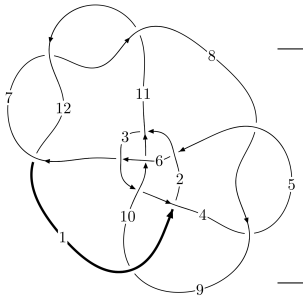
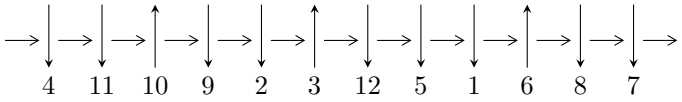
$12a_{1208}$ $(K12a_{1208})$



A knot diagram[1]

Linearized knot diagam



Solving Sequence

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

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

$$\begin{aligned} I_1^u = \langle & 2.07625 \times 10^{594} u^{165} + 5.47091 \times 10^{594} u^{164} + \cdots + 1.02629 \times 10^{595} b + 3.00733 \times 10^{596}, \\ & - 3.37299 \times 10^{595} u^{165} + 2.18527 \times 10^{596} u^{164} + \cdots + 8.72344 \times 10^{596} a + 4.06613 \times 10^{598}, \\ & u^{166} + 2u^{165} + \cdots - 714u + 289 \rangle \\ I_2^u = \langle & 1355679442634 u^{42} - 1138023218267 u^{41} + \cdots + 286979954013 b - 2810619597407, \\ & - 190977593434 u^{42} + 27758049080035 u^{41} + \cdots + 860939862039 a + 32882509966417, \\ & u^{43} + u^{42} + \cdots + 10u + 1 \rangle \end{aligned}$$

* 2 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 209 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. $\boldsymbol{I_1^u = \langle 2.08 \times 10^{594} u^{165} + 5.47 \times 10^{594} u^{164} + \cdots + 1.03 \times 10^{595} b + 3.01 \times 10^{596},\ -3.37 \times 10^{595} u^{165} + 2.19 \times 10^{596} u^{164} + \cdots + 8.72 \times 10^{596} a + 4.07 \times 10^{598},\ u^{166} + 2u^{165} + \cdots - 714u + 289 \rangle}$

(i) Arc colorings

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

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

$$a_3 = \begin{pmatrix} 0.0386659u^{165} - 0.250505u^{164} + \cdots + 103.290u - 46.6115 \\ -0.202307u^{165} - 0.533078u^{164} + \cdots + 34.8210u - 29.3030 \end{pmatrix}$$

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

$$a_2 = \begin{pmatrix} -0.163641u^{165} - 0.783583u^{164} + \cdots + 138.111u - 75.9146 \\ -0.202307u^{165} - 0.533078u^{164} + \cdots + 34.8210u - 29.3030 \end{pmatrix}$$

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

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

$$a_6 = \begin{pmatrix} -1.21009u^{165} - 3.04394u^{164} + \cdots - 37.7098u - 83.1115 \\ -0.0751152u^{165} - 0.524075u^{164} + \cdots + 127.144u - 55.8265 \end{pmatrix}$$

$$a_5 = \begin{pmatrix} 0.277604u^{165} + 0.563644u^{164} + \cdots + 54.4908u - 3.35099 \\ -1.15054u^{165} - 3.71939u^{164} + \cdots + 435.410u - 255.120 \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} 0.482406u^{165} - 0.333118u^{164} + \cdots + 660.458u - 236.350 \\ -0.537254u^{165} - 0.742007u^{164} + \cdots - 231.635u + 55.4828 \end{pmatrix}$$

$$a_9 = \begin{pmatrix} 0.0940036u^{165} - 0.413368u^{164} + \cdots + 290.152u - 113.207 \\ -0.869761u^{165} - 0.726677u^{164} + \cdots - 586.984u + 175.849 \end{pmatrix}$$

