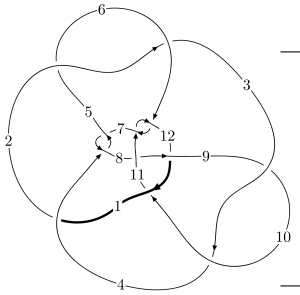
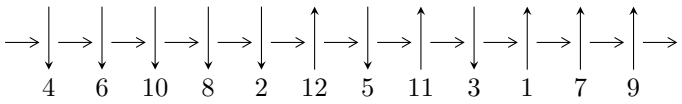
$12a_{0948}$ $(K12a_{0948})$



A knot diagram[1]

Linearized knot diagam



Solving Sequence

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

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

$$\begin{aligned} I_1^u = \langle & 4.82117 \times 10^{1053} u^{173} - 4.17945 \times 10^{1054} u^{172} + \cdots + 6.20593 \times 10^{1055} b - 1.69443 \times 10^{1058}, \\ & 3.67137 \times 10^{1057} u^{173} - 2.36071 \times 10^{1058} u^{172} + \cdots + 9.41254 \times 10^{1059} a + 2.24659 \times 10^{1060}, \\ & u^{174} - 8u^{173} + \cdots - 103455u + 15167 \rangle \\ I_2^u = \langle & 1.73012 \times 10^{65} u^{48} + 9.41857 \times 10^{65} u^{47} + \cdots + 3.09147 \times 10^{64} b - 2.30301 \times 10^{64}, \\ & - 5.28502 \times 10^{65} u^{48} - 2.32675 \times 10^{66} u^{47} + \cdots + 3.09147 \times 10^{64} a + 1.24633 \times 10^{66}, \ u^{49} + 5u^{48} + \cdots + 2u + \end{aligned}$$

* 2 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 223 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. $\boldsymbol{I_1^u = \langle 4.82 \times 10^{1053} u^{173} - 4.18 \times 10^{1054} u^{172} + \cdots + 6.21 \times 10^{1055} b - 1.69 \times 10^{1058},\ 3.67 \times 10^{1057} u^{173} - 2.36 \times 10^{1058} u^{172} + \cdots + 9.41 \times 10^{1059} a + 2.25 \times 10^{1060},\ u^{174} - 8u^{173} + \cdots - 103455u + 15167 \rangle}$

(i) Arc colorings

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

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

$$a_8 = \begin{pmatrix} 1 \\ u^2 \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} -0.00390051u^{173} + 0.0250805u^{172} + \cdots + 71.5023u - 2.38681 \\ -0.00776864u^{173} + 0.0673460u^{172} + \cdots - 1844.78u + 273.033 \end{pmatrix}$$

$$a_9 = \begin{pmatrix} -0.000688694u^{173} + 0.0205837u^{172} + \cdots - 4667.87u + 756.663 \\ 0.00312005u^{173} - 0.0195711u^{172} + \cdots - 923.636u + 179.023 \end{pmatrix}$$

$$a_{12} = \begin{pmatrix} -0.0116691u^{173} + 0.0924265u^{172} + \cdots - 1773.28u + 270.646 \\ -0.00776864u^{173} + 0.0673460u^{172} + \cdots - 1844.78u + 273.033 \end{pmatrix}$$

$$a_1 = \begin{pmatrix} 0.00293430u^{173} - 0.0302441u^{172} + \cdots + 653.871u - 107.847 \\ 0.000613664u^{173} - 0.00576074u^{172} + \cdots + 666.345u - 89.8223 \end{pmatrix}$$

$$a_4 = \begin{pmatrix} u \\ u^3 + u \end{pmatrix}$$

$$a_2 = \begin{pmatrix} 0.000973190u^{173} - 0.0125045u^{172} + \cdots + 364.254u - 58.2403 \\ 0.00127663u^{173} - 0.00949914u^{172} + \cdots + 618.636u - 71.3194 \end{pmatrix}$$

$$a_6 = \begin{pmatrix} -0.0114313u^{173} + 0.0803791u^{172} + \cdots + 950.078u - 226.104 \\ -0.00429712u^{173} + 0.0353554u^{172} + \cdots - 214.768u + 3.73542 \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} 0.00643769u^{173} - 0.0520573u^{172} + \cdots + 832.298u - 55.2080 \\ 0.00241189u^{173} - 0.0126908u^{172} + \cdots - 244.208u + 53.3806 \end{pmatrix}$$

