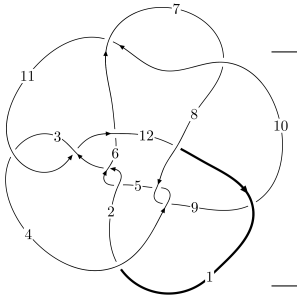
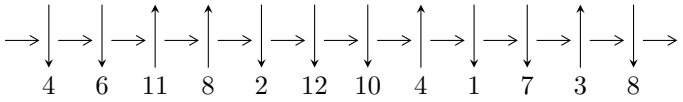
$12n_{0826}$ $(K12n_{0826})$



A knot diagram[1]

Linearized knot diagam



Solving Sequence

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

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

$$\begin{aligned} I_1^u = \langle & 3.56490 \times 10^{251} u^{63} + 5.72448 \times 10^{251} u^{62} + \cdots + 5.50146 \times 10^{254} b + 8.86861 \times 10^{253}, \\ & - 2.35876 \times 10^{254} u^{63} - 4.13220 \times 10^{254} u^{62} + \cdots + 4.26363 \times 10^{255} a + 8.91301 \times 10^{256}, \\ & u^{64} + 2u^{63} + \cdots - 735u - 124 \rangle \\ I_2^u = \langle & 284428202 u^{14} + 396867456 u^{13} + \cdots + 506758949 b + 426150472, \\ & - 8189375817 u^{14} - 6846809578 u^{13} + \cdots + 2533794745 a + 27837731986, \\ & u^{15} + u^{14} - u^{13} + 6u^{12} + 26u^{11} + 12u^{10} - 24u^9 - 24u^8 - 10u^7 - 32u^6 + 9u^5 + 51u^4 + 12u^3 - 17u^2 - 6u - 1 \end{aligned}$$

* 2 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 79 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. $\boldsymbol{I_1^u = \langle 3.56 \times 10^{251} u^{63} + 5.72 \times 10^{251} u^{62} + \cdots + 5.50 \times 10^{254} b + 8.87 \times 10^{253},\ -2.36 \times 10^{254} u^{63} - 4.13 \times 10^{254} u^{62} + \cdots + 4.26 \times 10^{255} a + 8.91 \times 10^{256},\ u^{64} + 2u^{63} + \cdots - 735u - 124 \rangle}$

(i) Arc colorings

$$a_7 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$

$$a_{12} = \begin{pmatrix} 0 \\ u \end{pmatrix}$$

$$a_3 = \begin{pmatrix} 0.0553228u^{63} + 0.0969175u^{62} + \cdots - 78.2318u - 20.9047 \\ -0.000647992u^{63} - 0.00104054u^{62} + \cdots - 1.92857u - 0.161205 \end{pmatrix}$$

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

$$a_2 = \begin{pmatrix} 0.0567994u^{63} + 0.100527u^{62} + \cdots - 83.3905u - 22.7682 \\ -0.000281111u^{63} - 0.000325930u^{62} + \cdots - 2.59418u - 0.242607 \end{pmatrix}$$

$$a_5 = \begin{pmatrix} 0.0564900u^{63} + 0.0995986u^{62} + \cdots - 85.0876u - 19.9751 \\ 0.00255943u^{63} + 0.00450226u^{62} + \cdots + 0.805611u + 1.02426 \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} -0.165563u^{63} - 0.264911u^{62} + \cdots + 226.261u + 27.5914 \\ 0.00582935u^{63} + 0.00991425u^{62} + \cdots - 9.04574u - 1.72680 \end{pmatrix}$$

$$a_4 = \begin{pmatrix} 0.0723938u^{63} - 0.000941407u^{62} + \cdots - 43.1756u + 139.987 \\ -0.0116628u^{63} - 0.0183746u^{62} + \cdots + 13.8692u + 1.03110 \end{pmatrix}$$

