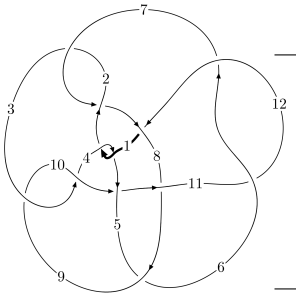
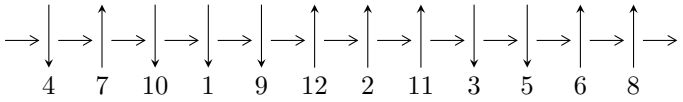
$12a_{1088}$ $(K12a_{1088})$



A knot diagram[1]

Linearized knot diagam



Solving Sequence

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

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

$$I_1^u = \langle 2.31491 \times 10^{1036} u^{173} + 1.57790 \times 10^{1037} u^{172} + \cdots + 3.00068 \times 10^{1038} b + 2.78340 \times 10^{1039},$$
$$- 1.81611 \times 10^{1038} u^{173} - 1.79120 \times 10^{1039} u^{172} + \cdots + 3.69384 \times 10^{1041} a - 1.30081 \times 10^{1043},$$
$$u^{174} + 7u^{173} + \cdots + 32468u + 1231 \rangle$$
$$I_2^u = \langle -7.43715 \times 10^{54} u^{47} + 3.00397 \times 10^{55} u^{46} + \cdots + 1.20510 \times 10^{53} b - 5.50344 \times 10^{54},$$
$$4.76026 \times 10^{54} u^{47} - 2.21701 \times 10^{55} u^{46} + \cdots + 1.20510 \times 10^{53} a - 9.61062 \times 10^{54},\ u^{48} - 4u^{47} + \cdots + 3u + 1 \rangle$$

* 2 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 222 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. $\boldsymbol{I_1^u = \langle 2.31 \times 10^{1036} u^{173} + 1.58 \times 10^{1037} u^{172} + \cdots + 3.00 \times 10^{1038} b + 2.78 \times 10^{1039},\ -1.82 \times 10^{1038} u^{173} - 1.79 \times 10^{1039} u^{172} + \cdots + 3.69 \times 10^{1041} a - 1.30 \times 10^{1043},\ u^{174} + 7u^{173} + \cdots + 32468u + 1231 \rangle}$

(i) Arc colorings

$$a_1 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$

$$a_4 = \begin{pmatrix} 0 \\ u \end{pmatrix}$$

$$a_2 = \begin{pmatrix} 1 \\ u^2 \end{pmatrix}$$

$$a_5 = \begin{pmatrix} -u \\ u \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} 0.000491659u^{173} + 0.00484915u^{172} + \cdots + 644.740u + 35.2157 \\ -0.00771462u^{173} - 0.0525848u^{172} + \cdots - 283.377u - 9.27589 \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} -0.00428694u^{173} - 0.0237318u^{172} + \cdots + 727.574u + 38.6934 \\ -0.00293603u^{173} - 0.0240038u^{172} + \cdots - 366.211u - 12.7536 \end{pmatrix}$$

$$a_3 = \begin{pmatrix} 0.00331237u^{173} + 0.0263307u^{172} + \cdots - 13.6765u - 9.11805 \\ -0.00830572u^{173} - 0.0573603u^{172} + \cdots - 199.908u - 7.28134 \end{pmatrix}$$

$$a_9 = \begin{pmatrix} 0.000473903u^{173} - 0.00172132u^{172} + \cdots - 234.484u - 4.16866 \\ -0.00269431u^{173} - 0.0157973u^{172} + \cdots - 45.6029u - 1.40926 \end{pmatrix}$$

$$a_6 = \begin{pmatrix} -0.0219404u^{173} - 0.151654u^{172} + \cdots - 303.429u - 6.94477 \\ 0.0114226u^{173} + 0.0765005u^{172} + \cdots - 28.4166u - 3.12707 \end{pmatrix}$$

$$a_8 = \begin{pmatrix} -0.0118555u^{173} - 0.0795581u^{172} + \cdots + 449.141u + 33.2239 \\ 0.00484708u^{173} + 0.0315881u^{172} + \cdots + 109.574u + 4.82128 \end{pmatrix}$$

$$a_7 = \begin{pmatrix} -0.0133040u^{173} - 0.0899921u^{172} + \cdots + 242.794u + 24.1803 \\ 0.00536885u^{173} + 0.0348291u^{172} + \cdots + 120.908u + 5.18340 \end{pmatrix}$$