$$a_3 = \begin{pmatrix} 0.0172693u^{173} - 0.126967u^{172} + \cdots - 1235.18u + 312.981 \\ 0.00834636u^{173} - 0.0675586u^{172} + \cdots + 1243.58u - 144.687 \end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= 0.0230806u^{173} - 0.156308u^{172} + \cdots - 3025.39u + 569.638$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{174} - 8u^{173} + \cdots + 43078027074u - 2742648543$
c_2, c_5	$9(9u^{174} + 48u^{173} + \cdots - 1.82848 \times 10^8 u - 2.86544 \times 10^7)$
c_3, c_9	$u^{174} - 3u^{173} + \cdots + 117419u + 88717$
c_4, c_7	$u^{174} - 8u^{173} + \cdots - 103455u + 15167$
c_6, c_{11}	$9(9u^{174} - 6u^{173} + \cdots + 1495690u - 685471)$
c_8	$u^{174} + 36u^{173} + \cdots - 108064167u - 3658113$
c_{10}	$81(81u^{174} + 2196u^{173} + \cdots + 9690823u + 854041)$
c_{12}	$u^{174} - 4u^{173} + \cdots - 9297164295u - 155059353$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{174} - 36y^{173} + \cdots - 6.70 \times 10^{20}y + 7.52 \times 10^{18}$
c_2, c_5	$81 \cdot (81y^{174} - 6552y^{173} + \cdots + 36023322668094366y + 821074238198449)$
c_3, c_9	$y^{174} - 135y^{173} + \cdots - 197112030361y + 7870706089$
c_4, c_7	$y^{174} + 82y^{173} + \cdots + 17293282263y + 230037889$
c_6, c_{11}	$81 \cdot (81y^{174} + 10134y^{173} + \cdots + 10182336694290y + 469870491841)$
c_8	$y^{174} - 80y^{173} + \cdots - 218702911553847y + 13381790720769$
c_{10}	$6561 \cdot (6561y^{174} - 435132y^{173} + \cdots - 22717612681479y + 729386029681)$
c_{12}	$y^{174} + 52y^{173} + \cdots - 9052861972252739517y + 24043402952778609$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.105788 + 0.992907I$ $a = -8.63885 + 2.18936I$ $b = 0.054244 + 1.013980I$	$-1.57777 - 0.35841I$	0
$u = 0.105788 - 0.992907I$ $a = -8.63885 - 2.18936I$ $b = 0.054244 - 1.013980I$	$-1.57777 + 0.35841I$	0
$u = 0.017165 + 1.001590I$ $a = 0.513932 + 0.985222I$ $b = -0.643237 - 0.876559I$	$-1.92649 + 4.95178I$	0
$u = 0.017165 - 1.001590I$ $a = 0.513932 - 0.985222I$ $b = -0.643237 + 0.876559I$	$-1.92649 - 4.95178I$	0
$u = -0.499108 + 0.863471I$ $a = 2.63700 + 0.62587I$ $b = -0.35250 - 2.71529I$	$-1.67953 + 2.03058I$	0
$u = -0.499108 - 0.863471I$ $a = 2.63700 - 0.62587I$ $b = -0.35250 + 2.71529I$	$-1.67953 - 2.03058I$	0
$u = 0.263655 + 0.974190I$ $a = 0.747181 - 0.626422I$ $b = -0.456440 + 0.019467I$	$-0.78721 - 2.39358I$	0
$u = 0.263655 - 0.974190I$ $a = 0.747181 + 0.626422I$ $b = -0.456440 - 0.019467I$	$-0.78721 + 2.39358I$	0
$u = 0.060232 + 0.986081I$ $a = -0.848099 - 0.131819I$ $b = 0.719978 + 0.392925I$	$1.64504 + 1.44970I$	0
$u = 0.060232 - 0.986081I$ $a = -0.848099 + 0.131819I$ $b = 0.719978 - 0.392925I$	$1.64504 - 1.44970I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.982738+0.245568I$ $a=-0.466688+0.751681I$ $b=\ \ 0.738446+0.146963I$	$-2.23933-2.59331I$	0
$u=-0.982738-0.245568I$ $a=-0.466688-0.751681I$ $b=\ \ 0.738446-0.146963I$	$-2.23933+2.59331I$	0
$u=\ \ 0.899970+0.474333I$ $a=-0.348297-0.228697I$ $b=-0.390896-1.211660I$	$-4.53629+3.07712I$	0
$u=\ \ 0.899970-0.474333I$ $a=-0.348297+0.228697I$ $b=-0.390896+1.211660I$	$-4.53629-3.07712I$	0
$u=-0.308477+0.973260I$ $a=-4.04787+0.47567I$ $b=\ \ 0.085823+1.000220I$	$-1.55044+1.07512I$	0
$u=-0.308477-0.973260I$ $a=-4.04787-0.47567I$ $b=\ \ 0.085823-1.000220I$	$-1.55044-1.07512I$	0
$u=\ \ 0.451931+0.862066I$ $a=-2.91381+0.21847I$ $b=\ \ 0.170072-1.326330I$	$-10.77750-6.33574I$	0
$u=\ \ 0.451931-0.862066I$ $a=-2.91381-0.21847I$ $b=\ \ 0.170072+1.326330I$	$-10.77750+6.33574I$	0
$u=-0.327654+0.978486I$ $a=-1.55074+0.46263I$ $b=\ \ 1.373920-0.100475I$	$1.59680+3.06648I$	0
$u=-0.327654-0.978486I$ $a=-1.55074-0.46263I$ $b=\ \ 1.373920+0.100475I$	$1.59680-3.06648I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.816236 + 0.518820I$ $a = -0.049880 + 0.592643I$ $b = -0.260211 + 1.308340I$	$-7.48812 - 6.13354I$	0
$u = 0.816236 - 0.518820I$ $a = -0.049880 - 0.592643I$ $b = -0.260211 - 1.308340I$	$-7.48812 + 6.13354I$	0
$u = 0.511228 + 0.814965I$ $a = -0.314456 - 0.613076I$ $b = -0.17044 - 1.55691I$	$-10.90080 + 2.39166I$	0
$u = 0.511228 - 0.814965I$ $a = -0.314456 + 0.613076I$ $b = -0.17044 + 1.55691I$	$-10.90080 - 2.39166I$	0
$u = 0.413407 + 0.957407I$ $a = 0.218950 - 0.495465I$ $b = 0.29409 + 1.80147I$	$-10.06320 - 6.70670I$	0
$u = 0.413407 - 0.957407I$ $a = 0.218950 + 0.495465I$ $b = 0.29409 - 1.80147I$	$-10.06320 + 6.70670I$	0
$u = -0.955084 + 0.055699I$ $a = -0.323674 - 0.044907I$ $b = 0.256490 - 1.100480I$	$-2.23201 - 3.29265I$	0
$u = -0.955084 - 0.055699I$ $a = -0.323674 + 0.044907I$ $b = 0.256490 + 1.100480I$	$-2.23201 + 3.29265I$	0
$u = 0.775120 + 0.559710I$ $a = 0.462315 + 0.172632I$ $b = 0.59221 + 1.40373I$	$-7.05184 + 5.89114I$	0
$u = 0.775120 - 0.559710I$ $a = 0.462315 - 0.172632I$ $b = 0.59221 - 1.40373I$	$-7.05184 - 5.89114I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.580676 + 0.881375I$ $a = 0.124712 + 0.086717I$ $b = -0.316735 - 1.354540I$	$-5.05541 - 3.45080I$	0
$u = 0.580676 - 0.881375I$ $a = 0.124712 - 0.086717I$ $b = -0.316735 + 1.354540I$	$-5.05541 + 3.45080I$	0