$$a_1 = \begin{pmatrix} -2.03665u^{63} - 3.81811u^{62} + \cdots + 3046.36u + 1071.95 \\ 0.0128152u^{63} + 0.0318513u^{62} + \cdots - 25.6739u - 16.6834 \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} -0.159734u^{63} - 0.254996u^{62} + \cdots + 217.215u + 25.8646 \\ 0.00582935u^{63} + 0.00991425u^{62} + \cdots - 9.04574u - 1.72680 \end{pmatrix}$$

$$a_8 = \begin{pmatrix} -0.135914u^{63} - 0.259560u^{62} + \cdots + 202.668u + 78.8031 \\ 0.00237433u^{63} + 0.00489477u^{62} + \cdots - 1.28540u - 0.718444 \end{pmatrix}$$

$$a_9 = \begin{pmatrix} 2.15886u^{63} + 3.39630u^{62} + \cdots - 2926.06u - 284.022 \\ -0.0649284u^{63} - 0.111193u^{62} + \cdots + 97.1411u + 21.8225 \end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= 0.208334u^{63} + 0.401745u^{62} + \cdots - 321.895u - 123.850$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{64} - 5u^{63} + \cdots + 1916u + 23$
c_2, c_5	$u^{64} + 2u^{63} + \cdots - 9167u - 1601$
c_3, c_{11}	$u^{64} - 7u^{63} + \cdots + 229u + 41$
c_4, c_8	$u^{64} - u^{63} + \cdots + 2985u + 1949$
c_6	$u^{64} + 2u^{63} + \cdots - 735u - 124$
c_7, c_{10}	$u^{64} - 8u^{63} + \cdots + 355u - 25$
c_9	$u^{64} + u^{63} + \cdots + 8216u - 400$
c_{12}	$u^{64} + 31u^{63} + \cdots - 13162594u - 3152393$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{64} + 91y^{63} + \cdots - 2472756y + 529$
c_2, c_5	$y^{64} - 36y^{63} + \cdots - 23099829y + 2563201$
c_3, c_{11}	$y^{64} + 41y^{63} + \cdots + 48501y + 1681$
c_4, c_8	$y^{64} - 71y^{63} + \cdots - 12929063y + 3798601$
c_6	$y^{64} - 12y^{63} + \cdots - 119121y + 15376$
c_7, c_{10}	$y^{64} + 46y^{63} + \cdots + 6025y + 625$
c_9	$y^{64} + 75y^{63} + \cdots - 82949056y + 160000$
c_{12}	$y^{64} - 291y^{63} + \cdots + 164152624346502y + 9937581626449$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.633361+0.835451I$ $a=-0.530837+1.034980I$ $b=-1.22852-1.74056I$	$9.22096+8.60656I$	$-4.00000-6.23706I$
$u=-0.633361-0.835451I$ $a=-0.530837-1.034980I$ $b=-1.22852+1.74056I$	$9.22096-8.60656I$	$-4.00000+6.23706I$
$u=0.253229+0.900252I$ $a=0.646605-0.735868I$ $b=0.197400-0.437594I$	$3.52271+1.68170I$	$3.06688-2.85627I$
$u=0.253229-0.900252I$ $a=0.646605+0.735868I$ $b=0.197400+0.437594I$	$3.52271-1.68170I$	$3.06688+2.85627I$
$u=-0.377573+0.852675I$ $a=0.896250-0.658963I$ $b=-1.065120+0.904713I$	$3.87587+2.56306I$	$-0.62210-7.87266I$
$u=-0.377573-0.852675I$ $a=0.896250+0.658963I$ $b=-1.065120-0.904713I$	$3.87587-2.56306I$	$-0.62210+7.87266I$
$u=0.968214+0.475093I$ $a=0.677564-0.491270I$ $b=0.176332+0.400779I$	$4.21273-5.33178I$	0
$u=0.968214-0.475093I$ $a=0.677564+0.491270I$ $b=0.176332-0.400779I$	$4.21273+5.33178I$	0
$u=0.773876+0.769109I$ $a=0.892108-0.775301I$ $b=0.281562-0.440255I$	$8.67364-9.43479I$	0
$u=0.773876-0.769109I$ $a=0.892108+0.775301I$ $b=0.281562+0.440255I$	$8.67364+9.43479I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.859282+0.057231I$ $a=-0.94062+1.30856I$ $b=-0.294118-0.799242I$	$1.356600-0.236124I$	$-10.20366+0.45727I$