$$a_{12} = \begin{pmatrix} -0.0231211u^{173} - 0.148324u^{172} + \cdots + 623.503u + 40.0407 \\ 0.00823559u^{173} + 0.0513008u^{172} + \cdots - 209.974u - 9.11274 \end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= 0.00680530u^{173} + 0.0466019u^{172} + \cdots + 155.904u + 9.18362$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1, c_4	$u^{174} - 7u^{173} + \cdots - 32468u + 1231$
c_2, c_7	$9(9u^{174} + 21u^{173} + \cdots + 57344u + 284672)$
c_3, c_9	$9(9u^{174} + 21u^{173} + \cdots + 5.26430 \times 10^7 u + 7135679)$
c_5	$u^{174} + 7u^{173} + \cdots - 115375851u + 8331579$
c_6, c_{11}	$u^{174} + 8u^{173} + \cdots + 103307u + 4271$
c_8	$81(81u^{174} + 1989u^{173} + \cdots + 432u + 32)$
c_{10}	$u^{174} - 14u^{172} + \cdots + 207068871u + 14948811$
c_{12}	$u^{174} - 3u^{173} + \cdots + 502185u + 36513$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_4	$y^{174} + 85y^{173} + \cdots + 414366y + 1515361$
c_2, c_7	$81(81y^{174} + 7083y^{173} + \cdots + 4.33429 \times 10^{12}y + 8.10381 \times 10^{10})$
c_3, c_9	81 $\cdot (81y^{174} - 9279y^{173} + \cdots - 2842222453168320y + 50917914791041)$
c_5	$y^{174} + 29y^{173} + \cdots + 23467085991243y + 69415208633241$
c_6, c_{11}	$y^{174} - 122y^{173} + \cdots + 2710884961y + 18241441$
c_8	$6561(6561y^{174} - 480573y^{173} + \cdots - 84736y + 1024)$
c_{10}	$y^{174} - 28y^{173} + \cdots - 12744162723038499y + 223466950313721$
c_{12}	$y^{174} - 13y^{173} + \cdots + 591008001867y + 1333199169$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.013817 + 1.000970I$ $a = -0.877606 + 0.723543I$ $b = 0.975979 - 0.832856I$	$3.55650 - 4.85750I$	0
$u = 0.013817 - 1.000970I$ $a = -0.877606 - 0.723543I$ $b = 0.975979 + 0.832856I$	$3.55650 + 4.85750I$	0
$u = -0.336662 + 0.936143I$ $a = 0.622357 + 0.926294I$ $b = -2.14550 - 2.04462I$	$-5.69350 + 2.20256I$	0
$u = -0.336662 - 0.936143I$ $a = 0.622357 - 0.926294I$ $b = -2.14550 + 2.04462I$	$-5.69350 - 2.20256I$	0
$u = 0.492686 + 0.861147I$ $a = 0.70963 - 2.34362I$ $b = -0.76003 + 1.86058I$	$1.69785 - 2.03628I$	0
$u = 0.492686 - 0.861147I$ $a = 0.70963 + 2.34362I$ $b = -0.76003 - 1.86058I$	$1.69785 + 2.03628I$	0
$u = 0.447668 + 0.885202I$ $a = -1.16858 + 1.26192I$ $b = 1.79422 - 1.04409I$	$1.75392 - 1.84767I$	0
$u = 0.447668 - 0.885202I$ $a = -1.16858 - 1.26192I$ $b = 1.79422 + 1.04409I$	$1.75392 + 1.84767I$	0
$u = 0.328880 + 0.961073I$ $a = 0.605411 - 0.853636I$ $b = -2.18230 - 0.61609I$	$5.11610 - 3.70241I$	0
$u = 0.328880 - 0.961073I$ $a = 0.605411 + 0.853636I$ $b = -2.18230 + 0.61609I$	$5.11610 + 3.70241I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.955094 + 0.233275I$ $a = 1.128060 - 0.703433I$ $b = -0.133729 - 0.261612I$	$0.25760 + 8.11693I$	0
$u = 0.955094 - 0.233275I$ $a = 1.128060 + 0.703433I$ $b = -0.133729 + 0.261612I$	$0.25760 - 8.11693I$	0
$u = 0.406624 + 0.895025I$ $a = -1.17116 - 0.81104I$ $b = 1.64239 + 0.37068I$	$0.87176 - 1.68280I$	0
$u = 0.406624 - 0.895025I$ $a = -1.17116 + 0.81104I$ $b = 1.64239 - 0.37068I$	$0.87176 + 1.68280I$	0
$u = -0.738781 + 0.646428I$ $a = -1.092200 - 0.648075I$ $b = 0.390019 - 0.380217I$	$-2.65819 + 6.17258I$	0
$u = -0.738781 - 0.646428I$ $a = -1.092200 + 0.648075I$ $b = 0.390019 + 0.380217I$	$-2.65819 - 6.17258I$	0
$u = -0.810447 + 0.546598I$ $a = -0.69029 - 1.24742I$ $b = 0.325194 + 0.260356I$	$-2.12549 - 5.85975I$	0
$u = -0.810447 - 0.546598I$ $a = -0.69029 + 1.24742I$ $b = 0.325194 - 0.260356I$	$-2.12549 + 5.85975I$	0
$u = 0.989956 + 0.256267I$ $a = 0.335141 + 0.634105I$ $b = -0.851772 + 0.310586I$	$-3.87929 + 2.56681I$	0
$u = 0.989956 - 0.256267I$ $a = 0.335141 - 0.634105I$ $b = -0.851772 - 0.310586I$	$-3.87929 - 2.56681I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.367132+0.900403I$ $a=\ \ 0.61697+1.73830I$ $b=-0.264114-0.508114I$	$-4.50987+7.17407I$	0
$u=-0.367132-0.900403I$ $a=\ \ 0.61697-1.73830I$ $b=-0.264114+0.508114I$	$-4.50987-7.17407I$	0
$u=\ \ 0.262500+0.935913I$ $a=\ \ 1.49603+0.64421I$ $b=-1.97415-0.00163I$	$5.75794-1.09159I$	0
$u=\ \ 0.262500-0.935913I$ $a=\ \ 1.49603-0.64421I$ $b=-1.97415+0.00163I$	$5.75794+1.09159I$	0
$u=-0.126802+1.027500I$ $a=\ \ 0.675385-0.178192I$ $b=-1.75138+0.44719I$	$7.82395-2.11414I$	0
$u=-0.126802-1.027500I$ $a=\ \ 0.675385+0.178192I$ $b=-1.75138-0.44719I$	$7.82395+2.11414I$	0
$u=-0.509013+0.905109I$ $a=-0.46648-1.41180I$ $b=-0.082766+0.207097I$	$-6.89574+2.99126I$	0
$u=-0.509013-0.905109I$ $a=-0.46648+1.41180I$ $b=-0.082766-0.207097I$	$-6.89574-2.99126I$	0
$u=-0.341745+1.011510I$ $a=\ \ 0.515404-0.603459I$ $b=-1.65693+0.02938I$	$1.63734+3.57373I$	0
$u=-0.341745-1.011510I$ $a=\ \ 0.515404+0.603459I$ $b=-1.65693-0.02938I$	$1.63734-3.57373I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.018349+1.068000I$ $a=-0.782065+0.845005I$ $b=\ \ 1.60889-0.09679I$	$3.61687-0.87679I$	0
$u=-0.018349-1.068000I$ $a=-0.782065-0.845005I$ $b=\ \ 1.60889+0.09679I$	$3.61687+0.87679I$	0
$u=-0.034695+0.930488I$ $a=\ \ 0.609160-0.457460I$ $b=-0.549427+0.074020I$	$0.302643-1.311420I$	0