$u = -0.925467 + 0.165358I$ $a = 0.212828 - 1.017190I$ $b = -0.962519 - 0.132593I$	$-6.30291 - 8.32375I$	0
$u = -0.925467 - 0.165358I$ $a = 0.212828 + 1.017190I$ $b = -0.962519 + 0.132593I$	$-6.30291 + 8.32375I$	0
$u = 0.598860 + 0.721099I$ $a = -2.31654 - 0.04429I$ $b = 0.490731 - 1.112850I$	$-5.53054 - 1.20802I$	0
$u = 0.598860 - 0.721099I$ $a = -2.31654 + 0.04429I$ $b = 0.490731 + 1.112850I$	$-5.53054 + 1.20802I$	0
$u = -1.043250 + 0.217868I$ $a = 0.208576 - 0.431210I$ $b = -0.670560 + 0.335177I$	$-6.81979 + 2.60677I$	0
$u = -1.043250 - 0.217868I$ $a = 0.208576 + 0.431210I$ $b = -0.670560 - 0.335177I$	$-6.81979 - 2.60677I$	0
$u = -0.123285 + 1.067010I$ $a = 1.68532 - 0.19184I$ $b = -0.546914 - 0.708360I$	$4.45474 + 0.18317I$	0
$u = -0.123285 - 1.067010I$ $a = 1.68532 + 0.19184I$ $b = -0.546914 + 0.708360I$	$4.45474 - 0.18317I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.633347+0.674496I$ $a=\ \ 0.91686-1.35419I$ $b=-0.735016-0.367384I$	$-0.91675+1.10715I$	0
$u=-0.633347-0.674496I$ $a=\ \ 0.91686+1.35419I$ $b=-0.735016+0.367384I$	$-0.91675-1.10715I$	0
$u=\ \ 0.060216+1.074030I$ $a=-1.48380-0.47596I$ $b=\ \ 0.877280+0.288988I$	$3.09545+3.19700I$	0
$u=\ \ 0.060216-1.074030I$ $a=-1.48380+0.47596I$ $b=\ \ 0.877280-0.288988I$	$3.09545-3.19700I$	0
$u=-0.281831+0.874245I$ $a=\ \ 1.94112-0.86508I$ $b=-1.42405+0.33650I$	$1.150790-0.546322I$	0
$u=-0.281831-0.874245I$ $a=\ \ 1.94112+0.86508I$ $b=-1.42405-0.33650I$	$1.150790+0.546322I$	0
$u=\ \ 0.363643+1.030730I$ $a=\ \ 1.43406+0.54770I$ $b=-0.797668-0.411576I$	$3.31463-3.43074I$	0
$u=\ \ 0.363643-1.030730I$ $a=\ \ 1.43406-0.54770I$ $b=-0.797668+0.411576I$	$3.31463+3.43074I$	0
$u=-0.868376+0.248762I$ $a=\ \ 0.321564+0.289191I$ $b=-0.317728+1.303600I$	$-6.06536-8.12155I$	0
$u=-0.868376-0.248762I$ $a=\ \ 0.321564-0.289191I$ $b=-0.317728-1.303600I$	$-6.06536+8.12155I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.023259 + 0.900920I$ $a = 2.11030 + 0.43584I$ $b = -0.387990 - 0.304064I$	$4.12487 + 0.03193I$	0
$u = 0.023259 - 0.900920I$ $a = 2.11030 - 0.43584I$ $b = -0.387990 + 0.304064I$	$4.12487 - 0.03193I$	0
$u = 0.457284 + 1.002900I$ $a = -1.48423 - 0.65641I$ $b = 0.853354 + 0.096959I$	$0.41605 - 8.37907I$	0
$u = 0.457284 - 1.002900I$ $a = -1.48423 + 0.65641I$ $b = 0.853354 - 0.096959I$	$0.41605 + 8.37907I$	0
$u = -0.585126 + 0.664641I$ $a = -0.633629 - 0.213282I$ $b = -0.209969 + 1.210890I$	$-1.60446 + 1.50746I$	0
$u = -0.585126 - 0.664641I$ $a = -0.633629 + 0.213282I$ $b = -0.209969 - 1.210890I$	$-1.60446 - 1.50746I$	0
$u = -1.026190 + 0.442963I$ $a = 0.275739 + 0.036861I$ $b = 0.332904 + 0.700789I$	$-5.42577 + 2.00818I$	0
$u = -1.026190 - 0.442963I$ $a = 0.275739 - 0.036861I$ $b = 0.332904 - 0.700789I$	$-5.42577 - 2.00818I$	0
$u = 0.634590 + 0.920462I$ $a = -1.48155 + 0.01846I$ $b = 0.061580 - 0.909578I$	$-4.25232 - 0.64086I$	0
$u = 0.634590 - 0.920462I$ $a = -1.48155 - 0.01846I$ $b = 0.061580 + 0.909578I$	$-4.25232 + 0.64086I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.755027+0.454788I$ $a=-0.053718+0.579396I$ $b=\ \ 0.201867-1.087000I$	$-5.29516-0.53701I$	0
$u=-0.755027-0.454788I$ $a=-0.053718-0.579396I$ $b=\ \ 0.201867+1.087000I$	$-5.29516+0.53701I$	0
$u=\ \ 0.540023+0.694861I$ $a=-0.153158-0.361356I$ $b=\ \ 0.055703-1.333580I$	$-4.98380-4.10822I$	0
$u=\ \ 0.540023-0.694861I$ $a=-0.153158+0.361356I$ $b=\ \ 0.055703+1.333580I$	$-4.98380+4.10822I$	0
$u=-1.101610+0.222702I$ $a=-0.047393-0.143697I$ $b=-0.193424-1.110190I$	$-5.87532+0.93957I$	0
$u=-1.101610-0.222702I$ $a=-0.047393+0.143697I$ $b=-0.193424+1.110190I$	$-5.87532-0.93957I$	0
$u=\ \ 0.093657+1.135620I$ $a=-1.409940+0.061582I$ $b=\ \ 1.216810+0.353798I$	$1.74865+0.27878I$	0
$u=\ \ 0.093657-1.135620I$ $a=-1.409940-0.061582I$ $b=\ \ 1.216810-0.353798I$	$1.74865-0.27878I$	0
$u=\ \ 0.151202+0.840096I$ $a=-1.83080-0.45938I$ $b=\ \ 0.263553+0.727900I$	$-1.45687+0.18954I$	0
$u=\ \ 0.151202-0.840096I$ $a=-1.83080+0.45938I$ $b=\ \ 0.263553-0.727900I$	$-1.45687-0.18954I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.431718 + 0.731263I$ $a = 2.69232 - 0.83150I$ $b = -0.44316 + 1.42863I$	$-10.80750 + 3.15916I$	0
$u = 0.431718 - 0.731263I$ $a = 2.69232 + 0.83150I$ $b = -0.44316 - 1.42863I$	$-10.80750 - 3.15916I$	0
$u = 0.002875 + 1.153440I$ $a = 1.51108 + 0.02918I$ $b = -1.28401 - 0.78539I$	$1.15212 + 1.20462I$	0
$u = 0.002875 - 1.153440I$ $a = 1.51108 - 0.02918I$ $b = -1.28401 + 0.78539I$	$1.15212 - 1.20462I$	0
$u = 0.454876 + 1.096400I$ $a = 1.83521 - 0.50281I$ $b = -0.61371 + 1.32945I$	$-2.41790 - 6.36783I$	0
$u = 0.454876 - 1.096400I$ $a = 1.83521 + 0.50281I$ $b = -0.61371 - 1.32945I$	$-2.41790 + 6.36783I$	0
$u = -0.468627 + 1.111020I$ $a = -0.792736 + 0.082852I$ $b = 0.818556 - 0.067626I$	$0.84886 + 3.29889I$	0
$u = -0.468627 - 1.111020I$ $a = -0.792736 - 0.082852I$ $b = 0.818556 + 0.067626I$	$0.84886 - 3.29889I$	0
$u = -0.574851 + 1.061100I$ $a = -1.297480 + 0.074808I$ $b = 0.573140 + 1.057110I$	$-0.12987 + 3.39369I$	0
$u = -0.574851 - 1.061100I$ $a = -1.297480 - 0.074808I$ $b = 0.573140 - 1.057110I$	$-0.12987 - 3.39369I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.969955 + 0.722466I$ $a = 0.495633 + 0.955340I$ $b = -0.047454 + 0.888667I$	$-0.36490 - 2.68762I$	0