$u=-0.859282-0.057231I$ $a=-0.94062-1.30856I$ $b=-0.294118+0.799242I$	$1.356600+0.236124I$	$-10.20366-0.45727I$
$u=-0.637038+0.946755I$ $a=0.399510+0.471571I$ $b=0.408356+0.442921I$	$1.75404+3.75138I$	0
$u=-0.637038-0.946755I$ $a=0.399510-0.471571I$ $b=0.408356-0.442921I$	$1.75404-3.75138I$	0
$u=-0.857334$ $a=0.655331$ $b=0.234820$	-2.02039	-2.98300
$u=0.890002+0.755372I$ $a=-0.560431-1.010460I$ $b=-0.14451+1.51757I$	$-5.87560-2.84637I$	0
$u=0.890002-0.755372I$ $a=-0.560431+1.010460I$ $b=-0.14451-1.51757I$	$-5.87560+2.84637I$	0
$u=-0.905414+0.761217I$ $a=0.319731-0.980710I$ $b=1.01703+1.40700I$	$1.05509+3.06315I$	0
$u=-0.905414-0.761217I$ $a=0.319731+0.980710I$ $b=1.01703-1.40700I$	$1.05509-3.06315I$	0
$u=0.629031+0.441968I$ $a=-0.590354-1.251080I$ $b=-1.30236+1.41946I$	$-0.87655-3.21386I$	$-5.46121+1.99366I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = \ 0.629031 - 0.441968I$ $a = -0.590354 + 1.251080I$ $b = -1.30236 - 1.41946I$	$-0.87655 + 3.21386I$	$-5.46121 - 1.99366I$
$u = \ 0.745958$ $a = -0.843570$ $b = -0.794982$	-2.75005	2.80630
$u = \ 0.325605 + 1.226800I$ $a = -0.479590 + 0.579451I$ $b = \ 0.135918 + 0.142703I$	$11.41820 - 3.52473I$	0
$u = \ 0.325605 - 1.226800I$ $a = -0.479590 - 0.579451I$ $b = \ 0.135918 - 0.142703I$	$11.41820 + 3.52473I$	0
$u = \ 0.499154 + 0.523034I$ $a = -0.352111 - 0.051255I$ $b = \ 0.811508 - 0.885581I$	$5.67586 + 1.02167I$	$0.667278 + 0.621622I$
$u = \ 0.499154 - 0.523034I$ $a = -0.352111 + 0.051255I$ $b = \ 0.811508 + 0.885581I$	$5.67586 - 1.02167I$	$0.667278 - 0.621622I$
$u = \ 1.233920 + 0.559467I$ $a = \ 0.154791 + 0.866376I$ $b = -0.10145 - 1.88879I$	$-5.32904 - 3.11782I$	0
$u = \ 1.233920 - 0.559467I$ $a = \ 0.154791 - 0.866376I$ $b = -0.10145 + 1.88879I$	$-5.32904 + 3.11782I$	0
$u = -0.666405 + 1.183570I$ $a = \ 0.923395 - 0.459675I$ $b = \ 0.647996 + 0.764798I$	$1.02762 - 2.42841I$	0
$u = -0.666405 - 1.183570I$ $a = \ 0.923395 + 0.459675I$ $b = \ 0.647996 - 0.764798I$	$1.02762 + 2.42841I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 1.113490 + 0.809533I$ $a = -0.233838 - 1.094600I$ $b = -0.77959 + 1.53834I$	$-2.47783 - 8.59651I$	0
$u = 1.113490 - 0.809533I$ $a = -0.233838 + 1.094600I$ $b = -0.77959 - 1.53834I$	$-2.47783 + 8.59651I$	0
$u = -0.604799 + 0.139734I$ $a = 0.485635 - 1.204360I$ $b = -0.556677 + 0.966102I$	$-0.236047 + 0.888762I$	$-5.62676 - 4.10196I$
$u = -0.604799 - 0.139734I$ $a = 0.485635 + 1.204360I$ $b = -0.556677 - 0.966102I$	$-0.236047 - 0.888762I$	$-5.62676 + 4.10196I$
$u = 0.607795 + 0.087221I$ $a = -0.74621 - 1.56542I$ $b = 0.68831 + 1.51458I$	$-0.88330 + 3.97137I$	$-1.334301 - 0.429545I$
$u = 0.607795 - 0.087221I$ $a = -0.74621 + 1.56542I$ $b = 0.68831 - 1.51458I$	$-0.88330 - 3.97137I$	$-1.334301 + 0.429545I$