$$a_4 = \begin{pmatrix} -0.0760578u^{165} - 0.388130u^{164} + \cdots + 98.5661u - 50.4660 \\ -0.665368u^{165} - 1.81042u^{164} + \cdots + 115.272u - 91.2676 \end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= 1.84451u^{165} + 4.84351u^{164} + \cdots - 35.4126u + 139.634$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{166} + 15u^{165} + \cdots + 14u - 1$
c_2	$u^{166} - 4u^{165} + \cdots + 28476u + 667$
c_3	$u^{166} - 3u^{165} + \cdots - 8268033u + 335191$
c_4, c_8	$u^{166} - u^{165} + \cdots - 228154u + 191449$
c_5	$u^{166} - 2u^{165} + \cdots + 2701472u - 273472$
c_6	$u^{166} - 10u^{165} + \cdots + 634u - 109$
c_7, c_{11}, c_{12}	$u^{166} + 2u^{165} + \cdots - 714u + 289$
c_9	$u^{166} - u^{165} + \cdots - 67072u + 22016$
c_{10}	$u^{166} + 5u^{165} + \cdots - 15u + 1$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{166} + y^{165} + \cdots - 14y + 1$
c_2	$y^{166} - 2y^{165} + \cdots - 1188891486y + 444889$
c_3	$y^{166} + 61y^{165} + \cdots - 3152875669969y + 112353006481$
c_4, c_8	$y^{166} + 117y^{165} + \cdots + 1929765685298y + 36652719601$
c_5	$y^{166} - 30y^{165} + \cdots - 5537587637248y + 74786934784$
c_6	$y^{166} + 18y^{165} + \cdots - 1172586y + 11881$
c_7, c_{11}, c_{12}	$y^{166} + 158y^{165} + \cdots + 2222988y + 83521$
c_9	$y^{166} + 21y^{165} + \cdots + 28523233280y + 484704256$
c_{10}	$y^{166} + 15y^{165} + \cdots - 249y + 1$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.725948+0.683647I$ $a=-0.038423+0.619652I$ $b=\ \ 0.256542-0.112019I$	$0.02086+2.75664I$	0
$u=-0.725948-0.683647I$ $a=-0.038423-0.619652I$ $b=\ \ 0.256542+0.112019I$	$0.02086-2.75664I$	0
$u=\ \ 0.025517+0.986919I$ $a=-1.110390+0.549998I$ $b=\ \ 1.104750-0.503162I$	$0.89681+3.77593I$	0
$u=\ \ 0.025517-0.986919I$ $a=-1.110390-0.549998I$ $b=\ \ 1.104750+0.503162I$	$0.89681-3.77593I$	0
$u=-0.946801+0.396249I$ $a=\ \ 0.734629+0.455554I$ $b=\ \ 1.01961-1.14872I$	$0.4546+15.7472I$	0
$u=-0.946801-0.396249I$ $a=\ \ 0.734629-0.455554I$ $b=\ \ 1.01961+1.14872I$	$0.4546-15.7472I$	0
$u=-0.794890+0.511199I$ $a=-0.292218+0.368860I$ $b=\ \ 0.467134+0.346393I$	$-3.38316+0.71507I$	0
$u=-0.794890-0.511199I$ $a=-0.292218-0.368860I$ $b=\ \ 0.467134-0.346393I$	$-3.38316-0.71507I$	0
$u=\ \ 1.049290+0.235908I$ $a=\ \ 0.301042+0.002024I$ $b=\ \ 0.316727+0.503949I$	$1.78942-6.85416I$	0
$u=\ \ 1.049290-0.235908I$ $a=\ \ 0.301042-0.002024I$ $b=\ \ 0.316727-0.503949I$	$1.78942+6.85416I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.556720 + 0.733265I$ $a = 0.525878 + 0.156768I$ $b = -0.909625 + 0.665707I$	$-2.58532 + 5.21679I$	0
$u = 0.556720 - 0.733265I$ $a = 0.525878 - 0.156768I$ $b = -0.909625 - 0.665707I$	$-2.58532 - 5.21679I$	0
$u = 0.600379 + 0.688416I$ $a = -0.534562 - 0.328227I$ $b = -0.439443 - 0.877361I$	$-1.60622 - 2.48356I$	0
$u = 0.600379 - 0.688416I$ $a = -0.534562 + 0.328227I$ $b = -0.439443 + 0.877361I$	$-1.60622 + 2.48356I$	0
$u = 0.369614 + 1.033310I$ $a = 0.131564 - 0.169829I$ $b = 0.290813 + 0.632611I$	$4.88400 + 1.56084I$	0
$u = 0.369614 - 1.033310I$ $a = 0.131564 + 0.169829I$ $b = 0.290813 - 0.632611I$	$4.88400 - 1.56084I$	0
$u = -0.132622 + 1.117560I$ $a = 1.24662 + 0.98339I$ $b = -0.703852 + 0.079105I$	$4.07151 + 6.08335I$	0
$u = -0.132622 - 1.117560I$ $a = 1.24662 - 0.98339I$ $b = -0.703852 - 0.079105I$	$4.07151 - 6.08335I$	0
$u = 0.788182 + 0.368170I$ $a = 0.782020 - 0.769821I$ $b = 1.048490 + 0.884888I$	$-3.77502 - 9.90973I$	0
$u = 0.788182 - 0.368170I$ $a = 0.782020 + 0.769821I$ $b = 1.048490 - 0.884888I$	$-3.77502 + 9.90973I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.554858+0.666692I$ $a=-0.095827-0.534005I$ $b=-0.826350+0.668994I$	$-2.76581+4.07346I$	0
$u=-0.554858-0.666692I$ $a=-0.095827+0.534005I$ $b=-0.826350-0.668994I$	$-2.76581-4.07346I$	0
$u=-0.405250+0.744541I$ $a=-0.632404+0.871648I$ $b=0.588314+0.139635I$	$-0.11721+2.83841I$	0
$u=-0.405250-0.744541I$ $a=-0.632404-0.871648I$ $b=0.588314-0.139635I$	$-0.11721-2.83841I$	0
$u=-0.732834+0.338965I$ $a=-1.195570-0.003043I$ $b=-0.113109+0.305420I$	$2.24288-2.77835I$	0
$u=-0.732834-0.338965I$ $a=-1.195570+0.003043I$ $b=-0.113109-0.305420I$	$2.24288+2.77835I$	0
$u=-0.053658+1.192690I$ $a=0.58502+3.52803I$ $b=0.01778-1.61639I$	$1.35245+6.33268I$	0
$u=-0.053658-1.192690I$ $a=0.58502-3.52803I$ $b=0.01778+1.61639I$	$1.35245-6.33268I$	0
$u=-0.336940+0.717872I$ $a=-0.652905+1.059580I$ $b=0.833983-0.388471I$	$0.97295+3.91183I$	0
$u=-0.336940-0.717872I$ $a=-0.652905-1.059580I$ $b=0.833983+0.388471I$	$0.97295-3.91183I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.785466 + 0.089428I$ $a = -1.22500 + 0.71118I$ $b = -1.006870 - 0.678413I$	$-1.30016 - 4.36479I$	0
$u = 0.785466 - 0.089428I$ $a = -1.22500 - 0.71118I$ $b = -1.006870 + 0.678413I$	$-1.30016 + 4.36479I$	0
$u = -0.793606 + 0.916192I$ $a = 0.550045 - 0.061150I$ $b = -0.745314 - 1.088650I$	$1.92998 - 9.84732I$	0
