.90943 \times 10^{27},$$
$$3.36403 \times 10^{27} u^{83} + 4.75814 \times 10^{27} u^{82} + \cdots + 7.57665 \times 10^{26} a + 8.28011 \times 10^{27},\ u^{84} + 2u^{83} + \cdots + u + 1\rangle$$
$$I_2^u = \langle u^2 + b + 1,\ u^2 + a + 2,\ u^3 + u^2 + 2u + 1\rangle$$

* 2 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 87 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.

$$\boldsymbol{I_1^u = \langle 1.97\times10^{27}u^{83}+4.02\times10^{27}u^{82}+\cdots+7.58\times10^{26}b+2.91\times10^{27},\ 3.36\times10^{27}u^{83}+4.76\times10^{27}u^{82}+\cdots+7.58\times10^{26}a+8.28\times10^{27},\ u^{84}+2u^{83}+\cdots+u+1\rangle}$$

(i) Arc colorings

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

$$a_{11} = \begin{pmatrix}1\\0\end{pmatrix}$$

$$a_{12} = \begin{pmatrix}1\\u^2\end{pmatrix}$$

$$a_7 = \begin{pmatrix}u\\u^3+u\end{pmatrix}$$

$$a_1 = \begin{pmatrix}u^2+1\\u^4+2u^2\end{pmatrix}$$

$$a_4 = \begin{pmatrix}-4.44000u^{83}-6.28001u^{82}+\cdots+13.8326u-10.9285\\-2.60003u^{83}-5.30231u^{82}+\cdots+4.48846u-3.84000\end{pmatrix}$$

$$a_2 = \begin{pmatrix}1.40000u^{83}+2.40001u^{82}+\cdots-3.79679u+2.51127\\0.399993u^{83}-0.0251959u^{82}+\cdots-1.11127u+1.40000\end{pmatrix}$$

$$a_9 = \begin{pmatrix}-u^5-2u^3-u\\-u^7-3u^5-2u^3+u\end{pmatrix}$$

$$a_3 = \begin{pmatrix}-3.44000u^{83}-4.07994u^{82}+\cdots+11.1855u-8.67404\\-2.60000u^{83}-5.37729u^{82}+\cdots+6.07404u-5.44000\end{pmatrix}$$

$$a_6 = \begin{pmatrix}u^3+2u\\u^3+u\end{pmatrix}$$

$$a_5 = \begin{pmatrix}-2.84000u^{83}-3.08004u^{82}+\cdots+10.4753u-7.72107\\-2.40000u^{83}-5.07341u^{82}+\cdots+6.32107u-4.84000\end{pmatrix}$$

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

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= -\frac{1661872384557826664277778654}{757665015935352679203803969}u^{83} - \frac{2271996256671495868603397318}{757665015935352679203803969}u^{82} + \cdots - \frac{3240811385902518351507383851 1}{757665015935352679203803969}u + \frac{1507803354306088562580006829 3}{757665015935352679203803969}$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{84} - 13u^{83} + \cdots - 36u + 8$
c_2, c_5	$u^{84} + 4u^{83} + \cdots - 24u - 1$
c_3	$u^{84} - u^{83} + \cdots + 3950u + 817$
c_4	$u^{84} + u^{83} + \cdots + 6u - 1$
c_6, c_8, c_{10}	$u^{84} - 2u^{83} + \cdots + 69u + 17$
c_7, c_{11}, c_{12}	$u^{84} + 2u^{83} + \cdots + u + 1$
c_9	$u^{84} + 2u^{83} + \cdots - u - 1$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{84} - 21y^{83} + \cdots - 1232y + 64$
c_2, c_5	$y^{84} - 48y^{83} + \cdots - 224y + 1$
c_3	$y^{84} + 85y^{83} + \cdots + 14128130y + 667489$
c_4	$y^{84} + 69y^{83} + \cdots - 234y + 1$
c_6, c_8, c_{10}	$y^{84} - 86y^{83} + \cdots - 8807y + 289$
c_7, c_{11}, c_{12}	$y^{84} + 66y^{83} + \cdots - 7y + 1$
c_9	$y^{84} - 14y^{83} + \cdots - 7y + 1$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.110255 + 0.992663I$ $a = -0.879103 + 0.499853I$ $b = -0.471696 + 0.417164I$	$-0.328989 + 0.984245I$	0
$u = 0.110255 - 0.992663I$ $a = -0.879103 - 0.499853I$ $b = -0.471696 - 0.417164I$	$-0.328989 - 0.984245I$	0
$u = -0.299517 + 0.904327I$ $a = 0.653627 - 0.164395I$ $b = 0.784926 - 0.330738I$	$1.86898 + 5.21583I$	0
$u = -0.299517 - 0.904327I$ $a = 0.653627 + 0.164395I$ $b = 0.784926 + 0.330738I$	$1.86898 - 5.21583I$	0
$u = 0.897832 + 0.024492I$ $a = -2.22947 + 0.33832I$ $b = -2.32818 + 0.38487I$	$-9.21782 - 0.46343I$	$-10.71619 - 2.01137I$
$u = 0.897832 - 0.024492I$ $a = -2.22947 - 0.33832I$ $b = -2.32818 - 0.38487I$	$-9.21782 + 0.46343I$	$-10.71619 + 2.01137I$
$u = -0.891180 + 0.064032I$ $a = -3.33093 + 0.18661I$ $b = -3.33496 + 0.25333I$	$-6.55361 + 12.23930I$	$-7.27322 - 7.00359I$
$u = -0.891180 - 0.064032I$ $a = -3.33093 - 0.18661I$ $b = -3.33496 - 0.25333I$	$-6.55361 - 12.23930I$	$-7.27322 + 7.00359I$
$u = -0.883835 + 0.038054I$ $a = 3.58891 - 0.56439I$ $b = 3.46927 - 0.50941I$	$-9.90913 + 5.72369I$	$-9.95611 - 4.95013I$
$u = -0.883835 - 0.038054I$ $a = 3.58891 + 0.56439I$ $b = 3.46927 + 0.50941I$	$-9.90913 - 5.72369I$	$-9.95611 + 4.95013I$