$u = 0.969955 - 0.722466I$ $a = 0.495633 - 0.955340I$ $b = -0.047454 - 0.888667I$	$-0.36490 + 2.68762I$	0
$u = 0.453692 + 1.128250I$ $a = -1.18972 - 1.10940I$ $b = 0.280444 - 1.251060I$	$-5.47780 - 10.52790I$	0
$u = 0.453692 - 1.128250I$ $a = -1.18972 + 1.10940I$ $b = 0.280444 + 1.251060I$	$-5.47780 + 10.52790I$	0
$u = 0.622518 + 1.048770I$ $a = -0.812514 - 0.536519I$ $b = 0.082243 - 0.898246I$	$-0.44233 + 2.84121I$	0
$u = 0.622518 - 1.048770I$ $a = -0.812514 + 0.536519I$ $b = 0.082243 + 0.898246I$	$-0.44233 - 2.84121I$	0
$u = 0.583693 + 0.509936I$ $a = 2.86879 + 0.82366I$ $b = -0.721821 + 1.041950I$	$-8.46291 - 7.57961I$	0
$u = 0.583693 - 0.509936I$ $a = 2.86879 - 0.82366I$ $b = -0.721821 - 1.041950I$	$-8.46291 + 7.57961I$	0
$u = 0.745171 + 0.972980I$ $a = 1.274660 + 0.084117I$ $b = 0.207915 + 1.005180I$	$-6.24656 + 0.29952I$	0
$u = 0.745171 - 0.972980I$ $a = 1.274660 - 0.084117I$ $b = 0.207915 - 1.005180I$	$-6.24656 - 0.29952I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.798382 + 0.935782I$ $a = -1.036420 - 0.734833I$ $b = 0.361463 - 0.891330I$	$-0.99518 - 8.59993I$	0
$u = 0.798382 - 0.935782I$ $a = -1.036420 + 0.734833I$ $b = 0.361463 + 0.891330I$	$-0.99518 + 8.59993I$	0
$u = 0.637912 + 1.056310I$ $a = 1.80510 + 0.26388I$ $b = -0.75884 + 1.48150I$	$-5.54132 - 11.24360I$	0
$u = 0.637912 - 1.056310I$ $a = 1.80510 - 0.26388I$ $b = -0.75884 - 1.48150I$	$-5.54132 + 11.24360I$	0
$u = 0.631103 + 1.071510I$ $a = -0.412700 - 0.325772I$ $b = 0.64430 + 1.32236I$	$-6.77712 + 2.68736I$	0
$u = 0.631103 - 1.071510I$ $a = -0.412700 + 0.325772I$ $b = 0.64430 - 1.32236I$	$-6.77712 - 2.68736I$	0
$u = 0.590990 + 1.135850I$ $a = 1.147040 + 0.552687I$ $b = -0.206241 + 1.028440I$	$1.47487 - 3.22310I$	0
$u = 0.590990 - 1.135850I$ $a = 1.147040 - 0.552687I$ $b = -0.206241 - 1.028440I$	$1.47487 + 3.22310I$	0
$u = -0.722405 + 1.066110I$ $a = -0.708294 + 0.039478I$ $b = -0.020913 + 0.233589I$	$-3.58239 + 4.26656I$	0
$u = -0.722405 - 1.066110I$ $a = -0.708294 - 0.039478I$ $b = -0.020913 - 0.233589I$	$-3.58239 - 4.26656I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.665368 + 1.127100I$ $a = -1.41992 - 0.14541I$ $b = 0.61247 - 1.30407I$	$-2.55376 - 8.83647I$	0
$u = 0.665368 - 1.127100I$ $a = -1.41992 + 0.14541I$ $b = 0.61247 + 1.30407I$	$-2.55376 + 8.83647I$	0
$u = 0.102007 + 0.682962I$ $a = -1.76914 - 0.25695I$ $b = 0.44987 - 1.41245I$	$-4.14146 - 5.79026I$	0
$u = 0.102007 - 0.682962I$ $a = -1.76914 + 0.25695I$ $b = 0.44987 + 1.41245I$	$-4.14146 + 5.79026I$	0
$u = 1.238880 + 0.444512I$ $a = 0.090410 - 0.181053I$ $b = -0.564035 - 1.282780I$	$-9.8173 + 13.8772I$	0
$u = 1.238880 - 0.444512I$ $a = 0.090410 + 0.181053I$ $b = -0.564035 + 1.282780I$	$-9.8173 - 13.8772I$	0
$u = -0.590781 + 1.176220I$ $a = -1.81293 - 0.15426I$ $b = 0.506160 + 1.298340I$	$-3.35110 + 13.46760I$	0
$u = -0.590781 - 1.176220I$ $a = -1.81293 + 0.15426I$ $b = 0.506160 - 1.298340I$	$-3.35110 - 13.46760I$	0
$u = -0.534335 + 0.421295I$ $a = -0.678665 + 0.247161I$ $b = -0.023937 + 1.138570I$	$-1.63591 + 1.46544I$	0
$u = -0.534335 - 0.421295I$ $a = -0.678665 - 0.247161I$ $b = -0.023937 - 1.138570I$	$-1.63591 - 1.46544I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.498382 + 1.231610I$ $a = -1.40992 + 0.45423I$ $b = 0.62903 - 1.46229I$	$-3.03939 - 10.04370I$	0
$u = 0.498382 - 1.231610I$ $a = -1.40992 - 0.45423I$ $b = 0.62903 + 1.46229I$	$-3.03939 + 10.04370I$	0
$u = -0.646745 + 1.161720I$ $a = 1.005690 + 0.131636I$ $b = -0.530877 - 0.940813I$	$-3.09487 + 5.84029I$	0
$u = -0.646745 - 1.161720I$ $a = 1.005690 - 0.131636I$ $b = -0.530877 + 0.940813I$	$-3.09487 - 5.84029I$	0
$u = -0.524563 + 1.224790I$ $a = 1.64082 + 0.37202I$ $b = -0.543452 - 1.076860I$	$1.25183 + 8.42208I$	0
$u = -0.524563 - 1.224790I$ $a = 1.64082 - 0.37202I$ $b = -0.543452 + 1.076860I$	$1.25183 - 8.42208I$	0
$u = -0.608253 + 1.187600I$ $a = 1.046230 - 0.532919I$ $b = -1.110490 + 0.208651I$	$0.56642 + 8.23567I$	0
$u = -0.608253 - 1.187600I$ $a = 1.046230 + 0.532919I$ $b = -1.110490 - 0.208651I$	$0.56642 - 8.23567I$	0
$u = -0.579509 + 1.211110I$ $a = -1.152770 + 0.575913I$ $b = 1.382860 - 0.185529I$	$-3.22713 + 13.72270I$	0
$u = -0.579509 - 1.211110I$ $a = -1.152770 - 0.575913I$ $b = 1.382860 + 0.185529I$	$-3.22713 - 13.72270I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.130120+1.336890I$ $a=\ \ 0.993158+0.699794I$ $b=-0.453590-0.879843I$	$3.90624+3.94646I$	0
$u=-0.130120-1.336890I$ $a=\ \ 0.993158-0.699794I$ $b=-0.453590+0.879843I$	$3.90624-3.94646I$	0
$u=-0.292621+1.314260I$ $a=\ \ 0.258085-0.662559I$ $b=-0.132899+0.683008I$	$2.69005+1.40993I$	0
$u=-0.292621-1.314260I$ $a=\ \ 0.258085+0.662559I$ $b=-0.132899-0.683008I$	$2.69005-1.40993I$	0
$u=\ \ 1.248410+0.516227I$ $a=-0.196618+0.227169I$ $b=\ \ 0.492989+1.209390I$	$-5.38896+7.27482I$	0
$u=\ \ 1.248410-0.516227I$ $a=-0.196618-0.227169I$ $b=\ \ 0.492989-1.209390I$	$-5.38896-7.27482I$	0
$u=\ \ 0.014040+0.645390I$ $a=\ \ 5.06102+1.42242I$ $b=-0.154060+0.958310I$	$-2.81767+0.05375I$	0