$u = 0.329116 + 0.508643I$ $a = -0.34712 + 2.17987I$ $b = -0.460457 + 0.282285I$	$0.391230 - 0.353831I$	$-2.98869 - 0.49409I$
$u = 0.329116 - 0.508643I$ $a = -0.34712 - 2.17987I$ $b = -0.460457 - 0.282285I$	$0.391230 + 0.353831I$	$-2.98869 + 0.49409I$
$u = -1.14937 + 0.90634I$ $a = -0.347312 + 0.828119I$ $b = -0.076957 - 1.360690I$	$-6.72812 + 3.57989I$	0
$u = -1.14937 - 0.90634I$ $a = -0.347312 - 0.828119I$ $b = -0.076957 + 1.360690I$	$-6.72812 - 3.57989I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.02527+1.46729I$ $a=-0.603836+0.026259I$ $b=\ \ 0.038716+0.193115I$	$0.33931+2.46518I$	0
$u=-0.02527-1.46729I$ $a=-0.603836-0.026259I$ $b=\ \ 0.038716-0.193115I$	$0.33931-2.46518I$	0
$u=-1.15018+0.95185I$ $a=\ \ 0.338925-0.857634I$ $b=\ \ 0.21681+1.86662I$	$-0.23323+9.95941I$	0
$u=-1.15018-0.95185I$ $a=\ \ 0.338925+0.857634I$ $b=\ \ 0.21681-1.86662I$	$-0.23323-9.95941I$	0
$u=-0.373052+0.273303I$ $a=\ \ 0.467221-1.081940I$ $b=-0.213074+0.512505I$	$-0.286450+0.969073I$	$-5.20156-6.74642I$
$u=-0.373052-0.273303I$ $a=\ \ 0.467221+1.081940I$ $b=-0.213074-0.512505I$	$-0.286450-0.969073I$	$-5.20156+6.74642I$
$u=-0.064752+0.327363I$ $a=-2.26682+0.73356I$ $b=\ \ 0.76192-1.90756I$	$5.41696+1.08390I$	$7.59845-2.56360I$
$u=-0.064752-0.327363I$ $a=-2.26682-0.73356I$ $b=\ \ 0.76192+1.90756I$	$5.41696-1.08390I$	$7.59845+2.56360I$
$u=-0.264144+0.158619I$ $a=-2.22385-11.81440I$ $b=\ \ 0.174020+0.255284I$	$1.84425-0.21555I$	$-54.1683-39.7304I$
$u=-0.264144-0.158619I$ $a=-2.22385+11.81440I$ $b=\ \ 0.174020-0.255284I$	$1.84425+0.21555I$	$-54.1683+39.7304I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-1.51312+1.02719I$ $a=-0.147229+0.787597I$ $b=-0.85869-1.71762I$	$-4.27079+6.80776I$	0
$u=-1.51312-1.02719I$ $a=-0.147229-0.787597I$ $b=-0.85869+1.71762I$	$-4.27079-6.80776I$	0
$u=-1.42579+1.18878I$ $a=0.215991-0.781332I$ $b=1.04536+1.90254I$	$4.6282+16.0012I$	0
$u=-1.42579-1.18878I$ $a=0.215991+0.781332I$ $b=1.04536-1.90254I$	$4.6282-16.0012I$	0
$u=1.89889+0.04609I$ $a=0.259481+0.412233I$ $b=0.01829-2.23354I$	$6.42656+2.16286I$	0
$u=1.89889-0.04609I$ $a=0.259481-0.412233I$ $b=0.01829+2.23354I$	$6.42656-2.16286I$	0
$u=1.64927+1.03875I$ $a=0.137830+0.664791I$ $b=1.06970-2.10818I$	$-1.72416-8.22153I$	0
$u=1.64927-1.03875I$ $a=0.137830-0.664791I$ $b=1.06970+2.10818I$	$-1.72416+8.22153I$	0
$u=1.71347+1.01637I$ $a=0.168962+0.420273I$ $b=2.00584-2.12827I$	$6.48830+3.36563I$	0
$u=1.71347-1.01637I$ $a=0.168962-0.420273I$ $b=2.00584+2.12827I$	$6.48830-3.36563I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-1.85043+0.96309I$ $a=-0.431038+0.249730I$ $b=-0.75543-1.82108I$	$6.12807-2.09855I$	0
$u=-1.85043-0.96309I$ $a=-0.431038-0.249730I$ $b=-0.75543+1.82108I$	$6.12807+2.09855I$	0
$u=-1.32939+2.57903I$ $a=0.318575-0.116709I$ $b=1.42196+1.34450I$	$6.24532-4.56303I$	0
$u=-1.32939-2.57903I$ $a=0.318575+0.116709I$ $b=1.42196-1.34450I$	$6.24532+4.56303I$	0