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.878158 + 0.070546I$ $a = 1.87000 - 0.49822I$ $b = 1.77275 - 0.49012I$	$-7.77096 - 4.58033I$	$-9.29631 + 5.11031I$
$u = 0.878158 - 0.070546I$ $a = 1.87000 + 0.49822I$ $b = 1.77275 + 0.49012I$	$-7.77096 + 4.58033I$	$-9.29631 - 5.11031I$
$u = 0.866332 + 0.010497I$ $a = 1.40515 + 2.06321I$ $b = 1.41089 + 2.80011I$	$-5.88867 - 0.76646I$	$-10.18802 - 8.51416I$
$u = 0.866332 - 0.010497I$ $a = 1.40515 - 2.06321I$ $b = 1.41089 - 2.80011I$	$-5.88867 + 0.76646I$	$-10.18802 + 8.51416I$
$u = -0.858093 + 0.025331I$ $a = -0.95600 - 2.32630I$ $b = -0.93847 - 1.67793I$	$-4.28941 + 3.74724I$	$-4.52184 - 5.72401I$
$u = -0.858093 - 0.025331I$ $a = -0.95600 + 2.32630I$ $b = -0.93847 + 1.67793I$	$-4.28941 - 3.74724I$	$-4.52184 + 5.72401I$
$u = -0.845503$ $a = -4.49525$ $b = -4.08680$	-2.58884	-1.97210
$u = -0.087999 + 1.205740I$ $a = 0.851450 + 0.079273I$ $b = 0.72162 - 1.91902I$	$3.95448 + 1.52948I$	0
$u = -0.087999 - 1.205740I$ $a = 0.851450 - 0.079273I$ $b = 0.72162 + 1.91902I$	$3.95448 - 1.52948I$	0
$u = 0.317565 + 0.699615I$ $a = 0.591065 - 0.420702I$ $b = 0.719031 - 0.569754I$	$2.21608 + 5.47917I$	$-2.75820 - 3.97142I$

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.317565 - 0.699615I$ $a = 0.591065 + 0.420702I$ $b = 0.719031 + 0.569754I$	$2.21608 - 5.47917I$	$-2.75820 + 3.97142I$
$u = 0.021059 + 1.251870I$ $a = 0.240736 + 0.329853I$ $b = 0.90373 - 1.23188I$	$4.24491 + 1.49996I$	0
$u = 0.021059 - 1.251870I$ $a = 0.240736 - 0.329853I$ $b = 0.90373 + 1.23188I$	$4.24491 - 1.49996I$	0
$u = -0.181517 + 1.243580I$ $a = 0.515986 + 0.448015I$ $b = 0.940034 + 0.122735I$	$2.79988 + 2.45137I$	0
$u = -0.181517 - 1.243580I$ $a = 0.515986 - 0.448015I$ $b = 0.940034 - 0.122735I$	$2.79988 - 2.45137I$	0
$u = -0.138549 + 1.255270I$ $a = -2.68245 + 0.16980I$ $b = -1.20511 + 3.23411I$	$4.81134 + 2.18966I$	0
$u = -0.138549 - 1.255270I$ $a = -2.68245 - 0.16980I$ $b = -1.20511 - 3.23411I$	$4.81134 - 2.18966I$	0
$u = -0.695609 + 0.224245I$ $a = -0.419849 - 0.863366I$ $b = -0.303627 - 0.104607I$	$-0.17080 - 1.42571I$	$-7.44428 + 4.45956I$
$u = -0.695609 - 0.224245I$ $a = -0.419849 + 0.863366I$ $b = -0.303627 + 0.104607I$	$-0.17080 + 1.42571I$	$-7.44428 - 4.45956I$
$u = 0.427785 + 1.209710I$ $a = -0.848570 + 0.981327I$ $b = -1.31346 - 0.86465I$	$-4.26362 - 0.09192I$	0