$u=\ \ 0.014040-0.645390I$ $a=\ \ 5.06102-1.42242I$ $b=-0.154060-0.958310I$	$-2.81767-0.05375I$	0
$u=\ \ 0.332081+0.539720I$ $a=\ \ 0.163227-0.206372I$ $b=\ \ 0.33277+1.47622I$	$-4.37561+2.82047I$	0
$u=\ \ 0.332081-0.539720I$ $a=\ \ 0.163227+0.206372I$ $b=\ \ 0.33277-1.47622I$	$-4.37561-2.82047I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.485128 + 0.386918I$ $a = 0.431449 + 0.189487I$ $b = -0.702401 - 0.306781I$	$-1.16173 + 4.50858I$	0
$u = 0.485128 - 0.386918I$ $a = 0.431449 - 0.189487I$ $b = -0.702401 + 0.306781I$	$-1.16173 - 4.50858I$	0
$u = -0.674152 + 1.224680I$ $a = -1.109810 + 0.274730I$ $b = 0.926632 + 0.358436I$	$-3.84233 + 3.46265I$	0
$u = -0.674152 - 1.224680I$ $a = -1.109810 - 0.274730I$ $b = 0.926632 - 0.358436I$	$-3.84233 - 3.46265I$	0
$u = -0.715485 + 1.216910I$ $a = 0.953494 + 0.141616I$ $b = -0.185714 - 0.946075I$	$-2.94117 + 5.45634I$	0
$u = -0.715485 - 1.216910I$ $a = 0.953494 - 0.141616I$ $b = -0.185714 + 0.946075I$	$-2.94117 - 5.45634I$	0
$u = -0.181403 + 1.401830I$ $a = -0.160472 + 0.703212I$ $b = 0.132799 - 0.928411I$	$-0.70898 - 4.04796I$	0
$u = -0.181403 - 1.401830I$ $a = -0.160472 - 0.703212I$ $b = 0.132799 + 0.928411I$	$-0.70898 + 4.04796I$	0
$u = 1.32207 + 0.51539I$ $a = 0.127444 - 0.441137I$ $b = -0.296939 - 1.209950I$	$-11.25820 + 0.41128I$	0
$u = 1.32207 - 0.51539I$ $a = 0.127444 + 0.441137I$ $b = -0.296939 + 1.209950I$	$-11.25820 - 0.41128I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.37329+1.37492I$ $a=\ \ 1.188340+0.414657I$ $b=-0.991259-0.953578I$	$0.42676+6.53970I$	0
$u=-0.37329-1.37492I$ $a=\ \ 1.188340-0.414657I$ $b=-0.991259+0.953578I$	$0.42676-6.53970I$	0
$u=\ \ 0.273426+0.496214I$ $a=-4.97581-1.75881I$ $b=-0.234871-0.854669I$	$-7.76717+7.03317I$	$-8.29993+0.I$
$u=\ \ 0.273426-0.496214I$ $a=-4.97581+1.75881I$ $b=-0.234871+0.854669I$	$-7.76717-7.03317I$	$-8.29993+0.I$
$u=-0.46777+1.38582I$ $a=-1.141810-0.360434I$ $b=\ \ 0.710784+1.180360I$	$-0.82386+6.39420I$	0
$u=-0.46777-1.38582I$ $a=-1.141810+0.360434I$ $b=\ \ 0.710784-1.180360I$	$-0.82386-6.39420I$	0
$u=\ \ 0.75845+1.25303I$ $a=\ \ 1.53602+0.13470I$ $b=-0.60377+1.30603I$	$-2.9196-14.3291I$	0
$u=\ \ 0.75845-1.25303I$ $a=\ \ 1.53602-0.13470I$ $b=-0.60377-1.30603I$	$-2.9196+14.3291I$	0
$u=\ \ 0.74461+1.26563I$ $a=-1.53106-0.09641I$ $b=\ \ 0.67719-1.40297I$	$-7.1508-20.8364I$	0
$u=\ \ 0.74461-1.26563I$ $a=-1.53106+0.09641I$ $b=\ \ 0.67719+1.40297I$	$-7.1508+20.8364I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.75095 + 1.26578I$ $a = -1.47264 - 0.19449I$ $b = 0.387850 - 1.291590I$	$-8.65019 - 7.58615I$	0
$u = 0.75095 - 1.26578I$ $a = -1.47264 + 0.19449I$ $b = 0.387850 + 1.291590I$	$-8.65019 + 7.58615I$	0
$u = -0.29458 + 1.44485I$ $a = -0.914883 + 0.277812I$ $b = 0.758733 + 0.818817I$	$-1.14018 - 3.58851I$	0
$u = -0.29458 - 1.44485I$ $a = -0.914883 - 0.277812I$ $b = 0.758733 - 0.818817I$	$-1.14018 + 3.58851I$	0
$u = -0.51517 + 1.42252I$ $a = -0.017843 + 0.505784I$ $b = 0.192527 - 0.077597I$	$-1.70071 + 8.06336I$	0
$u = -0.51517 - 1.42252I$ $a = -0.017843 - 0.505784I$ $b = 0.192527 + 0.077597I$	$-1.70071 - 8.06336I$	0
$u = 0.104495 + 0.445793I$ $a = -0.357588 + 1.183030I$ $b = -0.24868 - 1.58801I$	$-6.41225 + 6.68286I$	$-11.58531 + 0.48413I$
$u = 0.104495 - 0.445793I$ $a = -0.357588 - 1.183030I$ $b = -0.24868 + 1.58801I$	$-6.41225 - 6.68286I$	$-11.58531 - 0.48413I$
$u = 0.83731 + 1.35954I$ $a = 0.824384 - 0.039414I$ $b = -0.29348 + 1.38461I$	$-6.98294 - 9.60167I$	0
$u = 0.83731 - 1.35954I$ $a = 0.824384 + 0.039414I$ $b = -0.29348 - 1.38461I$	$-6.98294 + 9.60167I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.386094$ $a=-1.33488$ $b=-0.349604$	-1.02186	-12.1040
$u=-0.384804$ $a=\ \ 2.66052$ $b=\ \ 0.993750$	-2.32739	-2.92650
$u=\ \ 0.274111+0.172340I$ $a=-1.61436+0.09388I$ $b=\ \ 0.545398+0.081923I$	$1.28025+0.62932I$	$5.16557-1.08005I$
$u=\ \ 0.274111-0.172340I$ $a=-1.61436-0.09388I$ $b=\ \ 0.545398-0.081923I$	$1.28025-0.62932I$	$5.16557+1.08005I$
$u=\ \ 1.61151+0.47590I$ $a=\ \ 0.168398+0.205584I$ $b=\ \ 0.155742+1.163060I$	$-10.09570+1.33674I$	0
$u=\ \ 1.61151-0.47590I$ $a=\ \ 0.168398-0.205584I$ $b=\ \ 0.155742-1.163060I$	$-10.09570-1.33674I$	0
$u=-0.20354+1.70008I$ $a=\ \ 0.898783+0.042983I$ $b=-0.669462-0.828997I$	$4.30144+2.58801I$	0
$u=-0.20354-1.70008I$ $a=\ \ 0.898783-0.042983I$ $b=-0.669462+0.828997I$	$4.30144-2.58801I$	0
$u=-0.17017+1.71213I$ $a=-0.567105-0.268582I$ $b=\ \ 0.565467+0.799746I$	$-1.10228+8.74422I$	0
$u=-0.17017-1.71213I$ $a=-0.567105+0.268582I$ $b=\ \ 0.565467-0.799746I$	$-1.10228-8.74422I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.053246+0.203663I$ $a=-3.34885-1.33976I$ $b=-0.403840+0.517427I$	$-1.76130+0.49161I$	$-4.10039-0.03896I$
$u=-0.053246-0.203663I$ $a=-3.34885+1.33976I$ $b=-0.403840-0.517427I$	$-1.76130-0.49161I$	$-4.10039+0.03896I$
$u=-1.87862+0.02502I$ $a=\quad 0.085743+0.176647I$ $b=\quad 0.021083+0.759761I$	$-8.27980-0.55026I$	0
$u=-1.87862-0.02502I$ $a=\quad 0.085743-0.176647I$ $b=\quad 0.021083-0.759761I$	$-8.27980+0.55026I$	0