II.

$\boldsymbol{I_2^u = \langle 2.84\times 10^8 u^{14} + 3.97\times 10^8 u^{13} + \cdots + 5.07\times 10^8 b + 4.26\times 10^8,\ -8.19\times 10^9 u^{14} - 6.85\times 10^9 u^{13} + \cdots + 2.53\times 10^9 a + 2.78\times 10^{10},\ u^{15} + u^{14} + \cdots - 6u - 1\rangle}$

(i) Arc colorings

$$a_7 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$

$$a_{12} = \begin{pmatrix} 0 \\ u \end{pmatrix}$$

$$a_3 = \begin{pmatrix} 3.23206u^{14} + 2.70220u^{13} + \cdots - 61.4746u - 10.9866 \\ -0.561269u^{14} - 0.783148u^{13} + \cdots - 4.05570u - 0.840933 \end{pmatrix}$$

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

$$a_2 = \begin{pmatrix} 2.65780u^{14} + 1.80378u^{13} + \cdots - 65.4774u - 12.3574 \\ -0.119451u^{14} - 0.0902996u^{13} + \cdots - 1.53653u - 0.516781 \end{pmatrix}$$

$$a_5 = \begin{pmatrix} 2.70220u^{14} + 2.15934u^{13} + \cdots - 53.0688u - 7.75452 \\ 0.0495199u^{14} + 0.0757808u^{13} + \cdots + 0.0115506u - 0.198240 \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} -6.42929u^{14} - 4.92808u^{13} + \cdots + 115.242u + 4.54807 \\ -0.125520u^{14} + 0.0522556u^{13} + \cdots + 7.01627u + 1.26673 \end{pmatrix}$$

$$a_4 = \begin{pmatrix} 7.05889u^{14} + 2.95931u^{13} + \cdots - 126.691u + 32.5632 \\ 0.412693u^{14} + 0.120412u^{13} + \cdots - 13.9640u - 1.29863 \end{pmatrix}$$

$$a_1 = \begin{pmatrix} -16.6301u^{14} - 19.6871u^{13} + \cdots + 325.929u + 144.504 \\ 0.000494896u^{14} - 0.495565u^{13} + \cdots - 7.85539u + 2.68332 \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} -6.55481u^{14} - 4.87583u^{13} + \cdots + 122.258u + 5.81480 \\ -0.125520u^{14} + 0.0522556u^{13} + \cdots + 7.01627u + 1.26673 \end{pmatrix}$$

$$a_8 = \begin{pmatrix} 4.05411u^{14} + 4.62887u^{13} + \cdots - 73.3182u - 29.1773 \\ 0.264042u^{14} + 0.287559u^{13} + \cdots + 2.00556u - 0.550328 \end{pmatrix}$$

$$a_9 = \begin{pmatrix} -39.5909u^{14} - 29.6382u^{13} + \cdots + 741.709u + 48.4775 \\ -1.18765u^{14} - 0.793252u^{13} + \cdots + 35.0448u + 6.68072 \end{pmatrix}$$