$u = -0.793606 - 0.916192I$ $a = 0.550045 + 0.061150I$ $b = -0.745314 + 1.088650I$	$1.92998 + 9.84732I$	0
$u = -0.040204 + 1.222260I$ $a = -1.76830 + 0.36131I$ $b = 1.65751 - 0.03653I$	$0.54565 + 1.96085I$	0
$u = -0.040204 - 1.222260I$ $a = -1.76830 - 0.36131I$ $b = 1.65751 + 0.03653I$	$0.54565 - 1.96085I$	0
$u = 0.659388 + 0.402666I$ $a = 0.211715 + 0.689565I$ $b = -0.587173 + 1.037560I$	$3.42974 + 3.82141I$	0
$u = 0.659388 - 0.402666I$ $a = 0.211715 - 0.689565I$ $b = -0.587173 - 1.037560I$	$3.42974 - 3.82141I$	0
$u = -0.729954 + 0.247570I$ $a = -1.002790 + 0.123048I$ $b = -0.955453 - 0.985259I$	$-0.76173 - 3.67426I$	0
$u = -0.729954 - 0.247570I$ $a = -1.002790 - 0.123048I$ $b = -0.955453 + 0.985259I$	$-0.76173 + 3.67426I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.029942 + 1.230850I$ $a = 0.61461 - 1.51176I$ $b = 0.789132 + 0.782272I$	$5.14772 - 5.64701I$	0
$u = 0.029942 - 1.230850I$ $a = 0.61461 + 1.51176I$ $b = 0.789132 - 0.782272I$	$5.14772 + 5.64701I$	0
$u = -1.200860 + 0.304458I$ $a = -0.783677 - 0.133169I$ $b = -1.14324 + 1.40913I$	$0.31931 + 5.55081I$	0
$u = -1.200860 - 0.304458I$ $a = -0.783677 + 0.133169I$ $b = -1.14324 - 1.40913I$	$0.31931 - 5.55081I$	0
$u = 0.090973 + 1.239890I$ $a = 0.143791 + 0.749389I$ $b = 0.900131 - 0.470285I$	$1.94543 + 1.46866I$	0
$u = 0.090973 - 1.239890I$ $a = 0.143791 - 0.749389I$ $b = 0.900131 + 0.470285I$	$1.94543 - 1.46866I$	0
$u = 0.086497 + 1.251100I$ $a = -0.00903 - 3.04534I$ $b = 0.283185 + 0.150729I$	$1.67993 - 6.89070I$	0
$u = 0.086497 - 1.251100I$ $a = -0.00903 + 3.04534I$ $b = 0.283185 - 0.150729I$	$1.67993 + 6.89070I$	0
$u = 0.590527 + 0.453505I$ $a = -0.547503 + 0.679752I$ $b = -0.217537 - 0.878167I$	$3.19592 - 2.19949I$	0
$u = 0.590527 - 0.453505I$ $a = -0.547503 - 0.679752I$ $b = -0.217537 + 0.878167I$	$3.19592 + 2.19949I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = \quad 0.732939 + 0.103983I$ $a = -1.78445 - 0.51007I$ $b = -1.129710 + 0.342264I$	$-1.37174 + 4.38682I$	0
$u = \quad 0.732939 - 0.103983I$ $a = -1.78445 + 0.51007I$ $b = -1.129710 - 0.342264I$	$-1.37174 - 4.38682I$	0
$u = \quad 0.613741 + 0.411517I$ $a = \quad 1.167490 - 0.507533I$ $b = \quad 1.17963 + 1.08338I$	$3.52353 - 7.73326I$	0
$u = \quad 0.613741 - 0.411517I$ $a = \quad 1.167490 + 0.507533I$ $b = \quad 1.17963 - 1.08338I$	$3.52353 + 7.73326I$	0
$u = -1.26807$ $a = \quad 0.0715838$ $b = -0.0193289$	-2.38908	0
$u = \quad 0.668235 + 0.289415I$ $a = -0.903820 + 0.162173I$ $b = -0.152832 - 0.662900I$	$2.72771 - 1.66856I$	0
$u = \quad 0.668235 - 0.289415I$ $a = -0.903820 - 0.162173I$ $b = -0.152832 + 0.662900I$	$2.72771 + 1.66856I$	0
$u = -0.036979 + 1.280320I$ $a = -0.86818 - 3.14906I$ $b = \quad 0.22425 + 2.00525I$	$0.320119 - 1.132360I$	0
$u = -0.036979 - 1.280320I$ $a = -0.86818 + 3.14906I$ $b = \quad 0.22425 - 2.00525I$	$0.320119 + 1.132360I$	0
$u = -0.692433 + 0.108786I$ $a = -0.262714 - 0.144161I$ $b = -0.718367 + 0.295491I$	$-1.377630 - 0.063938I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.692433-0.108786I$ $a=-0.262714+0.144161I$ $b=-0.718367-0.295491I$	$-1.377630+0.063938I$	0
$u=\ \ 0.082398+1.297980I$ $a=-0.02656+2.50713I$ $b=-0.109061-0.148086I$	$0.032565+0.145382I$	0
$u=\ \ 0.082398-1.297980I$ $a=-0.02656-2.50713I$ $b=-0.109061+0.148086I$	$0.032565-0.145382I$	0
$u=-0.425785+1.231480I$ $a=-0.688572-0.013279I$ $b=\ \ 1.16183+0.98500I$	$4.09316+0.69217I$	0
$u=-0.425785-1.231480I$ $a=-0.688572+0.013279I$ $b=\ \ 1.16183-0.98500I$	$4.09316-0.69217I$	0
$u=\ \ 0.646752+0.254528I$ $a=-0.669782+0.783893I$ $b=-0.95342-1.08225I$	$-0.96365-6.74060I$	0
$u=\ \ 0.646752-0.254528I$ $a=-0.669782-0.783893I$ $b=-0.95342+1.08225I$	$-0.96365+6.74060I$	0
$u=-0.009787+1.311300I$ $a=-0.993443-0.460026I$ $b=\ \ 1.70773+0.53451I$	$0.73913-4.22237I$	0
$u=-0.009787-1.311300I$ $a=-0.993443+0.460026I$ $b=\ \ 1.70773-0.53451I$	$0.73913+4.22237I$	0
$u=\ \ 0.124052+1.319300I$ $a=-0.991384+0.092416I$ $b=-0.855687-0.027724I$	$0.55968-4.05266I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.124052 - 1.319300I$ $a = -0.991384 - 0.092416I$ $b = -0.855687 + 0.027724I$	$0.55968 + 4.05266I$	0
$u = 0.985453 + 0.885972I$ $a = -0.400218 + 0.097615I$ $b = 0.097629 - 1.180600I$	$2.10849 - 3.54917I$	0
$u = 0.985453 - 0.885972I$ $a = -0.400218 - 0.097615I$ $b = 0.097629 + 1.180600I$	$2.10849 + 3.54917I$	0
$u = -0.500222 + 0.447622I$ $a = 2.76284 + 0.55889I$ $b = 0.568813 - 0.452272I$	$0.21982 + 7.31370I$	$-6.0000 - 13.3490I$
$u = -0.500222 - 0.447622I$ $a = 2.76284 - 0.55889I$ $b = 0.568813 + 0.452272I$	$0.21982 - 7.31370I$	$-6.0000 + 13.3490I$
$u = 0.038523 + 1.331460I$ $a = -0.467909 + 0.043123I$ $b = -1.088600 - 0.262174I$	$4.02238 - 4.91225I$	0
$u = 0.038523 - 1.331460I$ $a = -0.467909 - 0.043123I$ $b = -1.088600 + 0.262174I$	$4.02238 + 4.91225I$	0
$u = -0.033022 + 1.336280I$ $a = 0.871766 - 0.883623I$ $b = -1.58004 + 0.11016I$	$4.78115 - 1.33167I$	0