$u=-0.034695-0.930488I$ $a=\ \ 0.609160+0.457460I$ $b=-0.549427-0.074020I$	$0.302643+1.311420I$	0
$u=-0.468510+0.965808I$ $a=-0.869272-0.965671I$ $b=\ \ 2.12048+1.46860I$	$-4.81659+8.16496I$	0
$u=-0.468510-0.965808I$ $a=-0.869272+0.965671I$ $b=\ \ 2.12048-1.46860I$	$-4.81659-8.16496I$	0
$u=-0.736645+0.781648I$ $a=-0.585159-0.321552I$ $b=\ \ 1.65919-0.14897I$	$4.91026+6.47248I$	0
$u=-0.736645-0.781648I$ $a=-0.585159+0.321552I$ $b=\ \ 1.65919+0.14897I$	$4.91026-6.47248I$	0
$u=-0.203162+1.055200I$ $a=-0.806942+0.076929I$ $b=\ \ 1.183680+0.693983I$	$4.47782+1.33772I$	0
$u=-0.203162-1.055200I$ $a=-0.806942-0.076929I$ $b=\ \ 1.183680-0.693983I$	$4.47782-1.33772I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.924814 + 0.024551I$ $a = -1.193050 + 0.269217I$ $b = 0.012081 + 0.319575I$	$-3.84091 + 3.33408I$	0
$u = 0.924814 - 0.024551I$ $a = -1.193050 - 0.269217I$ $b = 0.012081 - 0.319575I$	$-3.84091 - 3.33408I$	0
$u = 0.808933 + 0.447590I$ $a = 0.429964 + 0.040440I$ $b = 0.223394 - 0.375440I$	$-1.15778 - 2.33744I$	0
$u = 0.808933 - 0.447590I$ $a = 0.429964 - 0.040440I$ $b = 0.223394 + 0.375440I$	$-1.15778 + 2.33744I$	0
$u = -0.549757 + 0.740052I$ $a = 1.156340 + 0.735961I$ $b = -1.64031 - 1.43048I$	$-7.39558 + 1.27552I$	0
$u = -0.549757 - 0.740052I$ $a = 1.156340 - 0.735961I$ $b = -1.64031 + 1.43048I$	$-7.39558 - 1.27552I$	0
$u = 0.916100 + 0.038866I$ $a = 1.203700 - 0.039545I$ $b = -0.230480 + 0.010630I$	$-2.28017 - 0.00358I$	0
$u = 0.916100 - 0.038866I$ $a = 1.203700 + 0.039545I$ $b = -0.230480 - 0.010630I$	$-2.28017 + 0.00358I$	0
$u = -0.430201 + 0.805694I$ $a = -0.96655 - 1.20339I$ $b = 1.33735 + 1.69205I$	$-4.76385 - 3.81670I$	0
$u = -0.430201 - 0.805694I$ $a = -0.96655 + 1.20339I$ $b = 1.33735 - 1.69205I$	$-4.76385 + 3.81670I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.012724+1.089340I$ $a=-0.740074+0.570838I$ $b=\ \ 1.62952-0.11042I$	$3.42230-0.78350I$	0
$u=-0.012724-1.089340I$ $a=-0.740074-0.570838I$ $b=\ \ 1.62952+0.11042I$	$3.42230+0.78350I$	0
$u=\ \ 0.276649+0.848111I$ $a=-0.334593+0.819992I$ $b=\ \ 2.41948-0.29452I$	$4.63210+1.11022I$	0
$u=\ \ 0.276649-0.848111I$ $a=-0.334593-0.819992I$ $b=\ \ 2.41948+0.29452I$	$4.63210-1.11022I$	0
$u=\ \ 0.862802+0.197630I$ $a=-0.498749-0.983193I$ $b=\ \ 1.116060-0.106562I$	$0.50657+8.30498I$	0
$u=\ \ 0.862802-0.197630I$ $a=-0.498749+0.983193I$ $b=\ \ 1.116060+0.106562I$	$0.50657-8.30498I$	0
$u=-1.099610+0.200124I$ $a=\ \ 1.070300+0.416814I$ $b=-0.422987-0.219527I$	$-5.66272-3.90507I$	0
$u=-1.099610-0.200124I$ $a=\ \ 1.070300-0.416814I$ $b=-0.422987+0.219527I$	$-5.66272+3.90507I$	0
$u=-0.365063+0.800310I$ $a=-0.45143-1.53794I$ $b=\ \ 0.112373-0.608033I$	$-6.12075+0.81254I$	0
$u=-0.365063-0.800310I$ $a=-0.45143+1.53794I$ $b=\ \ 0.112373+0.608033I$	$-6.12075-0.81254I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 1.106990 + 0.270307I$ $a = 0.479434 - 0.566277I$ $b = 0.300216 - 0.217688I$	$-0.41197 - 2.54153I$	0
$u = 1.106990 - 0.270307I$ $a = 0.479434 + 0.566277I$ $b = 0.300216 + 0.217688I$	$-0.41197 + 2.54153I$	0
$u = -0.802756 + 0.818527I$ $a = 0.381070 + 0.989267I$ $b = 0.375686 + 0.299377I$	$0.343900 + 0.003740I$	0
$u = -0.802756 - 0.818527I$ $a = 0.381070 - 0.989267I$ $b = 0.375686 - 0.299377I$	$0.343900 - 0.003740I$	0
$u = -0.448252 + 1.057250I$ $a = -0.753830 + 0.535282I$ $b = 1.79507 - 0.07646I$	$6.47757 + 7.74757I$	0
$u = -0.448252 - 1.057250I$ $a = -0.753830 - 0.535282I$ $b = 1.79507 + 0.07646I$	$6.47757 - 7.74757I$	0
$u = -0.528288 + 0.667390I$ $a = 0.82653 + 1.63332I$ $b = -0.364968 + 0.049818I$	$-5.74474 - 4.12306I$	0
$u = -0.528288 - 0.667390I$ $a = 0.82653 - 1.63332I$ $b = -0.364968 - 0.049818I$	$-5.74474 + 4.12306I$	0
$u = 1.095800 + 0.346908I$ $a = -0.873237 - 0.006627I$ $b = 0.047350 + 0.197104I$	$-2.51801 - 1.53360I$	0
$u = 1.095800 - 0.346908I$ $a = -0.873237 + 0.006627I$ $b = 0.047350 - 0.197104I$	$-2.51801 + 1.53360I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.770969+0.329721I$ $a=-1.237760+0.289483I$ $b=\ \ 1.74374+1.07427I$	$-0.85433+6.97516I$	0
$u=-0.770969-0.329721I$ $a=-1.237760-0.289483I$ $b=\ \ 1.74374-1.07427I$	$-0.85433-6.97516I$	0
$u=-0.718866+0.913664I$ $a=\ \ 0.331140+0.669358I$ $b=-1.30314-0.85182I$	$-1.88752-0.62930I$	0
$u=-0.718866-0.913664I$ $a=\ \ 0.331140-0.669358I$ $b=-1.30314+0.85182I$	$-1.88752+0.62930I$	0
$u=-0.046077+1.174130I$ $a=\ \ 1.152090-0.536877I$ $b=-1.75302-0.09210I$	$4.93357-0.97754I$	0
$u=-0.046077-1.174130I$ $a=\ \ 1.152090+0.536877I$ $b=-1.75302+0.09210I$	$4.93357+0.97754I$	0
$u=-0.556358+1.056990I$ $a=\ \ 0.490430+0.548064I$ $b=-1.40325+0.25892I$	$5.99085-1.39243I$	0
$u=-0.556358-1.056990I$ $a=\ \ 0.490430-0.548064I$ $b=-1.40325-0.25892I$	$5.99085+1.39243I$	0
$u=-0.146238+1.217970I$ $a=\ \ 0.161544-0.573504I$ $b=-0.84837+1.58485I$	$6.22366+1.06281I$	0
$u=-0.146238-1.217970I$ $a=\ \ 0.161544+0.573504I$ $b=-0.84837-1.58485I$	$6.22366-1.06281I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-1.141950+0.455869I$ $a=\ \ 0.636606+0.443874I$ $b=-1.038490+0.602555I$	$-3.50732+2.35533I$	0