(ii) Obstruction class $= 1$

(iii) Cusp Shapes $= -\frac{6764270976}{2533794745}u^{14} - \frac{13464586804}{2533794745}u^{13} + \cdots + \frac{54402764179}{2533794745}u + \frac{37139257588}{2533794745}$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{15}+4u^{14}+\cdots+31u-11$
c_2	$u^{15}+5u^{14}+\cdots-12u-9$
c_3	$u^{15}-2u^{14}+\cdots+2u+1$
c_4	$u^{15}+4u^{14}+\cdots+5u^2-1$
c_5	$u^{15}-5u^{14}+\cdots-12u+9$
c_6	$u^{15}+u^{14}+\cdots-6u-1$
c_7	$u^{15}-3u^{14}+\cdots+30u-7$
c_8	$u^{15}-4u^{14}+\cdots-5u^2+1$
c_9	$u^{15}+6u^{13}+\cdots+3u-1$
c_{10}	$u^{15}+3u^{14}+\cdots+30u+7$
c_{11}	$u^{15}+2u^{14}+\cdots+2u-1$
c_{12}	$u^{15}+10u^{14}+\cdots+21u+9$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{15} + 8y^{14} + \cdots - 29y - 121$
c_2, c_5	$y^{15} - 11y^{14} + \cdots + 504y - 81$
c_3, c_{11}	$y^{15} + 10y^{14} + \cdots - 14y - 1$
c_4, c_8	$y^{15} - 6y^{14} + \cdots + 10y - 1$
c_6	$y^{15} - 3y^{14} + \cdots + 2y - 1$
c_7, c_{10}	$y^{15} + 11y^{14} + \cdots - 10y - 49$
c_9	$y^{15} + 12y^{14} + \cdots + 11y - 1$
c_{12}	$y^{15} - 46y^{14} + \cdots + 153y - 81$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.210934 + 1.069980I$ $a = 0.349370 + 0.185058I$ $b = -0.648553 + 0.253657I$	$1.22966 - 2.43908I$	$-0.15311 + 1.71479I$
$u = 0.210934 - 1.069980I$ $a = 0.349370 - 0.185058I$ $b = -0.648553 - 0.253657I$	$1.22966 + 2.43908I$	$-0.15311 - 1.71479I$
$u = 0.884019 + 0.098357I$ $a = -0.056574 - 0.974530I$ $b = 1.08511 + 2.03952I$	$4.78310 - 1.20532I$	$-6.85327 + 1.75712I$
$u = 0.884019 - 0.098357I$ $a = -0.056574 + 0.974530I$ $b = 1.08511 - 2.03952I$	$4.78310 + 1.20532I$	$-6.85327 - 1.75712I$
$u = 0.875489$ $a = -0.596402$ $b = -0.730423$	-3.25365	-14.4510
$u = -0.772671 + 0.267375I$ $a = 0.109162 - 1.363130I$ $b = 0.90057 + 1.67261I$	$-1.41494 + 4.47917I$	$-9.52176 - 8.69041I$
$u = -0.772671 - 0.267375I$ $a = 0.109162 + 1.363130I$ $b = 0.90057 - 1.67261I$	$-1.41494 - 4.47917I$	$-9.52176 + 8.69041I$
$u = -1.111680 + 0.803082I$ $a = -0.366596 + 0.898410I$ $b = 0.02909 - 1.54137I$	$-7.54522 + 3.13534I$	$-12.90276 - 1.18531I$
$u = -1.111680 - 0.803082I$ $a = -0.366596 - 0.898410I$ $b = 0.02909 + 1.54137I$	$-7.54522 - 3.13534I$	$-12.90276 + 1.18531I$
$u = -1.50791 + 0.90732I$ $a = -0.118198 + 0.835276I$ $b = -0.80441 - 1.75992I$	$-4.71766 + 7.82049I$	$-7.90270 - 7.21830I$