$u = -0.033022 - 1.336280I$ $a = 0.871766 + 0.883623I$ $b = -1.58004 - 0.11016I$	$4.78115 + 1.33167I$	0
$u = -0.617037 + 0.178502I$ $a = -0.594347 - 0.228378I$ $b = -0.962127 + 0.749077I$	$-1.91522 + 0.34343I$	$-10.92857 + 1.93540I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.617037-0.178502I$ $a=-0.594347+0.228378I$ $b=-0.962127-0.749077I$	$-1.91522-0.34343I$	$-10.92857-1.93540I$
$u=-0.138411+1.352910I$ $a=-0.217086+1.260970I$ $b=1.257190-0.439498I$	$3.16771+1.68068I$	0
$u=-0.138411-1.352910I$ $a=-0.217086-1.260970I$ $b=1.257190+0.439498I$	$3.16771-1.68068I$	0
$u=0.331929+0.546548I$ $a=-0.255257-0.397058I$ $b=-0.835212-0.757564I$	$-1.56185-2.54859I$	$-4.54183+6.73419I$
$u=0.331929-0.546548I$ $a=-0.255257+0.397058I$ $b=-0.835212+0.757564I$	$-1.56185+2.54859I$	$-4.54183-6.73419I$
$u=0.506249+0.383063I$ $a=1.282450-0.233467I$ $b=1.33969-0.99782I$	$-0.33577-7.51283I$	$-10.7158+11.6615I$
$u=0.506249-0.383063I$ $a=1.282450+0.233467I$ $b=1.33969+0.99782I$	$-0.33577+7.51283I$	$-10.7158-11.6615I$
$u=-0.480044+0.408777I$ $a=0.60292-1.39775I$ $b=-0.298969+0.772807I$	$3.12353+6.46824I$	$0.73913-10.15279I$
$u=-0.480044-0.408777I$ $a=0.60292+1.39775I$ $b=-0.298969-0.772807I$	$3.12353-6.46824I$	$0.73913+10.15279I$
$u=-0.203094+1.364630I$ $a=1.73312+1.06332I$ $b=-1.30310-1.52212I$	$2.44790+5.28354I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.203094-1.364630I$ $a=\ 1.73312-1.06332I$ $b=-1.30310+1.52212I$	$2.44790-5.28354I$	0
$u=-0.233413+1.362470I$ $a=\ 0.08623+1.84107I$ $b=\ 0.81713-1.23061I$	$2.95350+3.42762I$	0
$u=-0.233413-1.362470I$ $a=\ 0.08623-1.84107I$ $b=\ 0.81713+1.23061I$	$2.95350-3.42762I$	0
$u=\ 0.133295+1.380780I$ $a=\ 0.92027-1.11902I$ $b=-0.001311+0.512264I$	$6.25299+0.52670I$	0
$u=\ 0.133295-1.380780I$ $a=\ 0.92027+1.11902I$ $b=-0.001311-0.512264I$	$6.25299-0.52670I$	0
$u=\ 0.240329+1.377430I$ $a=\ 0.491496-0.511370I$ $b=\ 0.189501+0.635128I$	$5.10956+1.83810I$	0
$u=\ 0.240329-1.377430I$ $a=\ 0.491496+0.511370I$ $b=\ 0.189501-0.635128I$	$5.10956-1.83810I$	0
$u=-0.228892+1.382180I$ $a=\ 0.117317+1.188650I$ $b=\ 0.556428-0.783561I$	$3.34633+3.06913I$	0
$u=-0.228892-1.382180I$ $a=\ 0.117317-1.188650I$ $b=\ 0.556428+0.783561I$	$3.34633-3.06913I$	0
$u=\ 0.25227+1.40551I$ $a=\ 0.03543-2.27765I$ $b=\ 0.86262+1.41048I$	$4.35063-10.02420I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.25227 - 1.40551I$ $a = 0.03543 + 2.27765I$ $b = 0.86262 - 1.41048I$	$4.35063 + 10.02420I$	0
$u = -0.13339 + 1.42677I$ $a = 0.50672 - 1.98992I$ $b = -1.06454 + 0.97054I$	$6.57352 + 3.44110I$	0
$u = -0.13339 - 1.42677I$ $a = 0.50672 + 1.98992I$ $b = -1.06454 - 0.97054I$	$6.57352 - 3.44110I$	0
$u = 0.32254 + 1.39786I$ $a = 0.28885 - 2.01448I$ $b = 0.923664 + 1.004800I$	$3.60068 - 8.43394I$	0
$u = 0.32254 - 1.39786I$ $a = 0.28885 + 2.01448I$ $b = 0.923664 - 1.004800I$	$3.60068 + 8.43394I$	0
$u = -0.518527 + 0.214517I$ $a = 0.361565 + 0.426099I$ $b = 0.80056 + 1.42438I$	$-2.55081 + 2.60103I$	$-12.9307 - 11.5295I$
$u = -0.518527 - 0.214517I$ $a = 0.361565 - 0.426099I$ $b = 0.80056 - 1.42438I$	$-2.55081 - 2.60103I$	$-12.9307 + 11.5295I$
$u = 0.33778 + 1.42496I$ $a = 0.508109 - 1.087070I$ $b = 0.502588 + 0.790543I$	$8.09107 - 5.50368I$	0
$u = 0.33778 - 1.42496I$ $a = 0.508109 + 1.087070I$ $b = 0.502588 - 0.790543I$	$8.09107 + 5.50368I$	0
$u = -0.20032 + 1.45079I$ $a = -0.05306 + 1.92605I$ $b = 0.108526 - 1.070520I$	$9.10457 + 9.09493I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.20032-1.45079I$ $a=-0.05306-1.92605I$ $b=\ \ 0.108526+1.070520I$	$9.10457-9.09493I$	0
$u=\ \ 0.20599+1.45240I$ $a=\ \ 1.57680-0.46057I$ $b=-2.03746+1.23721I$	$5.60714-10.22340I$	0
$u=\ \ 0.20599-1.45240I$ $a=\ \ 1.57680+0.46057I$ $b=-2.03746-1.23721I$	$5.60714+10.22340I$	0
$u=-0.17957+1.45625I$ $a=-0.37758+1.94844I$ $b=\ \ 0.90227-1.25699I$	$3.72229+6.43678I$	0
$u=-0.17957-1.45625I$ $a=-0.37758-1.94844I$ $b=\ \ 0.90227+1.25699I$	$3.72229-6.43678I$	0
$u=-0.20003+1.46621I$ $a=-0.915411-0.527789I$ $b=-0.821245+0.218176I$	$6.39257+9.98168I$	0
$u=-0.20003-1.46621I$ $a=-0.915411+0.527789I$ $b=-0.821245-0.218176I$	$6.39257-9.98168I$	0
$u=\ \ 0.23324+1.46146I$ $a=\ \ 0.18206+2.10390I$ $b=-1.45473-1.43064I$	$9.5600-10.8669I$	0
$u=\ \ 0.23324-1.46146I$ $a=\ \ 0.18206-2.10390I$ $b=-1.45473+1.43064I$	$9.5600+10.8669I$	0
$u=\ \ 0.21065+1.46806I$ $a=\ \ 0.01019-1.93348I$ $b=\ \ 0.93758+1.79722I$	$4.83665-5.23562I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.21065 - 1.46806I$ $a = 0.01019 + 1.93348I$ $b = 0.93758 - 1.79722I$	$4.83665 + 5.23562I$	0
$u = 0.22202 + 1.46947I$ $a = 0.43697 - 1.72569I$ $b = 0.303575 + 1.114500I$	$9.39173 - 5.21294I$	0
$u = 0.22202 - 1.46947I$ $a = 0.43697 + 1.72569I$ $b = 0.303575 - 1.114500I$	$9.39173 + 5.21294I$	0
$u = -0.26248 + 1.46956I$ $a = 0.628599 + 0.826129I$ $b = 0.484751 - 0.429781I$	$8.16133 + 0.86157I$	0
