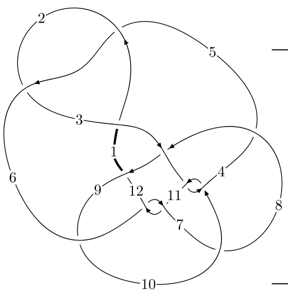
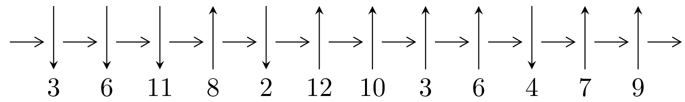
$12n_{0491}$ ($K12n_{0491}$)



A knot diagram[1]

Linearized knot diagam



Solving Sequence

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

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

$$\begin{aligned}
I_1^u = \langle & -6.28259 \times 10^{69} u^{52} - 3.92104 \times 10^{70} u^{51} + \cdots + 1.58927 \times 10^{71} b + 7.23259 \times 10^{71}, \\
& -1.12367 \times 10^{72} u^{52} + 1.44284 \times 10^{72} u^{51} + \cdots + 3.01961 \times 10^{72} a + 1.87033 \times 10^{73}, \\
& u^{53} - 2u^{52} + \cdots - 40u - 19 \rangle \\
I_2^u = \langle & -13796u^{18} - 18331u^{17} + \cdots + 45431b + 86665, \\
& 172722u^{18} + 249659u^{17} + \cdots + 318017a - 540027, \ u^{19} + u^{18} + \cdots - 3u - 7 \rangle
\end{aligned}$$

* 2 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 72 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. $I_1^u = \langle -6.28 \times 10^{69} u^{52} - 3.92 \times 10^{70} u^{51} + \cdots + 1.59 \times 10^{71} b + 7.23 \times 10^{71},\ -1.12 \times 10^{72} u^{52} + 1.44 \times 10^{72} u^{51} + \cdots + 3.02 \times 10^{72} a + 1.87 \times 10^{73},\ u^{53} - 2u^{52} + \cdots - 40u - 19 \rangle$

(i) Arc colorings

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

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

$$a_4 = \begin{pmatrix} 0.372124u^{52} - 0.477822u^{51} + \cdots - 20.2423u - 6.19396 \\ 0.0395313u^{52} + 0.246720u^{51} + \cdots - 9.19809u - 4.55090 \end{pmatrix}$$

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

$$a_3 = \begin{pmatrix} 0.411656u^{52} - 0.231102u^{51} + \cdots - 29.4404u - 10.7449 \\ 0.0395313u^{52} + 0.246720u^{51} + \cdots - 9.19809u - 4.55090 \end{pmatrix}$$

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

$$a_2 = \begin{pmatrix} 0.458907u^{52} - 0.728958u^{51} + \cdots - 18.2819u - 5.32838 \\ 0.0479872u^{52} + 0.108330u^{51} + \cdots - 5.12020u - 2.30366 \end{pmatrix}$$

$$a_1 = \begin{pmatrix} -0.217784u^{52} - 1.10568u^{51} + \cdots + 53.3268u + 23.0233 \\ -0.0127121u^{52} - 1.28483u^{51} + \cdots + 42.1962u + 19.5101 \end{pmatrix}$$

$$a_5 = \begin{pmatrix} -0.486443u^{52} + 0.781036u^{51} + \cdots + 16.1784u + 4.41592 \\ 0.210529u^{52} - 0.0287556u^{51} + \cdots - 14.2682u - 5.35874 \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} -0.151735u^{52} + 0.441502u^{51} + \cdots - 4.60673u - 1.92073 \\ 0.621884u^{52} - 1.11241u^{51} + \cdots - 9.54706u - 0.104321 \end{pmatrix}$$

$$a_8 = \begin{pmatrix} 0.124913u^{52} - 0.625193u^{51} + \cdots + 8.69636u + 6.25801 \\ -0.0892206u^{52} + 0.468833u^{51} + \cdots - 9.12061u - 4.72212 \end{pmatrix}$$