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-1.50791-0.90732I$ $a=-0.118198-0.835276I$ $b=-0.80441+1.75992I$	$-4.71766-7.82049I$	$-7.90270+7.21830I$
$u=-0.157840+0.171948I$ $a=\ \ 0.10064-10.05960I$ $b=-0.272890-0.178968I$	$1.94655-0.28740I$	$10.27253+8.40570I$
$u=-0.157840-0.171948I$ $a=\ \ 0.10064+10.05960I$ $b=-0.272890+0.178968I$	$1.94655+0.28740I$	$10.27253-8.40570I$
$u=\ \ 1.51740+1.84920I$ $a=\ \ 0.280397+0.100742I$ $b=\ \ 1.57630-1.96372I$	$7.34533+4.44406I$	$3.28670-5.71136I$
$u=\ \ 1.51740-1.84920I$ $a=\ \ 0.280397-0.100742I$ $b=\ \ 1.57630+1.96372I$	$7.34533-4.44406I$	$3.28670+5.71136I$

III. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1	$(u^{15}+4u^{14}+\cdots+31u-11)(u^{64}-5u^{63}+\cdots+1916u+23)$
c_2	$(u^{15}+5u^{14}+\cdots-12u-9)(u^{64}+2u^{63}+\cdots-9167u-1601)$
c_3	$(u^{15}-2u^{14}+\cdots+2u+1)(u^{64}-7u^{63}+\cdots+229u+41)$
c_4	$(u^{15}+4u^{14}+\cdots+5u^2-1)(u^{64}-u^{63}+\cdots+2985u+1949)$
c_5	$(u^{15}-5u^{14}+\cdots-12u+9)(u^{64}+2u^{63}+\cdots-9167u-1601)$
c_6	$(u^{15}+u^{14}+\cdots-6u-1)(u^{64}+2u^{63}+\cdots-735u-124)$
c_7	$(u^{15}-3u^{14}+\cdots+30u-7)(u^{64}-8u^{63}+\cdots+355u-25)$
c_8	$(u^{15}-4u^{14}+\cdots-5u^2+1)(u^{64}-u^{63}+\cdots+2985u+1949)$
c_9	$(u^{15}+6u^{13}+\cdots+3u-1)(u^{64}+u^{63}+\cdots+8216u-400)$
c_{10}	$(u^{15}+3u^{14}+\cdots+30u+7)(u^{64}-8u^{63}+\cdots+355u-25)$
c_{11}	$(u^{15}+2u^{14}+\cdots+2u-1)(u^{64}-7u^{63}+\cdots+229u+41)$
c_{12}	$(u^{15}+10u^{14}+\cdots+21u+9)$ $\cdot(u^{64}+31u^{63}+\cdots-13162594u-3152393)$

IV. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1	$(y^{15}+8y^{14}+\cdots-29y-121)(y^{64}+91y^{63}+\cdots-2472756y+529)$
c_2, c_5	$(y^{15}-11y^{14}+\cdots+504y-81)$ $\cdot(y^{64}-36y^{63}+\cdots-23099829y+2563201)$
c_3, c_{11}	$(y^{15}+10y^{14}+\cdots-14y-1)(y^{64}+41y^{63}+\cdots+48501y+1681)$
c_4, c_8	$(y^{15}-6y^{14}+\cdots+10y-1)$ $\cdot(y^{64}-71y^{63}+\cdots-12929063y+3798601)$
c_6	$(y^{15}-3y^{14}+\cdots+2y-1)(y^{64}-12y^{63}+\cdots-119121y+15376)$
c_7, c_{10}	$(y^{15}+11y^{14}+\cdots-10y-49)(y^{64}+46y^{63}+\cdots+6025y+625)$
c_9	$(y^{15}+12y^{14}+\cdots+11y-1)$ $\cdot(y^{64}+75y^{63}+\cdots-82949056y+160000)$
c_{12}	$(y^{15}-46y^{14}+\cdots+153y-81)$ $\cdot(y^{64}-291y^{63}+\cdots+164152624346502y+9937581626449)$