$u = -0.26248 - 1.46956I$ $a = 0.628599 - 0.826129I$ $b = 0.484751 + 0.429781I$	$8.16133 - 0.86157I$	0
$u = 0.29888 + 1.46546I$ $a = -0.02359 + 1.92866I$ $b = -1.09492 - 1.07987I$	$2.12497 - 13.85470I$	0
$u = 0.29888 - 1.46546I$ $a = -0.02359 - 1.92866I$ $b = -1.09492 + 1.07987I$	$2.12497 + 13.85470I$	0
$u = -0.377529 + 0.327841I$ $a = -2.63328 - 0.36476I$ $b = -0.778590 + 0.560618I$	$-2.02929 - 0.12780I$	$-10.74338 - 2.92051I$
$u = -0.377529 - 0.327841I$ $a = -2.63328 + 0.36476I$ $b = -0.778590 - 0.560618I$	$-2.02929 + 0.12780I$	$-10.74338 + 2.92051I$
$u = 0.22806 + 1.48473I$ $a = -0.737285 + 1.180430I$ $b = 0.19151 - 1.48260I$	$9.63764 + 0.53038I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = \quad 0.22806 - 1.48473I$ $a = -0.737285 - 1.180430I$ $b = \quad 0.19151 + 1.48260I$	$9.63764 - 0.53038I$	0
$u = -0.492300$ $a = -0.880497$ $b = -0.767274$	-1.03985	-9.78370
$u = -0.36108 + 1.46548I$ $a = -0.194985 - 0.692778I$ $b = -0.260332 + 0.488777I$	$3.06785 + 5.46384I$	0
$u = -0.36108 - 1.46548I$ $a = -0.194985 + 0.692778I$ $b = -0.260332 - 0.488777I$	$3.06785 - 5.46384I$	0
$u = -0.16852 + 1.50024I$ $a = \quad 0.35221 - 1.65697I$ $b = -0.646933 + 0.774698I$	$7.89567 + 6.01898I$	0
$u = -0.16852 - 1.50024I$ $a = \quad 0.35221 + 1.65697I$ $b = -0.646933 - 0.774698I$	$7.89567 - 6.01898I$	0
$u = \quad 0.09743 + 1.50655I$ $a = -0.418988 + 0.855912I$ $b = \quad 0.268925 - 0.646170I$	$4.81503 + 3.13066I$	0
$u = \quad 0.09743 - 1.50655I$ $a = -0.418988 - 0.855912I$ $b = \quad 0.268925 + 0.646170I$	$4.81503 - 3.13066I$	0
$u = -0.22611 + 1.50968I$ $a = -0.008568 - 1.303240I$ $b = -0.480493 + 0.561248I$	$6.94963 + 5.98626I$	0
$u = -0.22611 - 1.50968I$ $a = -0.008568 + 1.303240I$ $b = -0.480493 - 0.561248I$	$6.94963 - 5.98626I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.466172 + 0.053820I$ $a = 2.74298 + 1.94383I$ $b = 0.557478 + 0.093884I$	$-3.69307 - 1.95755I$	$-21.5246 + 4.3584I$
$u = 0.466172 - 0.053820I$ $a = 2.74298 - 1.94383I$ $b = 0.557478 - 0.093884I$	$-3.69307 + 1.95755I$	$-21.5246 - 4.3584I$
$u = 0.40654 + 1.48266I$ $a = -0.174575 + 0.929955I$ $b = -0.664099 - 0.693623I$	$7.37799 - 12.05090I$	0
$u = 0.40654 - 1.48266I$ $a = -0.174575 - 0.929955I$ $b = -0.664099 + 0.693623I$	$7.37799 + 12.05090I$	0
$u = -0.36217 + 1.50053I$ $a = -0.18881 - 1.82911I$ $b = -1.18037 + 1.28798I$	$6.5397 + 20.4690I$	0
$u = -0.36217 - 1.50053I$ $a = -0.18881 + 1.82911I$ $b = -1.18037 - 1.28798I$	$6.5397 - 20.4690I$	0
$u = 0.01761 + 1.56111I$ $a = 0.40062 + 1.53699I$ $b = -0.40719 - 1.39963I$	$13.45800 + 0.73329I$	0
$u = 0.01761 - 1.56111I$ $a = 0.40062 - 1.53699I$ $b = -0.40719 + 1.39963I$	$13.45800 - 0.73329I$	0
$u = -0.42002 + 1.52310I$ $a = 0.30271 + 1.65901I$ $b = 1.25358 - 1.33361I$	$6.28714 + 11.19380I$	0
$u = -0.42002 - 1.52310I$ $a = 0.30271 - 1.65901I$ $b = 1.25358 + 1.33361I$	$6.28714 - 11.19380I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.23918 + 1.56330I$ $a = -0.793867 - 0.051978I$ $b = 2.07607 - 0.62330I$	$4.46463 - 0.32332I$	0
$u = 0.23918 - 1.56330I$ $a = -0.793867 + 0.051978I$ $b = 2.07607 + 0.62330I$	$4.46463 + 0.32332I$	0
$u = -0.078937 + 0.395652I$ $a = 1.21565 - 0.97488I$ $b = -1.191190 + 0.608235I$	$-2.68361 + 4.42624I$	$-17.0809 - 4.1958I$
$u = -0.078937 - 0.395652I$ $a = 1.21565 + 0.97488I$ $b = -1.191190 - 0.608235I$	$-2.68361 - 4.42624I$	$-17.0809 + 4.1958I$
$u = 0.316419 + 0.196344I$ $a = -1.76905 - 2.53885I$ $b = 0.645438 - 0.416976I$	$0.24472 + 4.06950I$	$-15.0900 - 3.4557I$
$u = 0.316419 - 0.196344I$ $a = -1.76905 + 2.53885I$ $b = 0.645438 + 0.416976I$	$0.24472 - 4.06950I$	$-15.0900 + 3.4557I$
$u = -0.28601 + 1.60424I$ $a = -0.193252 - 0.089414I$ $b = 1.52095 + 0.48295I$	$4.88802 + 0.84151I$	0
$u = -0.28601 - 1.60424I$ $a = -0.193252 + 0.089414I$ $b = 1.52095 - 0.48295I$	$4.88802 - 0.84151I$	0
$u = 0.209703 + 0.292557I$ $a = -2.21950 - 0.86846I$ $b = -0.879647 + 0.862875I$	$-2.53441 + 0.87638I$	$-11.93265 + 6.27963I$
$u = 0.209703 - 0.292557I$ $a = -2.21950 + 0.86846I$ $b = -0.879647 - 0.862875I$	$-2.53441 - 0.87638I$	$-11.93265 - 6.27963I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.078361 + 0.340629I$ $a = -1.72638 + 1.53643I$ $b = 0.720044 - 0.281910I$	$1.00286 + 1.79610I$	$-0.49070 - 2.53110I$
$u = 0.078361 - 0.340629I$ $a = -1.72638 - 1.53643I$ $b = 0.720044 + 0.281910I$	$1.00286 - 1.79610I$	$-0.49070 + 2.53110I$
$u = -0.195422 + 0.282160I$ $a = 0.50857 + 2.67042I$ $b = 0.988380 - 0.398161I$	$0.94576 + 1.84722I$	$1.10121 - 2.58190I$
$u = -0.195422 - 0.282160I$ $a = 0.50857 - 2.67042I$ $b = 0.988380 + 0.398161I$	$0.94576 - 1.84722I$	$1.10121 + 2.58190I$
$u = 0.01860 + 1.67391I$ $a = -0.222969 - 1.227730I$ $b = 0.269022 + 1.356990I$	$11.83490 - 7.06354I$	0
$u = 0.01860 - 1.67391I$ $a = -0.222969 + 1.227730I$ $b = 0.269022 - 1.356990I$	$11.83490 + 7.06354I$	0