$u=-1.141950-0.455869I$ $a=\ \ 0.636606-0.443874I$ $b=-1.038490-0.602555I$	$-3.50732-2.35533I$	0
$u=-0.679889+1.029310I$ $a=-0.426804-0.748271I$ $b=\ \ 1.25418+0.81305I$	$-3.01224+1.18443I$	0
$u=-0.679889-1.029310I$ $a=-0.426804+0.748271I$ $b=\ \ 1.25418-0.81305I$	$-3.01224-1.18443I$	0
$u=-0.487060+1.148750I$ $a=\ \ 0.636212+0.744323I$ $b=-1.84745+0.44347I$	$2.44439+10.88210I$	0
$u=-0.487060-1.148750I$ $a=\ \ 0.636212-0.744323I$ $b=-1.84745-0.44347I$	$2.44439-10.88210I$	0
$u=-0.592694+1.103180I$ $a=-0.971240-0.752201I$ $b=\ \ 1.83398+1.02098I$	$-3.15555+8.67271I$	0
$u=-0.592694-1.103180I$ $a=-0.971240+0.752201I$ $b=\ \ 1.83398-1.02098I$	$-3.15555-8.67271I$	0
$u=-0.653663+1.068910I$ $a=\ \ 1.130960+0.579991I$ $b=-2.02558-0.71803I$	$-0.54286+11.35800I$	0
$u=-0.653663-1.068910I$ $a=\ \ 1.130960-0.579991I$ $b=-2.02558+0.71803I$	$-0.54286-11.35800I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.670294 + 1.061820I$ $a = 0.781285 - 0.405625I$ $b = -1.268560 + 0.535719I$	$-1.10245 - 3.11342I$	0
$u = 0.670294 - 1.061820I$ $a = 0.781285 + 0.405625I$ $b = -1.268560 - 0.535719I$	$-1.10245 + 3.11342I$	0
$u = -0.423419 + 1.182910I$ $a = 0.915230 + 0.860545I$ $b = -1.60590 - 1.41215I$	$1.68819 + 8.80919I$	0
$u = -0.423419 - 1.182910I$ $a = 0.915230 - 0.860545I$ $b = -1.60590 + 1.41215I$	$1.68819 - 8.80919I$	0
$u = 0.589374 + 1.110550I$ $a = 0.278014 + 0.432997I$ $b = -0.509822 + 0.106003I$	$-0.39456 - 3.63231I$	0
$u = 0.589374 - 1.110550I$ $a = 0.278014 - 0.432997I$ $b = -0.509822 - 0.106003I$	$-0.39456 + 3.63231I$	0
$u = 1.183570 + 0.455663I$ $a = 0.451265 - 0.010563I$ $b = -0.699679 - 0.282531I$	$-2.76313 - 2.33214I$	0
$u = 1.183570 - 0.455663I$ $a = 0.451265 + 0.010563I$ $b = -0.699679 + 0.282531I$	$-2.76313 + 2.33214I$	0
$u = -1.195980 + 0.441311I$ $a = 0.746997 + 0.776504I$ $b = -0.099857 + 0.185143I$	$-2.5274 - 13.9507I$	0
$u = -1.195980 - 0.441311I$ $a = 0.746997 - 0.776504I$ $b = -0.099857 - 0.185143I$	$-2.5274 + 13.9507I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.024790 + 0.714733I$ $a = -0.93542 - 1.68489I$ $b = 1.77448 + 0.16650I$	$1.47319 + 4.44377I$	0
$u = 0.024790 - 0.714733I$ $a = -0.93542 + 1.68489I$ $b = 1.77448 - 0.16650I$	$1.47319 - 4.44377I$	0
$u = 0.762863 + 1.042360I$ $a = -0.763808 + 0.135936I$ $b = 1.28863 - 0.83061I$	$1.89947 - 4.69191I$	0
$u = 0.762863 - 1.042360I$ $a = -0.763808 - 0.135936I$ $b = 1.28863 + 0.83061I$	$1.89947 + 4.69191I$	0
$u = -0.553382 + 1.177720I$ $a = -0.535907 - 0.660632I$ $b = 1.88146 - 0.03878I$	$-0.65670 + 3.53578I$	0
$u = -0.553382 - 1.177720I$ $a = -0.535907 + 0.660632I$ $b = 1.88146 + 0.03878I$	$-0.65670 - 3.53578I$	0
$u = -0.600589 + 0.334678I$ $a = 1.54532 + 1.41028I$ $b = -0.323623 - 0.247652I$	$-5.29796 - 3.74049I$	0
$u = -0.600589 - 0.334678I$ $a = 1.54532 - 1.41028I$ $b = -0.323623 + 0.247652I$	$-5.29796 + 3.74049I$	0
$u = 0.331079 + 1.270820I$ $a = -0.862064 + 0.260620I$ $b = 1.39447 - 0.87834I$	$4.32037 - 5.72260I$	0
$u = 0.331079 - 1.270820I$ $a = -0.862064 - 0.260620I$ $b = 1.39447 + 0.87834I$	$4.32037 + 5.72260I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.568689 + 1.191310I$ $a = -0.819006 - 0.672921I$ $b = 1.68863 + 0.11182I$	$3.41471 - 13.53380I$	0
$u = 0.568689 - 1.191310I$ $a = -0.819006 + 0.672921I$ $b = 1.68863 - 0.11182I$	$3.41471 + 13.53380I$	0
$u = 0.532788 + 1.215310I$ $a = 0.702350 - 0.602925I$ $b = -1.85818 + 1.31743I$	$-0.42530 - 8.38788I$	0
$u = 0.532788 - 1.215310I$ $a = 0.702350 + 0.602925I$ $b = -1.85818 - 1.31743I$	$-0.42530 + 8.38788I$	0
$u = -1.222390 + 0.532670I$ $a = -0.660519 - 0.708234I$ $b = 0.110637 - 0.374807I$	$-6.81067 - 7.27123I$	0
$u = -1.222390 - 0.532670I$ $a = -0.660519 + 0.708234I$ $b = 0.110637 + 0.374807I$	$-6.81067 + 7.27123I$	0
$u = 0.611450 + 1.186600I$ $a = 0.652085 + 0.507430I$ $b = -1.55187 + 0.01049I$	$-1.09609 - 8.23470I$	0
$u = 0.611450 - 1.186600I$ $a = 0.652085 - 0.507430I$ $b = -1.55187 - 0.01049I$	$-1.09609 + 8.23470I$	0
$u = 0.189687 + 1.329370I$ $a = -0.442990 + 0.626160I$ $b = 1.29568 - 1.02096I$	$2.31630 - 3.88848I$	0
$u = 0.189687 - 1.329370I$ $a = -0.442990 - 0.626160I$ $b = 1.29568 + 1.02096I$	$2.31630 + 3.88848I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.289883 + 1.317400I$ $a = 0.666362 - 0.524633I$ $b = -1.53012 - 0.19912I$	$5.36635 + 4.17200I$	0
$u = 0.289883 - 1.317400I$ $a = 0.666362 + 0.524633I$ $b = -1.53012 + 0.19912I$	$5.36635 - 4.17200I$	0
$u = 0.334377 + 1.306940I$ $a = 0.011036 - 0.480647I$ $b = 0.620928 + 0.768982I$	$0.95349 - 1.43422I$	0
$u = 0.334377 - 1.306940I$ $a = 0.011036 + 0.480647I$ $b = 0.620928 - 0.768982I$	$0.95349 + 1.43422I$	0
$u = 0.600155 + 1.210060I$ $a = -0.828161 + 0.647374I$ $b = 1.99737 - 1.18521I$	$3.19168 - 13.70870I$	0
$u = 0.600155 - 1.210060I$ $a = -0.828161 - 0.647374I$ $b = 1.99737 + 1.18521I$	$3.19168 + 13.70870I$	0
$u = 0.611151 + 1.241970I$ $a = -0.610138 + 0.594070I$ $b = 1.23057 - 0.89917I$	$1.21496 - 5.62268I$	0
$u = 0.611151 - 1.241970I$ $a = -0.610138 - 0.594070I$ $b = 1.23057 + 0.89917I$	$1.21496 + 5.62268I$	0