$$a_9 = \begin{pmatrix} 0.642220u^{52} - 0.865075u^{51} + \cdots - 19.8419u - 3.61549 \\ 0.832643u^{52} - 1.27823u^{51} + \cdots - 20.6504u - 3.75489 \end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= 0.0970191u^{52} + 0.877677u^{51} + \cdots - 34.0551u - 20.3470$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{53} + 78u^{52} + \cdots + 5037u + 49$
c_2, c_5	$u^{53} + 6u^{52} + \cdots + 173u - 7$
c_3, c_{10}	$u^{53} + 2u^{52} + \cdots - 17u - 13$
c_4	$u^{53} - 3u^{52} + \cdots + 34374u - 17789$
c_6, c_{11}	$u^{53} - 2u^{52} + \cdots - 40u - 19$
c_7	$u^{53} + 16u^{52} + \cdots - 1526u - 127$
c_8	$u^{53} + u^{52} + \cdots + 307064u - 83053$
c_9	$u^{53} - 4u^{52} + \cdots - 9953511u - 5353931$
c_{12}	$u^{53} + 44u^{51} + \cdots - 895504u - 204397$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{53} - 198y^{52} + \cdots + 8975185y - 2401$
c_2, c_5	$y^{53} - 78y^{52} + \cdots + 5037y - 49$
c_3, c_{10}	$y^{53} + 34y^{52} + \cdots - 23y - 169$
c_4	$y^{53} + 27y^{52} + \cdots - 3258740414y - 316448521$
c_6, c_{11}	$y^{53} + 38y^{52} + \cdots + 1866y - 361$
c_7	$y^{53} + 6y^{52} + \cdots - 286000y - 16129$
c_8	$y^{53} + 109y^{52} + \cdots + 44431418090y - 6897800809$
c_9	$y^{53} + 74y^{52} + \cdots - 616501666366053y - 28664577152761$
c_{12}	$y^{53} + 88y^{52} + \cdots - 165123439470y - 41778133609$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.020424 + 1.053450I$ $a = 1.37500 + 1.00686I$ $b = 0.412944 - 0.888348I$	$-3.41496 - 0.13150I$	$-2.61329 + 0.59782I$
$u = 0.020424 - 1.053450I$ $a = 1.37500 - 1.00686I$ $b = 0.412944 + 0.888348I$	$-3.41496 + 0.13150I$	$-2.61329 - 0.59782I$
$u = -0.114759 + 1.057300I$ $a = -3.20217 - 0.52473I$ $b = -0.249252 + 0.779627I$	$-12.52400 - 0.56124I$	$-3.93900 - 2.29264I$
$u = -0.114759 - 1.057300I$ $a = -3.20217 + 0.52473I$ $b = -0.249252 - 0.779627I$	$-12.52400 + 0.56124I$	$-3.93900 + 2.29264I$
$u = -0.897126 + 0.227286I$ $a = -0.379021 + 0.772014I$ $b = 0.836819 - 0.182673I$	$-11.53260 - 3.30283I$	$-1.48794 + 1.83705I$
$u = -0.897126 - 0.227286I$ $a = -0.379021 - 0.772014I$ $b = 0.836819 + 0.182673I$	$-11.53260 + 3.30283I$	$-1.48794 - 1.83705I$
$u = 0.758954 + 0.497746I$ $a = -0.352903 - 1.066290I$ $b = 0.082346 + 1.057370I$	$1.94643 + 1.44631I$	$4.91144 - 4.52605I$
$u = 0.758954 - 0.497746I$ $a = -0.352903 + 1.066290I$ $b = 0.082346 - 1.057370I$	$1.94643 - 1.44631I$	$4.91144 + 4.52605I$
$u = 0.100638 + 1.126930I$ $a = -0.093158 + 0.628972I$ $b = -0.60558 - 2.11609I$	$-9.49889 + 0.94288I$	$-12.4384 - 8.3240I$
$u = 0.100638 - 1.126930I$ $a = -0.093158 - 0.628972I$ $b = -0.60558 + 2.11609I$	$-9.49889 - 0.94288I$	$-12.4384 + 8.3240I$