II.

$\boldsymbol{I_2^u = \langle 1.36\times 10^{12}u^{42}-1.14\times 10^{12}u^{41}+\cdots+2.87\times 10^{11}b-2.81\times 10^{12},\ -1.91\times 10^{11}u^{42}+2.78\times 10^{13}u^{41}+\cdots+8.61\times 10^{11}a+3.29\times 10^{13},\ u^{43}+u^{42}+\cdots+10u+1\rangle}$

(i) Arc colorings

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

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

$$a_3 = \begin{pmatrix} 0.221825u^{42} - 32.2416u^{41} + \cdots - 299.443u - 38.1937 \\ -4.72395u^{42} + 3.96551u^{41} + \cdots + 68.4609u + 9.79378 \end{pmatrix}$$

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

$$a_2 = \begin{pmatrix} -4.50213u^{42} - 28.2761u^{41} + \cdots - 230.982u - 28.4000 \\ -4.72395u^{42} + 3.96551u^{41} + \cdots + 68.4609u + 9.79378 \end{pmatrix}$$

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

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

$$a_6 = \begin{pmatrix} 1.26740u^{42} - 25.2656u^{41} + \cdots - 205.158u - 27.9026 \\ -2.07515u^{42} - 2.36787u^{41} + \cdots - 62.5179u - 8.79318 \end{pmatrix}$$

$$a_5 = \begin{pmatrix} -16.1530u^{42} - 10.5518u^{41} + \cdots - 63.9256u - 15.1660 \\ 12.9419u^{42} + 21.4444u^{41} + \cdots + 37.9531u + 1.77918 \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} -9.06365u^{42} - 11.0607u^{41} + \cdots + 71.8230u + 13.3274 \\ 3.06681u^{42} + 0.104786u^{41} + \cdots - 49.4519u - 6.52750 \end{pmatrix}$$

$$a_9 = \begin{pmatrix} -3.37370u^{42} - 4.87295u^{41} + \cdots + 22.7095u + 4.97731 \\ 10.7071u^{42} + 7.04464u^{41} + \cdots - 46.0819u - 7.00358 \end{pmatrix}$$

$$a_4 = \begin{pmatrix} -11.5047u^{42} - 16.9836u^{41} + \cdots - 194.799u - 25.3332 \\ 7.09211u^{42} + 25.4009u^{41} + \cdots + 170.411u + 17.6561 \end{pmatrix}$$