II.

$\boldsymbol{I_2^u = \langle 1.73\times 10^{65}u^{48}+9.42\times 10^{65}u^{47}+\cdots+3.09\times 10^{64}b-2.30\times 10^{64},\ -5.29\times 10^{65}u^{48}-2.33\times 10^{66}u^{47}+\cdots+3.09\times 10^{64}a+1.25\times 10^{66},\ u^{49}+5u^{48}+\cdots+2u+1\rangle}$

(i) Arc colorings

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

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

$$a_8 = \begin{pmatrix} 1 \\ u^2 \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} 17.0955u^{48} + 75.2635u^{47} + \cdots - 55.2364u - 40.3151 \\ -5.59643u^{48} - 30.4663u^{47} + \cdots - 5.33561u + 0.744957 \end{pmatrix}$$

$$a_9 = \begin{pmatrix} -38.5978u^{48} - 179.859u^{47} + \cdots + 33.8204u + 57.4952 \\ -3.04117u^{48} - 11.7999u^{47} + \cdots + 30.3011u + 15.4988 \end{pmatrix}$$

$$a_{12} = \begin{pmatrix} 11.4990u^{48} + 44.7973u^{47} + \cdots - 60.5720u - 39.5701 \\ -5.59643u^{48} - 30.4663u^{47} + \cdots - 5.33561u + 0.744957 \end{pmatrix}$$

$$a_1 = \begin{pmatrix} -8.41999u^{48} - 44.9404u^{47} + \cdots - 27.7528u - 7.46483 \\ 8.29155u^{48} + 38.9571u^{47} + \cdots - 28.7713u - 15.8291 \end{pmatrix}$$

$$a_4 = \begin{pmatrix} u \\ u^3 + u \end{pmatrix}$$

$$a_2 = \begin{pmatrix} -2.15596u^{48} - 12.4449u^{47} + \cdots - 17.0459u - 8.76743 \\ 12.4336u^{48} + 60.1249u^{47} + \cdots - 26.6792u - 18.3070 \end{pmatrix}$$

$$a_6 = \begin{pmatrix} -9.72715u^{48} - 48.5642u^{47} + \cdots + 14.8786u + 9.69608 \\ 10.8427u^{48} + 52.7312u^{47} + \cdots - 12.8391u - 17.0527 \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} 41.9381u^{48} + 221.729u^{47} + \cdots + 151.127u + 1.01042 \\ 9.86070u^{48} + 48.6428u^{47} + \cdots - 22.1248u - 16.1652 \end{pmatrix}$$

$$a_3 = \begin{pmatrix} 18.0206u^{48} + 86.3237u^{47} + \cdots - 51.5573u - 31.7971 \\ -0.0443102u^{48} + 0.627570u^{47} + \cdots + 10.4237u + 6.30775 \end{pmatrix}$$