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.167867 + 1.122590I$ $a = 1.025970 - 0.785312I$ $b = 0.74301 + 1.32853I$	$-0.62397 - 4.66230I$	$-2.14855 + 3.98094I$
$u = -0.167867 - 1.122590I$ $a = 1.025970 + 0.785312I$ $b = 0.74301 - 1.32853I$	$-0.62397 + 4.66230I$	$-2.14855 - 3.98094I$
$u = 1.145150 + 0.111172I$ $a = 0.220953 + 1.242920I$ $b = -0.400983 - 1.048090I$	$1.16018 - 3.48244I$	$0. + 4.21874I$
$u = 1.145150 - 0.111172I$ $a = 0.220953 - 1.242920I$ $b = -0.400983 + 1.048090I$	$1.16018 + 3.48244I$	$0. - 4.21874I$
$u = -1.009890 + 0.580274I$ $a = 0.45461 - 1.51023I$ $b = -0.201772 + 0.717706I$	$-0.404087 - 0.664512I$	0
$u = -1.009890 - 0.580274I$ $a = 0.45461 + 1.51023I$ $b = -0.201772 - 0.717706I$	$-0.404087 + 0.664512I$	0
$u = 0.446506 + 1.080840I$ $a = -0.758454 - 0.942259I$ $b = -0.560983 + 1.108950I$	$0.01834 + 3.18821I$	0
$u = 0.446506 - 1.080840I$ $a = -0.758454 + 0.942259I$ $b = -0.560983 - 1.108950I$	$0.01834 - 3.18821I$	0
$u = 0.094171 + 1.189170I$ $a = -0.198337 - 0.285371I$ $b = -0.815075 + 0.102906I$	$-2.73134 + 1.95349I$	0
$u = 0.094171 - 1.189170I$ $a = -0.198337 + 0.285371I$ $b = -0.815075 - 0.102906I$	$-2.73134 - 1.95349I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.372324+1.144500I$ $a=-1.16966+1.43335I$ $b=-0.463731-1.211130I$	$0.97517-6.41654I$	0
$u=-0.372324-1.144500I$ $a=-1.16966-1.43335I$ $b=-0.463731+1.211130I$	$0.97517+6.41654I$	0
$u=-0.713359+0.352723I$ $a=-0.82265+1.89224I$ $b=\ \ 0.291445-1.061860I$	$3.49003+2.33827I$	$7.35150-0.03351I$
$u=-0.713359-0.352723I$ $a=-0.82265-1.89224I$ $b=\ \ 0.291445+1.061860I$	$3.49003-2.33827I$	$7.35150+0.03351I$
$u=\ \ 1.208870+0.041842I$ $a=-0.14294+1.53627I$ $b=\ \ 0.553234-1.183980I$	$-8.60540+8.39391I$	0
$u=\ \ 1.208870-0.041842I$ $a=-0.14294-1.53627I$ $b=\ \ 0.553234+1.183980I$	$-8.60540-8.39391I$	0
$u=-0.231709+1.213410I$ $a=\ \ 0.225449+0.057108I$ $b=\ \ 1.259850-0.339420I$	$-5.52106-2.87929I$	0
$u=-0.231709-1.213410I$ $a=\ \ 0.225449-0.057108I$ $b=\ \ 1.259850+0.339420I$	$-5.52106+2.87929I$	0
$u=\ \ 0.129199+1.337350I$ $a=\ \ 0.537924-0.387937I$ $b=\ \ 0.324016-0.723848I$	$-4.06104+3.45520I$	0
$u=\ \ 0.129199-1.337350I$ $a=\ \ 0.537924+0.387937I$ $b=\ \ 0.324016+0.723848I$	$-4.06104-3.45520I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.180042 + 1.332050I$ $a = -1.50668 + 0.75298I$ $b = -0.339166 + 0.960564I$	$-11.76730 + 3.22677I$	0