(ii) Obstruction class $= 1$

(iii) Cusp Shapes

$$= -\frac{54075895974472}{860939862039}u^{42} - \frac{91712206252259}{860939862039}u^{41} + \cdots - \frac{277470088274206}{860939862039}u - \frac{33734854727699}{860939862039}$$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{43} - 18u^{42} + \cdots + 12u^2 - 1$
c_2	$u^{43} - 5u^{42} + \cdots + 8u - 1$
c_3	$u^{43} + 15u^{41} + \cdots + 3u - 9$
c_4	$u^{43} + 2u^{42} + \cdots - 14u^2 - 1$
c_5	$u^{43} - 3u^{42} + \cdots + 22u + 1$
c_6	$u^{43} - 3u^{42} + \cdots + 2u - 1$
c_7	$u^{43} - u^{42} + \cdots + 10u - 1$
c_8	$u^{43} - 2u^{42} + \cdots + 14u^2 + 1$
c_9	$u^{43} + 2u^{42} + \cdots - u - 1$
c_{10}	$u^{43} + 2u^{42} + \cdots + u + 1$
c_{11}, c_{12}	$u^{43} + u^{42} + \cdots + 10u + 1$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{43} - 6y^{42} + \cdots + 24y - 1$
c_2	$y^{43} - 13y^{42} + \cdots + 40y - 1$
c_3	$y^{43} + 30y^{42} + \cdots - 441y - 81$
c_4, c_8	$y^{43} + 34y^{42} + \cdots - 28y - 1$
c_5	$y^{43} - 17y^{42} + \cdots + 44y - 1$
c_6	$y^{43} + 23y^{42} + \cdots + 20y - 1$
c_7, c_{11}, c_{12}	$y^{43} + 43y^{42} + \cdots + 6y - 1$
c_9	$y^{43} + 2y^{42} + \cdots - 3y - 1$
c_{10}	$y^{43} - 26y^{41} + \cdots - 21y - 1$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.994536 + 0.150816I$ $a = 0.906274 - 0.271769I$ $b = 1.11458 + 1.13376I$	$-0.22307 - 5.30082I$	$-8.25420 + 7.03473I$
$u = 0.994536 - 0.150816I$ $a = 0.906274 + 0.271769I$ $b = 1.11458 - 1.13376I$	$-0.22307 + 5.30082I$	$-8.25420 - 7.03473I$
$u = -0.708601 + 0.633712I$ $a = 0.191227 + 0.727984I$ $b = 0.649217 - 0.568399I$	$0.51627 + 3.47994I$	$-7.74667 - 6.07604I$
$u = -0.708601 - 0.633712I$ $a = 0.191227 - 0.727984I$ $b = 0.649217 + 0.568399I$	$0.51627 - 3.47994I$	$-7.74667 + 6.07604I$
$u = -0.447532 + 0.799937I$ $a = 0.801775 - 0.735958I$ $b = 0.196687 - 0.665448I$	$-2.57328 + 2.03942I$	$-12.33316 - 1.81690I$
$u = -0.447532 - 0.799937I$ $a = 0.801775 + 0.735958I$ $b = 0.196687 + 0.665448I$	$-2.57328 - 2.03942I$	$-12.33316 + 1.81690I$
$u = 0.011937 + 1.206330I$ $a = 1.33564 - 0.60332I$ $b = -1.57880 + 0.54168I$	$-0.18874 + 4.21692I$	0
$u = 0.011937 - 1.206330I$ $a = 1.33564 + 0.60332I$ $b = -1.57880 - 0.54168I$	$-0.18874 - 4.21692I$	0
$u = 0.741245 + 0.245069I$ $a = -0.718430 - 0.496296I$ $b = -0.513762 - 0.150614I$	$1.28665 - 6.29745I$	$-7.03142 + 5.87693I$
$u = 0.741245 - 0.245069I$ $a = -0.718430 + 0.496296I$ $b = -0.513762 + 0.150614I$	$1.28665 + 6.29745I$	$-7.03142 - 5.87693I$

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.040747+1.241710I$ $a=-0.85450-3.11424I$ $b=\ \ 0.344407+0.875309I$	$2.16762+6.44054I$	0
$u=-0.040747-1.241710I$ $a=-0.85450+3.11424I$ $b=\ \ 0.344407-0.875309I$	$2.16762-6.44054I$	0
$u=-1.25030$ $a=\ \ 0.0158832$ $b=-0.146461$	-2.40936	-197.870
$u=\ \ 0.086387+0.710392I$ $a=-0.230492-0.225732I$ $b=\ \ 1.182270+0.579007I$	$-2.16882-4.50883I$	$-1.07557+6.25982I$
$u=\ \ 0.086387-0.710392I$ $a=-0.230492+0.225732I$ $b=\ \ 1.182270-0.579007I$	$-2.16882+4.50883I$	$-1.07557-6.25982I$
$u=\ \ 0.028724+1.291820I$ $a=-0.520755+0.419157I$ $b=-1.022110-0.409951I$	$3.66390-4.55889I$	0
$u=\ \ 0.028724-1.291820I$ $a=-0.520755-0.419157I$ $b=-1.022110+0.409951I$	$3.66390+4.55889I$	0
$u=-0.068145+1.300850I$ $a=\ \ 0.50005+2.45482I$ $b=-0.424767-1.058000I$	$0.727086-0.489982I$	0
$u=-0.068145-1.300850I$ $a=\ \ 0.50005-2.45482I$ $b=-0.424767+1.058000I$	$0.727086+0.489982I$	0
$u=-0.257190+1.301560I$ $a=\ \ 0.732839-0.545164I$ $b=-1.61892-0.44519I$	$3.08345+0.58263I$	0

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.257190-1.301560I$ $a=\ \ 0.732839+0.545164I$ $b=-1.61892+0.44519I$	$3.08345-0.58263I$	0
$u=\ \ 0.004853+0.631885I$ $a=-0.48373+2.93246I$ $b=-0.283727+0.554739I$	$-0.20672-6.17992I$	$-10.70052+5.69705I$
$u=\ \ 0.004853-0.631885I$ $a=-0.48373-2.93246I$ $b=-0.283727-0.554739I$	$-0.20672+6.17992I$	$-10.70052-5.69705I$
$u=-0.251863+1.346230I$ $a=-0.774057-0.742338I$ $b=\ \ 0.549413+0.754159I$	$2.76284+4.64437I$	0
$u=-0.251863-1.346230I$ $a=-0.774057+0.742338I$ $b=\ \ 0.549413-0.754159I$	$2.76284-4.64437I$	0
$u=-0.190679+1.375190I$ $a=\ \ 0.03901-1.84667I$ $b=-0.69989+1.27425I$	$2.70702+3.95086I$	0
$u=-0.190679-1.375190I$ $a=\ \ 0.03901+1.84667I$ $b=-0.69989-1.27425I$	$2.70702-3.95086I$	0
$u=\ \ 0.29568+1.39265I$ $a=-0.23343+2.19845I$ $b=-0.92289-1.28590I$	$4.80069-9.55102I$	0
$u=\ \ 0.29568-1.39265I$ $a=-0.23343-2.19845I$ $b=-0.92289+1.28590I$	$4.80069+9.55102I$	0
$u=\ \ 0.27470+1.43631I$ $a=-0.540777+0.471902I$ $b=-0.088275-0.524413I$	$5.45011+2.16121I$	0