$u = 0.763724 + 1.159790I$ $a = 0.273029 - 0.397530I$ $b = -0.914581 + 0.740763I$	$-0.13958 - 5.03749I$	0
$u = 0.763724 - 1.159790I$ $a = 0.273029 + 0.397530I$ $b = -0.914581 - 0.740763I$	$-0.13958 + 5.03749I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.769281 + 1.157060I$ $a = -0.080311 - 0.640041I$ $b = 1.322790 + 0.093237I$	$2.08566 - 1.98401I$	0
$u = 0.769281 - 1.157060I$ $a = -0.080311 + 0.640041I$ $b = 1.322790 - 0.093237I$	$2.08566 + 1.98401I$	0
$u = 1.32898 + 0.51078I$ $a = -0.550872 + 0.209588I$ $b = 0.169795 - 0.208671I$	$-3.03200 - 3.48105I$	0
$u = 1.32898 - 0.51078I$ $a = -0.550872 - 0.209588I$ $b = 0.169795 + 0.208671I$	$-3.03200 + 3.48105I$	0
$u = -0.170664 + 0.542787I$ $a = -0.22802 - 2.84190I$ $b = -0.157799 + 0.465396I$	$-0.95086 - 5.88563I$	$0. - 4.85169I$
$u = -0.170664 - 0.542787I$ $a = -0.22802 + 2.84190I$ $b = -0.157799 - 0.465396I$	$-0.95086 + 5.88563I$	$0. + 4.85169I$
$u = -0.035648 + 0.560359I$ $a = 0.35430 + 1.38809I$ $b = -3.10184 + 0.01966I$	$-4.39180 - 0.37220I$	$0. - 2.93367I$
$u = -0.035648 - 0.560359I$ $a = 0.35430 - 1.38809I$ $b = -3.10184 - 0.01966I$	$-4.39180 + 0.37220I$	$0. + 2.93367I$
$u = -0.88386 + 1.13534I$ $a = -0.750609 - 0.322836I$ $b = 2.03908 + 1.15033I$	$0.94177 + 6.59500I$	0
$u = -0.88386 - 1.13534I$ $a = -0.750609 + 0.322836I$ $b = 2.03908 - 1.15033I$	$0.94177 - 6.59500I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.23627 + 1.42205I$ $a = 0.078341 + 0.625843I$ $b = -0.454089 - 0.989680I$	$5.79784 + 3.69967I$	0
$u = 0.23627 - 1.42205I$ $a = 0.078341 - 0.625843I$ $b = -0.454089 + 0.989680I$	$5.79784 - 3.69967I$	0
$u = -0.85566 + 1.16090I$ $a = 0.693358 + 0.527928I$ $b = -1.305870 - 0.507912I$	$-3.23339 + 6.95414I$	0
$u = -0.85566 - 1.16090I$ $a = 0.693358 - 0.527928I$ $b = -1.305870 + 0.507912I$	$-3.23339 - 6.95414I$	0
$u = -0.22273 + 1.43028I$ $a = -0.433768 + 0.665635I$ $b = 1.54989 + 0.00015I$	$3.29465 - 1.47827I$	0
$u = -0.22273 - 1.43028I$ $a = -0.433768 - 0.665635I$ $b = 1.54989 - 0.00015I$	$3.29465 + 1.47827I$	0
$u = -0.490288 + 0.237921I$ $a = -0.40711 + 1.37691I$ $b = 0.476410 + 0.191070I$	$4.32415 - 3.95433I$	$5.14455 + 3.81317I$
$u = -0.490288 - 0.237921I$ $a = -0.40711 - 1.37691I$ $b = 0.476410 - 0.191070I$	$4.32415 + 3.95433I$	$5.14455 - 3.81317I$
$u = -0.73449 + 1.25701I$ $a = -0.900599 - 0.549465I$ $b = 2.02119 + 1.02006I$	$0.1025 + 20.7741I$	0
$u = -0.73449 - 1.25701I$ $a = -0.900599 + 0.549465I$ $b = 2.02119 - 1.02006I$	$0.1025 - 20.7741I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.75846+1.24692I$ $a=\ \ 0.819122+0.526837I$ $b=-2.03325-1.00282I$	$-4.4125+14.2814I$	0
$u=-0.75846-1.24692I$ $a=\ \ 0.819122-0.526837I$ $b=-2.03325+1.00282I$	$-4.4125-14.2814I$	0
$u=-1.24399+0.77812I$ $a=-0.556076-0.515195I$ $b=\ \ 0.423537+0.191599I$	$-4.65337+0.52341I$	0
$u=-1.24399-0.77812I$ $a=-0.556076+0.515195I$ $b=\ \ 0.423537-0.191599I$	$-4.65337-0.52341I$	0
$u=-0.389016+0.357587I$ $a=\ \ 2.18449+1.46116I$ $b=-0.528021+0.344010I$	$-5.09298+3.86575I$	$-7.02785+3.98900I$
$u=-0.389016-0.357587I$ $a=\ \ 2.18449-1.46116I$ $b=-0.528021-0.344010I$	$-5.09298-3.86575I$	$-7.02785-3.98900I$
$u=\ \ 0.42456+1.40989I$ $a=\ \ 0.803659-0.565846I$ $b=-1.46528+1.05181I$	$3.07659-6.72028I$	0
$u=\ \ 0.42456-1.40989I$ $a=\ \ 0.803659+0.565846I$ $b=-1.46528-1.05181I$	$3.07659+6.72028I$	0
$u=\ \ 0.41592+1.43222I$ $a=\ \ 0.128211+0.313027I$ $b=-0.496253-0.951501I$	$5.02935-7.75653I$	0
$u=\ \ 0.41592-1.43222I$ $a=\ \ 0.128211-0.313027I$ $b=-0.496253+0.951501I$	$5.02935+7.75653I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.69744+1.33683I$ $a=-0.686338-0.722786I$ $b=1.22406+0.92608I$	$-2.07218+10.45970I$	0
$u=-0.69744-1.33683I$ $a=-0.686338+0.722786I$ $b=1.22406-0.92608I$	$-2.07218-10.45970I$	0
$u=-0.200283+0.395755I$ $a=-0.16870-1.51310I$ $b=2.95156+0.13955I$	$-0.31450-7.14678I$	$-4.49203-2.10558I$
$u=-0.200283-0.395755I$ $a=-0.16870+1.51310I$ $b=2.95156-0.13955I$	$-0.31450+7.14678I$	$-4.49203+2.10558I$
$u=0.59921+1.45206I$ $a=-0.653395+0.346444I$ $b=1.64668-0.86803I$	$3.17261-4.22099I$	0
$u=0.59921-1.45206I$ $a=-0.653395-0.346444I$ $b=1.64668+0.86803I$	$3.17261+4.22099I$	0
$u=0.04516+1.62819I$ $a=0.355744-0.483182I$ $b=-0.898681+0.795282I$	$5.60191-9.19561I$	0
$u=0.04516-1.62819I$ $a=0.355744+0.483182I$ $b=-0.898681-0.795282I$	$5.60191+9.19561I$	0
$u=0.330110+0.104153I$ $a=0.04887-2.60150I$ $b=-0.259689+0.917401I$	$1.077580-0.261089I$	$4.62633-0.35337I$
$u=0.330110-0.104153I$ $a=0.04887+2.60150I$ $b=-0.259689-0.917401I$	$1.077580+0.261089I$	$4.62633+0.35337I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.117236+0.267047I$ $a=\ \ 1.25828-1.12794I$ $b=-0.152184-0.364471I$	$0.073015-1.045710I$	$1.31066+6.08485I$
$u=-0.117236-0.267047I$ $a=\ \ 1.25828+1.12794I$ $b=-0.152184+0.364471I$	$0.073015+1.045710I$	$1.31066-6.08485I$
$u=-0.0847749+0.0636642I$ $a=\ \ 5.09053+5.56696I$ $b=\ \ 0.603592+0.019819I$	$2.21026+0.01481I$	$4.68494+0.68731I$
$u=-0.0847749-0.0636642I$ $a=\ \ 5.09053-5.56696I$ $b=\ \ 0.603592-0.019819I$	$2.21026-0.01481I$	$4.68494-0.68731I$