$u = 0.180042 - 1.332050I$ $a = -1.50668 - 0.75298I$ $b = -0.339166 - 0.960564I$	$-11.76730 - 3.22677I$	0
$u = -0.577971 + 1.247660I$ $a = 0.78777 - 1.50170I$ $b = 0.421565 + 1.016140I$	$-2.93844 - 5.32446I$	0
$u = -0.577971 - 1.247660I$ $a = 0.78777 + 1.50170I$ $b = 0.421565 - 1.016140I$	$-2.93844 + 5.32446I$	0
$u = -0.39239 + 1.36564I$ $a = -0.081320 + 0.209135I$ $b = -1.232780 + 0.267892I$	$-16.4729 - 7.8769I$	0
$u = -0.39239 - 1.36564I$ $a = -0.081320 - 0.209135I$ $b = -1.232780 - 0.267892I$	$-16.4729 + 7.8769I$	0
$u = -0.75288 + 1.22697I$ $a = -0.39606 + 1.40742I$ $b = -0.528365 - 0.680227I$	$-14.0211 - 2.5435I$	0
$u = -0.75288 - 1.22697I$ $a = -0.39606 - 1.40742I$ $b = -0.528365 + 0.680227I$	$-14.0211 + 2.5435I$	0
$u = 0.54784 + 1.33209I$ $a = 0.759325 + 1.028150I$ $b = 0.675306 - 1.215400I$	$-2.77910 + 9.40789I$	0
$u = 0.54784 - 1.33209I$ $a = 0.759325 - 1.028150I$ $b = 0.675306 + 1.215400I$	$-2.77910 - 9.40789I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.33828 + 1.43001I$ $a = -0.0525982 - 0.0974268I$ $b = 0.359013 + 0.599994I$	$-4.31265 + 1.85896I$	0
$u = 0.33828 - 1.43001I$ $a = -0.0525982 + 0.0974268I$ $b = 0.359013 - 0.599994I$	$-4.31265 - 1.85896I$	0
$u = 0.443343 + 0.193493I$ $a = 2.20108 + 1.09321I$ $b = 0.385941 - 1.326290I$	$-7.01956 + 0.93199I$	$3.37878 - 0.77497I$
$u = 0.443343 - 0.193493I$ $a = 2.20108 - 1.09321I$ $b = 0.385941 + 1.326290I$	$-7.01956 - 0.93199I$	$3.37878 + 0.77497I$
$u = 0.54770 + 1.41531I$ $a = -0.89521 - 1.20600I$ $b = -0.68192 + 1.29863I$	$-13.2260 + 14.5372I$	0
$u = 0.54770 - 1.41531I$ $a = -0.89521 + 1.20600I$ $b = -0.68192 - 1.29863I$	$-13.2260 - 14.5372I$	0
$u = 0.471441$ $a = -0.781098$ $b = 0.296482$	0.918032	11.4070
$u = -0.241489 + 0.382395I$ $a = 1.38602 - 0.67704I$ $b = -0.380240 + 1.189440I$	$1.58800 + 2.79734I$	$0.78154 - 2.00922I$
$u = -0.241489 - 0.382395I$ $a = 1.38602 + 0.67704I$ $b = -0.380240 - 1.189440I$	$1.58800 - 2.79734I$	$0.78154 + 2.00922I$
$u = 0.56855 + 1.51885I$ $a = 0.248170 + 0.465569I$ $b = -0.541885 - 0.930855I$	$-13.25010 - 1.79041I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.56855 - 1.51885I$ $a = 0.248170 - 0.465569I$ $b = -0.541885 + 0.930855I$	$-13.25010 + 1.79041I$	0
$u = -0.293628 + 0.169658I$ $a = -0.43844 - 1.77881I$ $b = -0.492003 - 0.133929I$	$-1.46218 - 0.58938I$	$-4.90888 + 1.84572I$
$u = -0.293628 - 0.169658I$ $a = -0.43844 + 1.77881I$ $b = -0.492003 + 0.133929I$	$-1.46218 + 0.58938I$	$-4.90888 - 1.84572I$