(ii) Obstruction class $= 1$

(iii) Cusp Shapes $= 11.2892u^{48} + 45.4455u^{47} + \cdots - 320.068u - 89.4626$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{49} - 11u^{48} + \cdots + 5241u - 423$
c_2	$9(9u^{49} + 15u^{48} + \cdots - u - 1)$
c_3	$u^{49} - 10u^{48} + \cdots + 30u + 11$
c_4	$u^{49} - 5u^{48} + \cdots + 2u - 1$
c_5	$9(9u^{49} - 15u^{48} + \cdots - u + 1)$
c_6	$9(9u^{49} + 3u^{48} + \cdots - 23u + 11)$
c_7	$u^{49} + 5u^{48} + \cdots + 2u + 1$
c_8	$u^{49} - 17u^{48} + \cdots - 1488u + 207$
c_9	$u^{49} + 10u^{48} + \cdots + 30u - 11$
c_{10}	$81(81u^{49} + 261u^{48} + \cdots + 8u + 1)$
c_{11}	$9(9u^{49} - 3u^{48} + \cdots - 23u - 11)$
c_{12}	$u^{49} + 3u^{48} + \cdots - 1710u - 81$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{49} + 9y^{48} + \cdots - 12260925y - 178929$
c_2, c_5	$81(81y^{49} - 1071y^{48} + \cdots + 47y - 1)$
c_3, c_9	$y^{49} - 50y^{48} + \cdots + 11438y - 121$
c_4, c_7	$y^{49} + 23y^{48} + \cdots - 18y - 1$
c_6, c_{11}	$81(81y^{49} + 2655y^{48} + \cdots - 3145y - 121)$
c_8	$y^{49} - 107y^{48} + \cdots + 402480y - 42849$
c_{10}	$6561(6561y^{49} + 27297y^{48} + \cdots - 114y^2 - 1)$
c_{12}	$y^{49} + 29y^{48} + \cdots + 153738y - 6561$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.102719 + 0.996744I$ $a = 9.96278 - 2.86802I$ $b = -0.048960 - 1.013590I$	$-1.57696 - 0.34522I$	$11.125 - 370.594I$
$u = 0.102719 - 0.996744I$ $a = 9.96278 + 2.86802I$ $b = -0.048960 + 1.013590I$	$-1.57696 + 0.34522I$	$11.125 + 370.594I$
$u = -0.501010 + 0.917801I$ $a = 1.99648 - 0.39944I$ $b = -0.663006 - 1.171760I$	$-1.74562 + 1.85571I$	0
$u = -0.501010 - 0.917801I$ $a = 1.99648 + 0.39944I$ $b = -0.663006 + 1.171760I$	$-1.74562 - 1.85571I$	0
$u = 0.073909 + 1.050380I$ $a = -1.68731 - 0.11753I$ $b = 1.33889 + 0.58337I$	$2.21306 + 1.35043I$	0
$u = 0.073909 - 1.050380I$ $a = -1.68731 + 0.11753I$ $b = 1.33889 - 0.58337I$	$2.21306 - 1.35043I$	0
$u = -0.172642 + 0.905117I$ $a = -2.11829 + 0.40901I$ $b = 0.342689 + 0.531349I$	$3.91484 + 0.76486I$	$-3.11943 - 9.49179I$
$u = -0.172642 - 0.905117I$ $a = -2.11829 - 0.40901I$ $b = 0.342689 - 0.531349I$	$3.91484 - 0.76486I$	$-3.11943 + 9.49179I$
$u = -0.022023 + 0.907618I$ $a = 1.86717 - 0.52481I$ $b = -1.253380 - 0.059904I$	$1.50321 - 1.59167I$	$-0.50632 + 4.11443I$
$u = -0.022023 - 0.907618I$ $a = 1.86717 + 0.52481I$ $b = -1.253380 + 0.059904I$	$1.50321 + 1.59167I$	$-0.50632 - 4.11443I$

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.708456+0.858365I$ $a=1.100870-0.792423I$ $b=-0.259755-0.474098I$	$-0.72530+7.87554I$	0
$u=-0.708456-0.858365I$ $a=1.100870+0.792423I$ $b=-0.259755+0.474098I$	$-0.72530-7.87554I$	0
$u=0.683396+0.565127I$ $a=-0.221272+0.185117I$ $b=-0.46633-1.37214I$	$-5.44014+4.42954I$	$-8.17260-2.83803I$
$u=0.683396-0.565127I$ $a=-0.221272-0.185117I$ $b=-0.46633+1.37214I$	$-5.44014-4.42954I$	$-8.17260+2.83803I$
$u=-0.916804+0.687931I$ $a=-0.399941+0.865660I$ $b=0.104948+0.473005I$	$0.51817+2.60675I$	0
$u=-0.916804-0.687931I$ $a=-0.399941-0.865660I$ $b=0.104948-0.473005I$	$0.51817-2.60675I$	0
$u=0.453618+0.695987I$ $a=-2.88205-0.74476I$ $b=0.003909-0.864625I$	$-2.89842-0.97257I$	$-3.83893+5.12989I$
$u=0.453618-0.695987I$ $a=-2.88205+0.74476I$ $b=0.003909+0.864625I$	$-2.89842+0.97257I$	$-3.83893-5.12989I$
$u=-0.798450+0.173264I$ $a=-0.279520+0.279089I$ $b=-0.202385-0.961114I$	$-3.80992+1.97516I$	$-6.56951-3.60338I$
$u=-0.798450-0.173264I$ $a=-0.279520-0.279089I$ $b=-0.202385+0.961114I$	$-3.80992-1.97516I$	$-6.56951+3.60338I$

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.279374+1.170380I$ $a=-0.925668+0.413124I$ $b=\ \ 0.492677+0.059623I$	$3.48700+2.03632I$	0
$u=-0.279374-1.170380I$ $a=-0.925668-0.413124I$ $b=\ \ 0.492677-0.059623I$	$3.48700-2.03632I$	0
$u=-0.435441+1.201430I$ $a=\ \ 0.788620-0.402212I$ $b=-0.339227-0.615981I$	$0.55716-2.74878I$	0
$u=-0.435441-1.201430I$ $a=\ \ 0.788620+0.402212I$ $b=-0.339227+0.615981I$	$0.55716+2.74878I$	0
$u=\ \ 0.604405+1.147190I$ $a=-1.46926+0.12159I$ $b=\ \ 0.66012-1.37025I$	$-3.47676-9.35087I$	0
$u=\ \ 0.604405-1.147190I$ $a=-1.46926-0.12159I$ $b=\ \ 0.66012+1.37025I$	$-3.47676+9.35087I$	0
$u=\ \ 0.673645+1.193850I$ $a=\ \ 1.061450+0.195252I$ $b=-0.31368+1.39097I$	$-6.56276-8.65820I$	0
$u=\ \ 0.673645-1.193850I$ $a=\ \ 1.061450-0.195252I$ $b=-0.31368-1.39097I$	$-6.56276+8.65820I$	0
$u=\ \ 0.153082+0.606195I$ $a=-0.461743+0.325074I$ $b=\ \ 0.18695-1.58367I$	$-6.16187-7.05268I$	$-1.42905+13.83288I$
$u=\ \ 0.153082-0.606195I$ $a=-0.461743-0.325074I$ $b=\ \ 0.18695+1.58367I$	$-6.16187+7.05268I$	$-1.42905-13.83288I$