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.27470 - 1.43631I$ $a = -0.540777 - 0.471902I$ $b = -0.088275 + 0.524413I$	$5.45011 - 2.16121I$	0
$u = 0.21977 + 1.45302I$ $a = 0.059220 - 0.136952I$ $b = 0.990880 - 0.094483I$	$7.02514 - 9.54845I$	0
$u = 0.21977 - 1.45302I$ $a = 0.059220 + 0.136952I$ $b = 0.990880 + 0.094483I$	$7.02514 + 9.54845I$	0
$u = -0.396732 + 0.292907I$ $a = -0.638609 - 0.563413I$ $b = 0.215097 - 0.849317I$	$-2.65156 + 1.72406I$	$-12.69164 - 3.37048I$
$u = -0.396732 - 0.292907I$ $a = -0.638609 + 0.563413I$ $b = 0.215097 + 0.849317I$	$-2.65156 - 1.72406I$	$-12.69164 + 3.37048I$
$u = -0.18265 + 1.50681I$ $a = 0.25510 - 1.57673I$ $b = -0.557755 + 0.756420I$	$7.66397 + 6.18308I$	0
$u = -0.18265 - 1.50681I$ $a = 0.25510 + 1.57673I$ $b = -0.557755 - 0.756420I$	$7.66397 - 6.18308I$	0
$u = -0.025242 + 0.455449I$ $a = -2.48479 + 0.91092I$ $b = 0.763287 - 0.466434I$	$0.56637 + 4.36746I$	$-2.3969 - 17.9478I$
$u = -0.025242 - 0.455449I$ $a = -2.48479 - 0.91092I$ $b = 0.763287 + 0.466434I$	$0.56637 - 4.36746I$	$-2.3969 + 17.9478I$
$u = 0.29189 + 1.67164I$ $a = 0.337666 + 0.013597I$ $b = -1.80615 + 0.49588I$	$5.13869 - 0.84939I$	0

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.29189 - 1.67164I$ $a = 0.337666 - 0.013597I$ $b = -1.80615 - 0.49588I$	$5.13869 + 0.84939I$	0
$u = -0.255185 + 0.022593I$ $a = 1.31285 - 2.65318I$ $b = 1.084440 + 0.524226I$	$-2.15438 - 2.00272I$	$-13.73059 + 2.44447I$
$u = -0.255185 - 0.022593I$ $a = 1.31285 + 2.65318I$ $b = 1.084440 - 0.524226I$	$-2.15438 + 2.00272I$	$-13.73059 - 2.44447I$

III. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1	$(u^{43}-18u^{42}+\cdots+12u^2-1)(u^{166}+15u^{165}+\cdots+14u-1)$
c_2	$(u^{43}-5u^{42}+\cdots+8u-1)(u^{166}-4u^{165}+\cdots+28476u+667)$
c_3	$(u^{43}+15u^{41}+\cdots+3u-9)(u^{166}-3u^{165}+\cdots-8268033u+335191)$
c_4	$(u^{43}+2u^{42}+\cdots-14u^2-1)(u^{166}-u^{165}+\cdots-228154u+191449)$
c_5	$(u^{43}-3u^{42}+\cdots+22u+1)(u^{166}-2u^{165}+\cdots+2701472u-273472)$
c_6	$(u^{43}-3u^{42}+\cdots+2u-1)(u^{166}-10u^{165}+\cdots+634u-109)$
c_7	$(u^{43}-u^{42}+\cdots+10u-1)(u^{166}+2u^{165}+\cdots-714u+289)$
c_8	$(u^{43}-2u^{42}+\cdots+14u^2+1)(u^{166}-u^{165}+\cdots-228154u+191449)$
c_9	$(u^{43}+2u^{42}+\cdots-u-1)(u^{166}-u^{165}+\cdots-67072u+22016)$
c_{10}	$(u^{43}+2u^{42}+\cdots+u+1)(u^{166}+5u^{165}+\cdots-15u+1)$
c_{11}, c_{12}	$(u^{43}+u^{42}+\cdots+10u+1)(u^{166}+2u^{165}+\cdots-714u+289)$

IV. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1	$(y^{43}-6y^{42}+\cdots+24y-1)(y^{166}+y^{165}+\cdots-14y+1)$
c_2	$(y^{43}-13y^{42}+\cdots+40y-1)$ $\cdot(y^{166}-2y^{165}+\cdots-1188891486y+444889)$
c_3	$(y^{43}+30y^{42}+\cdots-441y-81)$ $\cdot(y^{166}+61y^{165}+\cdots-3152875669969y+112353006481)$
c_4, c_8	$(y^{43}+34y^{42}+\cdots-28y-1)$ $\cdot(y^{166}+117y^{165}+\cdots+1929765685298y+36652719601)$
c_5	$(y^{43}-17y^{42}+\cdots+44y-1)$ $\cdot(y^{166}-30y^{165}+\cdots-5537587637248y+74786934784)$
c_6	$(y^{43}+23y^{42}+\cdots+20y-1)$ $\cdot(y^{166}+18y^{165}+\cdots-1172586y+11881)$
c_7, c_{11}, c_{12}	$(y^{43}+43y^{42}+\cdots+6y-1)$ $\cdot(y^{166}+158y^{165}+\cdots+2222988y+83521)$
c_9	$(y^{43}+2y^{42}+\cdots-3y-1)$ $\cdot(y^{166}+21y^{165}+\cdots+28523233280y+484704256)$
c_{10}	$(y^{43}-26y^{41}+\cdots-21y-1)(y^{166}+15y^{165}+\cdots-249y+1)$