II. $\boldsymbol{I^u_2 = \langle -13796u^{18} - 18331u^{17} + \cdots + 45431b + 86665,\ 1.73 \times 10^5 u^{18} + 2.50 \times 10^5 u^{17} + \cdots + 3.18 \times 10^5 a - 5.40 \times 10^5,\ u^{19} + u^{18} + \cdots - 3u - 7\rangle}$

(i) Arc colorings

$$a_7 = \begin{pmatrix} 0 \\ u \end{pmatrix}$$
$$a_{11} = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$
$$a_4 = \begin{pmatrix} -0.543122u^{18} - 0.785049u^{17} + \cdots + 2.33131u + 1.69811 \\ 0.303669u^{18} + 0.403491u^{17} + \cdots - 1.20556u - 1.90762 \end{pmatrix}$$
$$a_{12} = \begin{pmatrix} 1 \\ -u^2 \end{pmatrix}$$
$$a_3 = \begin{pmatrix} -0.239453u^{18} - 0.381558u^{17} + \cdots + 1.12575u - 0.209511 \\ 0.303669u^{18} + 0.403491u^{17} + \cdots - 1.20556u - 1.90762 \end{pmatrix}$$
$$a_6 = \begin{pmatrix} -u \\ u^3 + u \end{pmatrix}$$
$$a_2 = \begin{pmatrix} -0.429037u^{18} - 0.992044u^{17} + \cdots + 4.06352u + 3.76898 \\ 0.309634u^{18} + 0.774493u^{17} + \cdots - 1.55354u - 2.93980 \end{pmatrix}$$
$$a_1 = \begin{pmatrix} -1.09950u^{18} - 0.891735u^{17} + \cdots + 9.42967u + 3.59530 \\ -1.14149u^{18} - 0.770487u^{17} + \cdots + 6.82585u + 0.0622042 \end{pmatrix}$$
$$a_5 = \begin{pmatrix} 0.148385u^{18} + 0.268435u^{17} + \cdots - 1.01515u + 0.939076 \\ 0.495675u^{18} + 0.891506u^{17} + \cdots - 4.32517u - 4.91394 \end{pmatrix}$$
$$a_{10} = \begin{pmatrix} -0.00459724u^{18} + 0.00136785u^{17} + \cdots - 0.540462u - 0.334187 \\ -0.217583u^{18} - 1.26700u^{17} + \cdots + 1.84046u + 6.86386 \end{pmatrix}$$
$$a_8 = \begin{pmatrix} 0.624070u^{18} + 0.511306u^{17} + \cdots - 1.65340u + 0.296396 \\ -0.211618u^{18} + 0.104004u^{17} + \cdots + 0.492483u - 1.16832 \end{pmatrix}$$
$$a_9 = \begin{pmatrix} -0.00459724u^{18} - 0.998632u^{17} + \cdots + 1.45954u + 6.66581 \\ -0.217583u^{18} - 1.26700u^{17} + \cdots + 2.84046u + 6.86386 \end{pmatrix}$$

(ii) Obstruction class $= 1$

(iii) Cusp Shapes $= -\frac{29514}{45431}u^{18} + \frac{3561}{45431}u^{17} + \cdots + \frac{108503}{45431}u - \frac{237418}{45431}$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{19} - 23u^{18} + \cdots + 142u - 9$
c_2	$u^{19} + u^{18} + \cdots + 4u - 3$
c_3	$u^{19} - u^{18} + \cdots - 2u + 1$
c_4	$u^{19} - 2u^{18} + \cdots - 3u + 1$
c_5	$u^{19} - u^{18} + \cdots + 4u + 3$
c_6	$u^{19} - u^{18} + \cdots - 3u + 7$
c_7	$u^{19} + 3u^{18} + \cdots + u + 1$
c_8	$u^{19} + 12u^{17} + \cdots + 17u - 7$
c_9	$u^{19} + 3u^{18} + \cdots + 6u - 1$
c_{10}	$u^{19} + u^{18} + \cdots - 2u - 1$
c_{11}	$u^{19} + u^{18} + \cdots - 3u - 7$
c_{12}	$u^{19} - u^{18} + \cdots + 3u - 1$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{19} - 47y^{18} + \cdots + 1138y - 81$
c_2, c_5	$y^{19} - 23y^{18} + \cdots + 142y - 9$
c_3, c_{10}	$y^{19} + 17y^{18} + \cdots - 10y - 1$
c_4	$y^{19} + 2y^{18} + \cdots + 11y - 1$
c_6, c_{11}	$y^{19} + 13y^{18} + \cdots - 61y - 49$
c_7	$y^{19} - 7y^{18} + \cdots - 7y - 1$
c_8	$y^{19} + 24y^{18} + \cdots + 1283y - 49$
c_9	$y^{19} + 25y^{18} + \cdots + 4y - 1$
c_{12}	$y^{19} + 15y^{18} + \cdots + 7y - 1$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.912989 + 0.470847I$ $a = 0.08016 - 1.71011I$ $b = -0.090557 + 0.743656I$	$-0.23953 + 1.45033I$	$1.46889 - 5.46667I$
$u = 0.912989 - 0.470847I$ $a = 0.08016 + 1.71011I$ $b = -0.090557 - 0.743656I$	$-0.23953 - 1.45033I$	$1.46889 + 5.46667I$
$u = -0.122558 + 1.056040I$ $a = 0.431762 + 0.531081I$ $b = 0.25264 - 1.78160I$	$-9.10403 - 0.56699I$	$0.10463 - 2.18342I$
$u = -0.122558 - 1.056040I$ $a = 0.431762 - 0.531081I$ $b = 0.25264 + 1.78160I$	$-9.10403 + 0.56699I$	$0.10463 + 2.18342I$
$u = -0.375439 + 1.005050I$ $a = 0.80534 - 1.25378I$ $b = 0.51738 + 1.33523I$	$0.95735 - 4.84388I$	$2.57358 + 4.50026I$
$u = -0.375439 - 1.005050I$ $a = 0.80534 + 1.25378I$ $b = 0.51738 - 1.33523I$	$0.95735 + 4.84388I$	$2.57358 - 4.50026I$
$u = -0.828010 + 0.194067I$ $a = -0.18741 + 1.74034I$ $b = 0.388243 - 1.140120I$	$3.03087 + 3.56656I$	$5.57109 - 5.07215I$
$u = -0.828010 - 0.194067I$ $a = -0.18741 - 1.74034I$ $b = 0.388243 + 1.140120I$	$3.03087 - 3.56656I$	$5.57109 + 5.07215I$
$u = -0.798171 + 0.862325I$ $a = 0.599547 - 0.825372I$ $b = -0.299334 + 1.118840I$	$1.52458 + 0.35003I$	$1.30577 - 1.04146I$
$u = -0.798171 - 0.862325I$ $a = 0.599547 + 0.825372I$ $b = -0.299334 - 1.118840I$	$1.52458 - 0.35003I$	$1.30577 + 1.04146I$