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.427785 - 1.209710I$ $a = -0.848570 - 0.981327I$ $b = -1.31346 + 0.86465I$	$-4.26362 + 0.09192I$	0
$u = 0.100979 + 1.283630I$ $a = 1.188160 - 0.660522I$ $b = 0.053190 - 1.124170I$	$7.14933 - 0.86028I$	0
$u = 0.100979 - 1.283630I$ $a = 1.188160 + 0.660522I$ $b = 0.053190 + 1.124170I$	$7.14933 + 0.86028I$	0
$u = -0.441193 + 1.219920I$ $a = 0.69098 + 2.04564I$ $b = 2.85592 - 0.56509I$	$-2.99168 - 7.48111I$	0
$u = -0.441193 - 1.219920I$ $a = 0.69098 - 2.04564I$ $b = 2.85592 + 0.56509I$	$-2.99168 + 7.48111I$	0
$u = 0.145710 + 1.293010I$ $a = 0.359277 - 0.661475I$ $b = -1.037240 + 0.805161I$	$6.61179 - 4.37101I$	0
$u = 0.145710 - 1.293010I$ $a = 0.359277 + 0.661475I$ $b = -1.037240 - 0.805161I$	$6.61179 + 4.37101I$	0
$u = 0.196690 + 1.297810I$ $a = -0.747120 + 0.507520I$ $b = -0.657638 + 0.978220I$	$2.21675 - 6.47162I$	0
$u = 0.196690 - 1.297810I$ $a = -0.747120 - 0.507520I$ $b = -0.657638 - 0.978220I$	$2.21675 + 6.47162I$	0
$u = -0.398240 + 1.251920I$ $a = 1.53701 - 0.13733I$ $b = 0.90130 - 1.85883I$	$-0.492846 + 0.757796I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = -0.398240 - 1.251920I$ $a = 1.53701 + 0.13733I$ $b = 0.90130 + 1.85883I$	$-0.492846 - 0.757796I$	0
$u = -0.426210 + 1.243960I$ $a = -0.59680 - 2.27508I$ $b = -3.11386 + 0.31059I$	$-6.18171 - 1.03877I$	0
$u = -0.426210 - 1.243960I$ $a = -0.59680 + 2.27508I$ $b = -3.11386 - 0.31059I$	$-6.18171 + 1.03877I$	0
$u = 0.607131 + 0.307088I$ $a = -1.58483 + 0.55700I$ $b = -0.266796 - 0.243230I$	$0.95192 - 9.05338I$	$-4.97546 + 9.13072I$
$u = 0.607131 - 0.307088I$ $a = -1.58483 - 0.55700I$ $b = -0.266796 + 0.243230I$	$0.95192 + 9.05338I$	$-4.97546 - 9.13072I$
$u = 0.404594 + 1.266270I$ $a = 0.90231 + 1.11982I$ $b = -2.53793 + 2.04408I$	$-1.99365 - 3.78777I$	0
$u = 0.404594 - 1.266270I$ $a = 0.90231 - 1.11982I$ $b = -2.53793 - 2.04408I$	$-1.99365 + 3.78777I$	0
$u = -0.386566 + 1.274330I$ $a = 1.25324 + 2.56499I$ $b = 3.95929 - 1.00569I$	$1.37013 + 4.42279I$	0
$u = -0.386566 - 1.274330I$ $a = 1.25324 - 2.56499I$ $b = 3.95929 + 1.00569I$	$1.37013 - 4.42279I$	0
$u = 0.437176 + 1.259540I$ $a = 0.82445 - 1.23687I$ $b = 1.91181 + 1.01797I$	$-5.39444 - 4.30513I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.437176 - 1.259540I$ $a = 0.82445 + 1.23687I$ $b = 1.91181 - 1.01797I$	$-5.39444 + 4.30513I$	0
$u = 0.402005 + 1.283320I$ $a = -1.73173 + 0.46694I$ $b = -0.08092 - 3.11543I$	$-1.86506 - 5.31277I$	0
$u = 0.402005 - 1.283320I$ $a = -1.73173 - 0.46694I$ $b = -0.08092 + 3.11543I$	$-1.86506 + 5.31277I$	0
$u = -0.394513 + 1.293300I$ $a = -1.04471 + 1.30566I$ $b = 0.91800 + 1.57492I$	$-0.18144 + 8.24146I$	0
$u = -0.394513 - 1.293300I$ $a = -1.04471 - 1.30566I$ $b = 0.91800 - 1.57492I$	$-0.18144 - 8.24146I$	0
$u = 0.422095 + 1.298160I$ $a = 0.45105 - 1.40256I$ $b = 2.40460 + 0.35338I$	$-5.09893 - 5.18369I$	0
$u = 0.422095 - 1.298160I$ $a = 0.45105 + 1.40256I$ $b = 2.40460 - 0.35338I$	$-5.09893 + 5.18369I$	0
$u = -0.409997 + 1.305830I$ $a = -1.37607 - 1.93579I$ $b = -3.48232 + 1.34187I$	$-5.71744 + 10.35760I$	0
$u = -0.409997 - 1.305830I$ $a = -1.37607 + 1.93579I$ $b = -3.48232 - 1.34187I$	$-5.71744 - 10.35760I$	0
$u = 0.203910 + 1.353850I$ $a = 0.723619 - 0.741474I$ $b = 0.573766 - 0.626084I$	$6.17343 - 11.87550I$	0