II.

$\boldsymbol{I_2^u = \langle -7.44\times10^{54}u^{47}+3.00\times10^{55}u^{46}+\cdots+1.21\times10^{53}b-5.50\times10^{54},\ 4.76\times10^{54}u^{47}-2.22\times10^{55}u^{46}+\cdots+1.21\times10^{53}a-9.61\times10^{54},\ u^{48}-4u^{47}+\cdots+3u+1\rangle}$

(i) Arc colorings

$$a_1 = \begin{pmatrix}1\\0\end{pmatrix}$$

$$a_4 = \begin{pmatrix}0\\u\end{pmatrix}$$

$$a_2 = \begin{pmatrix}1\\u^2\end{pmatrix}$$

$$a_5 = \begin{pmatrix}-u\\u\end{pmatrix}$$

$$a_{10} = \begin{pmatrix}-39.5010u^{47}+183.969u^{46}+\cdots+47.7087u+79.7496\\61.7141u^{47}-249.272u^{46}+\cdots+340.917u+45.6680\end{pmatrix}$$

$$a_{11} = \begin{pmatrix}-30.1853u^{47}+150.609u^{46}+\cdots+140.571u+103.299\\52.3984u^{47}-215.911u^{46}+\cdots+248.055u+22.1184\end{pmatrix}$$

$$a_3 = \begin{pmatrix}33.3626u^{47}-167.692u^{46}+\cdots-145.410u-113.501\\12.7121u^{47}-37.2179u^{46}+\cdots+171.457u+59.4091\end{pmatrix}$$

$$a_9 = \begin{pmatrix}39.5152u^{47}-164.422u^{46}+\cdots+73.6186u-11.7077\\36.1946u^{47}-153.725u^{46}+\cdots+148.087u+0.974418\end{pmatrix}$$

$$a_6 = \begin{pmatrix}-137.333u^{47}+544.394u^{46}+\cdots-738.090u-90.5797\\68.5653u^{47}-260.535u^{46}+\cdots+501.392u+105.289\end{pmatrix}$$

$$a_8 = \begin{pmatrix}76.0061u^{47}-300.609u^{46}+\cdots+338.470u+52.5437\\-33.9909u^{47}+144.635u^{46}+\cdots-90.7103u+15.7144\end{pmatrix}$$

$$a_7 = \begin{pmatrix}85.4533u^{47}-343.849u^{46}+\cdots+342.927u+33.4136\\-34.6122u^{47}+148.249u^{46}+\cdots-83.8039u+21.1657\end{pmatrix}$$

$$a_{12} = \begin{pmatrix}148.793u^{47}-560.655u^{46}+\cdots+1022.34u+205.796\\-56.4142u^{47}+209.831u^{46}+\cdots-393.894u-88.9611\end{pmatrix}$$