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.407738+1.327260I$ $a=-1.274990-0.427418I$ $b=\ \ 0.908474+1.005880I$	$0.87301+6.18090I$	0
$u=-0.407738-1.327260I$ $a=-1.274990+0.427418I$ $b=\ \ 0.908474-1.005880I$	$0.87301-6.18090I$	0
$u=\ \ 0.124015+0.545800I$ $a=\ \ 5.86633+0.65560I$ $b=-0.470298+0.854986I$	$-7.46315-7.54061I$	$-0.64793+10.47120I$
$u=\ \ 0.124015-0.545800I$ $a=\ \ 5.86633-0.65560I$ $b=-0.470298-0.854986I$	$-7.46315+7.54061I$	$-0.64793-10.47120I$
$u=\ \ 0.143774+0.462860I$ $a=\ \ 3.59852-0.10397I$ $b=-0.10384+1.51777I$	$-10.55420+4.35819I$	$-8.05761-4.11778I$
$u=\ \ 0.143774-0.462860I$ $a=\ \ 3.59852+0.10397I$ $b=-0.10384-1.51777I$	$-10.55420-4.35819I$	$-8.05761+4.11778I$
$u=-0.33576+1.48634I$ $a=\ \ 0.881927+0.447261I$ $b=-0.649783-1.090960I$	$-1.63244+7.19376I$	0
$u=-0.33576-1.48634I$ $a=\ \ 0.881927-0.447261I$ $b=-0.649783+1.090960I$	$-1.63244-7.19376I$	0
$u=-0.48103+1.53280I$ $a=-0.213654-0.453229I$ $b=\ \ 0.217512+0.602017I$	$-2.13303+8.39587I$	0
$u=-0.48103-1.53280I$ $a=-0.213654+0.453229I$ $b=\ \ 0.217512-0.602017I$	$-2.13303-8.39587I$	0

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 1.58028 + 0.39905I$ $a = 0.065935 + 0.334995I$ $b = 0.171542 + 1.128330I$	$-9.77165 + 1.49028I$	0
$u = 1.58028 - 0.39905I$ $a = 0.065935 - 0.334995I$ $b = 0.171542 - 1.128330I$	$-9.77165 - 1.49028I$	0
$u = 0.195856 + 0.306648I$ $a = 1.40213 + 0.60416I$ $b = -0.24850 + 1.40296I$	$-4.26307 - 3.44006I$	$-1.94439 + 5.69150I$
$u = 0.195856 - 0.306648I$ $a = 1.40213 - 0.60416I$ $b = -0.24850 - 1.40296I$	$-4.26307 + 3.44006I$	$-1.94439 - 5.69150I$
$u = -0.22212 + 1.62980I$ $a = -0.937581 - 0.050913I$ $b = 0.650043 + 0.820927I$	$4.48079 + 2.54080I$	0
$u = -0.22212 - 1.62980I$ $a = -0.937581 + 0.050913I$ $b = 0.650043 - 0.820927I$	$4.48079 - 2.54080I$	0
$u = -0.235886$ $a = -3.65205$ $b = -0.671273$	-0.430818	4.30640
$u = -1.88990 + 0.03587I$ $a = -0.061577 + 0.130232I$ $b = 0.110369 + 0.778949I$	$-8.33414 - 0.29076I$	0
$u = -1.88990 - 0.03587I$ $a = -0.061577 - 0.130232I$ $b = 0.110369 - 0.778949I$	$-8.33414 + 0.29076I$	0

III. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1	$(u^{49}-11u^{48}+\cdots+5241u-423)$ $\cdot(u^{174}-8u^{173}+\cdots+43078027074u-2742648543)$
c_2	$81(9u^{49}+15u^{48}+\cdots-u-1)$ $\cdot(9u^{174}+48u^{173}+\cdots-182847720u-28654393)$
c_3	$(u^{49}-10u^{48}+\cdots+30u+11)(u^{174}-3u^{173}+\cdots+117419u+88717)$
c_4	$(u^{49}-5u^{48}+\cdots+2u-1)(u^{174}-8u^{173}+\cdots-103455u+15167)$
c_5	$81(9u^{49}-15u^{48}+\cdots-u+1)$ $\cdot(9u^{174}+48u^{173}+\cdots-182847720u-28654393)$
c_6	$81(9u^{49}+3u^{48}+\cdots-23u+11)$ $\cdot(9u^{174}-6u^{173}+\cdots+1495690u-685471)$
c_7	$(u^{49}+5u^{48}+\cdots+2u+1)(u^{174}-8u^{173}+\cdots-103455u+15167)$
c_8	$(u^{49}-17u^{48}+\cdots-1488u+207)$ $\cdot(u^{174}+36u^{173}+\cdots-108064167u-3658113)$
c_9	$(u^{49}+10u^{48}+\cdots+30u-11)(u^{174}-3u^{173}+\cdots+117419u+88717)$
c_{10}	$6561(81u^{49}+261u^{48}+\cdots+8u+1)$ $\cdot(81u^{174}+2196u^{173}+\cdots+9690823u+854041)$
c_{11}	$81(9u^{49}-3u^{48}+\cdots-23u-11)$ $\cdot(9u^{174}-6u^{173}+\cdots+1495690u-685471)$
c_{12}	$(u^{49}+3u^{48}+\cdots-1710u-81)$ $\cdot(u^{174}-4u^{173}+\cdots-9297164295u-155059353)$

IV. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1	$(y^{49}+9y^{48}+\cdots-12260925y-178929)$ $\cdot(y^{174}-36y^{173}+\cdots-6.70\times10^{20}y+7.52\times10^{18})$
c_2, c_5	$6561(81y^{49}-1071y^{48}+\cdots+47y-1)$ $\cdot(81y^{174}-6552y^{173}+\cdots+36023322668094366y+821074238198449)$
c_3, c_9	$(y^{49}-50y^{48}+\cdots+11438y-121)$ $\cdot(y^{174}-135y^{173}+\cdots-197112030361y+7870706089)$
c_4, c_7	$(y^{49}+23y^{48}+\cdots-18y-1)$ $\cdot(y^{174}+82y^{173}+\cdots+17293282263y+230037889)$
c_6, c_{11}	$6561(81y^{49}+2655y^{48}+\cdots-3145y-121)$ $\cdot(81y^{174}+10134y^{173}+\cdots+10182336694290y+469870491841)$
c_8	$(y^{49}-107y^{48}+\cdots+402480y-42849)$ $\cdot(y^{174}-80y^{173}+\cdots-218702911553847y+13381790720769)$
c_{10}	$43046721(6561y^{49}+27297y^{48}+\cdots-114y^2-1)$ $\cdot(6561y^{174}-435132y^{173}+\cdots-22717612681479y+729386029681)$
c_{12}	$(y^{49}+29y^{48}+\cdots+153738y-6561)$ $\cdot(y^{174}+52y^{173}+\cdots-9052861972252739517y+24043402952778609)$