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.203910 - 1.353850I$ $a = 0.723619 + 0.741474I$ $b = 0.573766 + 0.626084I$	$6.17343 + 11.87550I$	0
$u = 0.022685 + 1.376350I$ $a = 0.153766 - 0.103161I$ $b = -0.846260 + 0.832839I$	$8.47907 + 4.89675I$	0
$u = 0.022685 - 1.376350I$ $a = 0.153766 + 0.103161I$ $b = -0.846260 - 0.832839I$	$8.47907 - 4.89675I$	0
$u = -0.156955 + 1.372250I$ $a = -0.036947 - 0.278434I$ $b = 0.214434 - 0.433302I$	$4.30450 + 3.68208I$	0
$u = -0.156955 - 1.372250I$ $a = -0.036947 + 0.278434I$ $b = 0.214434 + 0.433302I$	$4.30450 - 3.68208I$	0
$u = -0.269039 + 1.357850I$ $a = -0.169242 + 0.428987I$ $b = -0.022494 + 0.257815I$	$4.81001 + 2.03195I$	0
$u = -0.269039 - 1.357850I$ $a = -0.169242 - 0.428987I$ $b = -0.022494 - 0.257815I$	$4.81001 - 2.03195I$	0
$u = 0.400272 + 1.326730I$ $a = -0.325967 + 1.177850I$ $b = -1.98872 + 0.03276I$	$-3.39774 - 9.16489I$	0
$u = 0.400272 - 1.326730I$ $a = -0.325967 - 1.177850I$ $b = -1.98872 - 0.03276I$	$-3.39774 + 9.16489I$	0
$u = -0.409526 + 1.324500I$ $a = 1.10413 + 1.91526I$ $b = 3.42129 - 1.08649I$	$-2.2113 + 16.8981I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.409526 - 1.324500I$ $a = 1.10413 - 1.91526I$ $b = 3.42129 + 1.08649I$	$-2.2113 - 16.8981I$	0
$u = -0.499272 + 0.346825I$ $a = 0.004363 + 0.910218I$ $b = -0.060032 + 0.136687I$	$-1.12877 + 1.42262I$	$-10.39314 - 6.10068I$
$u = -0.499272 - 0.346825I$ $a = 0.004363 - 0.910218I$ $b = -0.060032 - 0.136687I$	$-1.12877 - 1.42262I$	$-10.39314 + 6.10068I$
$u = 0.557733 + 0.195919I$ $a = 1.72195 - 0.43966I$ $b = 0.111216 - 0.097143I$	$-2.38342 - 3.80840I$	$-9.51840 + 7.64998I$
$u = 0.557733 - 0.195919I$ $a = 1.72195 + 0.43966I$ $b = 0.111216 + 0.097143I$	$-2.38342 + 3.80840I$	$-9.51840 - 7.64998I$
$u = -0.499502$ $a = -1.24909$ $b = -0.365987$	-0.990570	-10.1890
$u = 0.413247 + 0.213468I$ $a = -0.048963 + 0.431755I$ $b = 0.301016 - 0.915224I$	$2.03282 - 2.37496I$	$-1.25289 + 9.23814I$
$u = 0.413247 - 0.213468I$ $a = -0.048963 - 0.431755I$ $b = 0.301016 + 0.915224I$	$2.03282 + 2.37496I$	$-1.25289 - 9.23814I$
$u = -0.131361 + 0.439258I$ $a = -0.910942 + 0.658284I$ $b = -0.363524 + 0.420591I$	$-0.414341 + 1.299990I$	$-5.47130 - 4.04671I$
$u = -0.131361 - 0.439258I$ $a = -0.910942 - 0.658284I$ $b = -0.363524 - 0.420591I$	$-0.414341 - 1.299990I$	$-5.47130 + 4.04671I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.413765+0.073813I$ $a=-0.52748-5.74207I$ $b=-0.83044-2.00086I$	$0.809864+0.226391I$	$16.7645+17.2989I$
$u=-0.413765-0.073813I$ $a=-0.52748+5.74207I$ $b=-0.83044+2.00086I$	$0.809864-0.226391I$	$16.7645-17.2989I$
$u=\quad 0.212225+0.259248I$ $a=-2.31187+1.75601I$ $b=\quad 0.562007-0.127169I$	$2.62354+0.38861I$	$2.48144+3.79646I$
$u=\quad 0.212225-0.259248I$ $a=-2.31187-1.75601I$ $b=\quad 0.562007+0.127169I$	$2.62354-0.38861I$	$2.48144-3.79646I$