(ii) Obstruction class $= 1$

(iii) Cusp Shapes $= 35.4796u^{47}-103.388u^{46}+\cdots+567.551u+258.683$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{48} - 4u^{47} + \cdots + 3u + 1$
c_2	$9(9u^{48} + 12u^{47} + \cdots - 2u + 1)$
c_3	$9(9u^{48} + 12u^{47} + \cdots + u + 1)$
c_4	$u^{48} + 4u^{47} + \cdots - 3u + 1$
c_5	$u^{48} + 6u^{46} + \cdots - 90u + 81$
c_6	$u^{48} - 5u^{47} + \cdots + 14u + 1$
c_7	$9(9u^{48} - 12u^{47} + \cdots + 2u + 1)$
c_8	$81(81u^{48} + 630u^{47} + \cdots + 7u + 1)$
c_9	$9(9u^{48} - 12u^{47} + \cdots - u + 1)$
c_{10}	$u^{48} - u^{47} + \cdots - 1572u + 333$
c_{11}	$u^{48} + 5u^{47} + \cdots - 14u + 1$
c_{12}	$u^{48} + 2u^{47} + \cdots + 48u + 9$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_4	$y^{48} + 24y^{47} + \cdots + 43y + 1$
c_2, c_7	$81(81y^{48} + 2574y^{47} + \cdots + 44y + 1)$
c_3, c_9	$81(81y^{48} - 2448y^{47} + \cdots - 43y + 1)$
c_5	$y^{48} + 12y^{47} + \cdots + 541728y + 6561$
c_6, c_{11}	$y^{48} - 39y^{47} + \cdots - 50y + 1$
c_8	$6561(6561y^{48} - 27378y^{47} + \cdots + 3y + 1)$
c_{10}	$y^{48} - y^{47} + \cdots - 316674y + 110889$
c_{12}	$y^{48} - 22y^{47} + \cdots - 1476y + 81$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.677268 + 0.753027I$ $a = -0.431899 + 0.148921I$ $b = 1.57452 + 0.19789I$	$5.21254 - 6.25233I$	$10.54912 - 0.72730I$
$u = 0.677268 - 0.753027I$ $a = -0.431899 - 0.148921I$ $b = 1.57452 - 0.19789I$	$5.21254 + 6.25233I$	$10.54912 + 0.72730I$
$u = -0.049406 + 0.977314I$ $a = 1.47729 - 0.36221I$ $b = -1.89462 - 0.24074I$	$6.10651 + 0.21347I$	$8.56006 + 0.47025I$
$u = -0.049406 - 0.977314I$ $a = 1.47729 + 0.36221I$ $b = -1.89462 + 0.24074I$	$6.10651 - 0.21347I$	$8.56006 - 0.47025I$
$u = -0.941040 + 0.129955I$ $a = -1.385730 + 0.034643I$ $b = 0.491679 + 0.001678I$	$-5.40572 + 4.59588I$	$-6.39371 - 10.13528I$
$u = -0.941040 - 0.129955I$ $a = -1.385730 - 0.034643I$ $b = 0.491679 - 0.001678I$	$-5.40572 - 4.59588I$	$-6.39371 + 10.13528I$
$u = 0.582367 + 0.927797I$ $a = -0.227225 - 1.036490I$ $b = 0.896743 + 0.495914I$	$1.61918 - 1.76668I$	$0. + 2.36762I$
$u = 0.582367 - 0.927797I$ $a = -0.227225 + 1.036490I$ $b = 0.896743 - 0.495914I$	$1.61918 + 1.76668I$	$0. - 2.36762I$
$u = 0.016037 + 0.885524I$ $a = -0.474282 + 0.861436I$ $b = 2.34120 - 0.24752I$	$5.06746 - 2.21168I$	$6.16953 + 3.78028I$
$u = 0.016037 - 0.885524I$ $a = -0.474282 - 0.861436I$ $b = 2.34120 + 0.24752I$	$5.06746 + 2.21168I$	$6.16953 - 3.78028I$

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.348173 + 1.068330I$ $a = 0.384302 - 0.349445I$ $b = -1.377670 - 0.227169I$	$6.62054 + 1.94068I$	$5.69167 + 0.I$
$u = 0.348173 - 1.068330I$ $a = 0.384302 + 0.349445I$ $b = -1.377670 + 0.227169I$	$6.62054 - 1.94068I$	$5.69167 + 0.I$
$u = 0.015056 + 1.131720I$ $a = -0.004738 - 0.537449I$ $b = -1.18637 + 0.94362I$	$6.01151 + 2.03416I$	$4.66426 - 3.19973I$
$u = 0.015056 - 1.131720I$ $a = -0.004738 + 0.537449I$ $b = -1.18637 - 0.94362I$	$6.01151 - 2.03416I$	$4.66426 + 3.19973I$
$u = 0.438369 + 1.119810I$ $a = -0.393884 - 0.456803I$ $b = 1.215450 + 0.414132I$	$1.65570 - 1.64946I$	0
$u = 0.438369 - 1.119810I$ $a = -0.393884 + 0.456803I$ $b = 1.215450 - 0.414132I$	$1.65570 + 1.64946I$	0
$u = -0.419584 + 0.637730I$ $a = -1.14410 - 1.44387I$ $b = 0.393077 - 0.174688I$	$-4.93101 + 4.30343I$	$-0.49316 - 11.47398I$
$u = -0.419584 - 0.637730I$ $a = -1.14410 + 1.44387I$ $b = 0.393077 + 0.174688I$	$-4.93101 - 4.30343I$	$-0.49316 + 11.47398I$
$u = -0.787789 + 0.961220I$ $a = -0.934268 - 0.326848I$ $b = 1.83851 + 1.17419I$	$0.44960 + 6.79917I$	0
$u = -0.787789 - 0.961220I$ $a = -0.934268 + 0.326848I$ $b = 1.83851 - 1.17419I$	$0.44960 - 6.79917I$	0

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.390999+0.626599I$ $a=\ \ 0.632484+0.926398I$ $b=-2.67155-0.60653I$	$-4.56973+0.99702I$	$-3.86813-6.97623I$
$u=-0.390999-0.626599I$ $a=\ \ 0.632484-0.926398I$ $b=-2.67155+0.60653I$	$-4.56973-0.99702I$	$-3.86813+6.97623I$
$u=-0.983251+0.811877I$ $a=\ \ 0.528823+0.566984I$ $b=-1.111440-0.289664I$	$-4.08113+1.15134I$	0
$u=-0.983251-0.811877I$ $a=\ \ 0.528823-0.566984I$ $b=-1.111440+0.289664I$	$-4.08113-1.15134I$	0
$u=\ \ 1.287570+0.340175I$ $a=\ \ 0.382999-0.190209I$ $b=-0.536269-0.385513I$	$-2.29767-3.07732I$	0
$u=\ \ 1.287570-0.340175I$ $a=\ \ 0.382999+0.190209I$ $b=-0.536269+0.385513I$	$-2.29767+3.07732I$	0
$u=-0.131214+1.325890I$ $a=-0.597252+0.672496I$ $b=\ \ 1.49074-0.05534I$	$2.95493-1.72198I$	0
$u=-0.131214-1.325890I$ $a=-0.597252-0.672496I$ $b=\ \ 1.49074+0.05534I$	$2.95493+1.72198I$	0
$u=-0.626741+1.209510I$ $a=\ \ 0.824343+0.781107I$ $b=-1.46749-0.87493I$	$-1.73094+9.84736I$	0
$u=-0.626741-1.209510I$ $a=\ \ 0.824343-0.781107I$ $b=-1.46749+0.87493I$	$-1.73094-9.84736I$	0