II. $I_2^u = \langle u^2+b+1,\ u^2+a+2,\ u^3+u^2+2u+1\rangle$

(i) Arc colorings

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

(ii) Obstruction class $= 1$

(iii) Cusp Shapes $= -u^2-3u-3$

(iv) u-Polynomials at the component

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

(v) Riley Polynomials at the component

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

(vi) Complex Volumes and Cusp Shapes

Solutions to I_2^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.215080 + 1.307140I$ $a = -0.337641 + 0.562280I$ $b = 0.662359 + 0.562280I$	$4.66906 + 2.82812I$	$-0.69240 - 3.35914I$
$u = -0.215080 - 1.307140I$ $a = -0.337641 - 0.562280I$ $b = 0.662359 - 0.562280I$	$4.66906 - 2.82812I$	$-0.69240 + 3.35914I$
$u = -0.569840$ $a = -2.32472$ $b = -1.32472$	0.531480	-1.61520

III. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1	$u^3(u^{84} - 13u^{83} + \cdots - 36u + 8)$
c_2	$((u+1)^3)(u^{84} + 4u^{83} + \cdots - 24u - 1)$
c_3	$(u^3 - u - 1)(u^{84} - u^{83} + \cdots + 3950u + 817)$
c_4	$(u^3 - u - 1)(u^{84} + u^{83} + \cdots + 6u - 1)$
c_5	$((u-1)^3)(u^{84} + 4u^{83} + \cdots - 24u - 1)$
c_6, c_8	$(u^3 + u^2 - 1)(u^{84} - 2u^{83} + \cdots + 69u + 17)$
c_7	$(u^3 - u^2 + 2u - 1)(u^{84} + 2u^{83} + \cdots + u + 1)$
c_9	$(u^3 + u^2 - 1)(u^{84} + 2u^{83} + \cdots - u - 1)$
c_{10}	$(u^3 - u^2 + 1)(u^{84} - 2u^{83} + \cdots + 69u + 17)$
c_{11}, c_{12}	$(u^3 + u^2 + 2u + 1)(u^{84} + 2u^{83} + \cdots + u + 1)$

IV. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1	$y^3(y^{84} - 21y^{83} + \cdots - 1232y + 64)$
c_2, c_5	$((y-1)^3)(y^{84} - 48y^{83} + \cdots - 224y + 1)$
c_3	$(y^3 - 2y^2 + y - 1)(y^{84} + 85y^{83} + \cdots + 1.41281 \times 10^7 y + 667489)$
c_4	$(y^3 - 2y^2 + y - 1)(y^{84} + 69y^{83} + \cdots - 234y + 1)$
c_6, c_8, c_{10}	$(y^3 - y^2 + 2y - 1)(y^{84} - 86y^{83} + \cdots - 8807y + 289)$
c_7, c_{11}, c_{12}	$(y^3 + 3y^2 + 2y - 1)(y^{84} + 66y^{83} + \cdots - 7y + 1)$
c_9	$(y^3 - y^2 + 2y - 1)(y^{84} - 14y^{83} + \cdots - 7y + 1)$