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.764890 + 1.155320I$ $a = 0.392460 - 0.299145I$ $b = -1.003840 + 0.616001I$	$-1.29791 - 4.82048I$	0
$u = 0.764890 - 1.155320I$ $a = 0.392460 + 0.299145I$ $b = -1.003840 - 0.616001I$	$-1.29791 + 4.82048I$	0
$u = 1.32824 + 0.50776I$ $a = -0.592339 + 0.110009I$ $b = 0.1269800 + 0.0336655I$	$-3.54900 - 2.41805I$	0
$u = 1.32824 - 0.50776I$ $a = -0.592339 - 0.110009I$ $b = 0.1269800 - 0.0336655I$	$-3.54900 + 2.41805I$	0
$u = 0.33743 + 1.38755I$ $a = 0.740655 - 0.635339I$ $b = -1.33595 + 1.14239I$	$3.38347 - 7.44465I$	0
$u = 0.33743 - 1.38755I$ $a = 0.740655 + 0.635339I$ $b = -1.33595 - 1.14239I$	$3.38347 + 7.44465I$	0
$u = -0.073388 + 0.535748I$ $a = 0.96130 + 2.76187I$ $b = -0.443797 - 0.323900I$	$-0.84235 + 6.25989I$	$3.7680 - 14.3317I$
$u = -0.073388 - 0.535748I$ $a = 0.96130 - 2.76187I$ $b = -0.443797 + 0.323900I$	$-0.84235 - 6.25989I$	$3.7680 + 14.3317I$
$u = -0.115734 + 0.491777I$ $a = -1.10629 - 0.95714I$ $b = 3.41728 + 0.35621I$	$-0.09742 + 7.44614I$	$8.4144 - 15.3289I$
$u = -0.115734 - 0.491777I$ $a = -1.10629 + 0.95714I$ $b = 3.41728 - 0.35621I$	$-0.09742 - 7.44614I$	$8.4144 + 15.3289I$

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = \ 0.31128 + 1.46922I$ $a = -0.169885 + 0.235097I$ $b = -0.314036 - 0.597513I$	$4.76119 - 8.26412I$	0
$u = \ 0.31128 - 1.46922I$ $a = -0.169885 - 0.235097I$ $b = -0.314036 + 0.597513I$	$4.76119 + 8.26412I$	0
$u = \ 0.62552 + 1.38356I$ $a = -0.696219 + 0.285558I$ $b = \ 1.57996 - 0.89639I$	$2.96289 - 4.48046I$	0
$u = \ 0.62552 - 1.38356I$ $a = -0.696219 - 0.285558I$ $b = \ 1.57996 + 0.89639I$	$2.96289 + 4.48046I$	0
$u = -0.251914 + 0.406963I$ $a = -1.50117 - 2.91187I$ $b = \ 0.993827 + 0.633272I$	$-5.00528 - 5.34310I$	$-1.94104 + 5.96770I$
$u = -0.251914 - 0.406963I$ $a = -1.50117 + 2.91187I$ $b = \ 0.993827 - 0.633272I$	$-5.00528 + 5.34310I$	$-1.94104 - 5.96770I$
$u = \ 0.038850 + 0.393182I$ $a = -0.33205 + 3.18672I$ $b = -1.350250 + 0.389932I$	$-6.41761 - 0.62933I$	$-4.99685 + 0.82666I$
$u = \ 0.038850 - 0.393182I$ $a = -0.33205 - 3.18672I$ $b = -1.350250 - 0.389932I$	$-6.41761 + 0.62933I$	$-4.99685 - 0.82666I$

III. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1	$(u^{48}-4u^{47}+\cdots+3u+1)(u^{174}-7u^{173}+\cdots-32468u+1231)$
c_2	$81(9u^{48}+12u^{47}+\cdots-2u+1)$ $\cdot(9u^{174}+21u^{173}+\cdots+57344u+284672)$
c_3	$81(9u^{48}+12u^{47}+\cdots+u+1)$ $\cdot(9u^{174}+21u^{173}+\cdots+52642972u+7135679)$
c_4	$(u^{48}+4u^{47}+\cdots-3u+1)(u^{174}-7u^{173}+\cdots-32468u+1231)$
c_5	$(u^{48}+6u^{46}+\cdots-90u+81)$ $\cdot(u^{174}+7u^{173}+\cdots-115375851u+8331579)$
c_6	$(u^{48}-5u^{47}+\cdots+14u+1)(u^{174}+8u^{173}+\cdots+103307u+4271)$
c_7	$81(9u^{48}-12u^{47}+\cdots+2u+1)$ $\cdot(9u^{174}+21u^{173}+\cdots+57344u+284672)$
c_8	$6561(81u^{48}+630u^{47}+\cdots+7u+1)$ $\cdot(81u^{174}+1989u^{173}+\cdots+432u+32)$
c_9	$81(9u^{48}-12u^{47}+\cdots-u+1)$ $\cdot(9u^{174}+21u^{173}+\cdots+52642972u+7135679)$
c_{10}	$(u^{48}-u^{47}+\cdots-1572u+333)$ $\cdot(u^{174}-14u^{172}+\cdots+207068871u+14948811)$
c_{11}	$(u^{48}+5u^{47}+\cdots-14u+1)(u^{174}+8u^{173}+\cdots+103307u+4271)$
c_{12}	$(u^{48}+2u^{47}+\cdots+48u+9)(u^{174}-3u^{173}+\cdots+502185u+36513)$

IV. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1, c_4	$(y^{48} + 24y^{47} + \cdots + 43y + 1)$ $\cdot (y^{174} + 85y^{173} + \cdots + 414366y + 1515361)$
c_2, c_7	$6561(81y^{48} + 2574y^{47} + \cdots + 44y + 1)$ $\cdot (81y^{174} + 7083y^{173} + \cdots + 4334293090304y + 81038147584)$
c_3, c_9	$6561(81y^{48} - 2448y^{47} + \cdots - 43y + 1)$ $\cdot (81y^{174} - 9279y^{173} + \cdots - 2842222453168320y + 50917914791041)$
c_5	$(y^{48} + 12y^{47} + \cdots + 541728y + 6561)$ $\cdot (y^{174} + 29y^{173} + \cdots + 23467085991243y + 69415208633241)$
c_6, c_{11}	$(y^{48} - 39y^{47} + \cdots - 50y + 1)$ $\cdot (y^{174} - 122y^{173} + \cdots + 2710884961y + 18241441)$
c_8	$43046721(6561y^{48} - 27378y^{47} + \cdots + 3y + 1)$ $\cdot (6561y^{174} - 480573y^{173} + \cdots - 84736y + 1024)$
c_{10}	$(y^{48} - y^{47} + \cdots - 316674y + 110889)$ $\cdot (y^{174} - 28y^{173} + \cdots - 12744162723038499y + 223466950313721)$
c_{12}	$(y^{48} - 22y^{47} + \cdots - 1476y + 81)$ $\cdot (y^{174} - 13y^{173} + \cdots + 591008001867y + 1333199169)$