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.361100 + 1.153390I$ $a = 2.44435 + 0.80442I$ $b = 0.074478 - 0.751501I$	$-12.31010 + 1.60834I$	$-0.89180 - 3.51923I$
$u = 0.361100 - 1.153390I$ $a = 2.44435 - 0.80442I$ $b = 0.074478 + 0.751501I$	$-12.31010 - 1.60834I$	$-0.89180 + 3.51923I$
$u = 0.245707 + 1.238420I$ $a = -0.451047 - 0.220292I$ $b = -0.863122 - 0.000595I$	$-3.94352 + 3.17778I$	$-2.47265 - 4.38700I$
$u = 0.245707 - 1.238420I$ $a = -0.451047 + 0.220292I$ $b = -0.863122 + 0.000595I$	$-3.94352 - 3.17778I$	$-2.47265 + 4.38700I$
$u = 0.231435 + 1.334010I$ $a = -0.681102 - 0.044640I$ $b = -0.229020 + 0.511916I$	$-3.91760 + 2.77143I$	$-0.013564 - 1.322656I$
$u = 0.231435 - 1.334010I$ $a = -0.681102 + 0.044640I$ $b = -0.229020 - 0.511916I$	$-3.91760 - 2.77143I$	$-0.013564 + 1.322656I$
$u = 0.635520$ $a = -0.0744073$ $b = 0.586817$	-0.102213	0.467600
$u = -0.444813 + 1.297870I$ $a = -1.14727 + 0.98503I$ $b = -0.544126 - 1.209470I$	$-0.62097 - 8.31420I$	$0.62025 + 6.65896I$
$u = -0.444813 - 1.297870I$ $a = -1.14727 - 0.98503I$ $b = -0.544126 + 1.209470I$	$-0.62097 + 8.31420I$	$0.62025 - 6.65896I$

III. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1	$(u^{19} - 23u^{18} + \cdots + 142u - 9)(u^{53} + 78u^{52} + \cdots + 5037u + 49)$
c_2	$(u^{19} + u^{18} + \cdots + 4u - 3)(u^{53} + 6u^{52} + \cdots + 173u - 7)$
c_3	$(u^{19} - u^{18} + \cdots - 2u + 1)(u^{53} + 2u^{52} + \cdots - 17u - 13)$
c_4	$(u^{19} - 2u^{18} + \cdots - 3u + 1)(u^{53} - 3u^{52} + \cdots + 34374u - 17789)$
c_5	$(u^{19} - u^{18} + \cdots + 4u + 3)(u^{53} + 6u^{52} + \cdots + 173u - 7)$
c_6	$(u^{19} - u^{18} + \cdots - 3u + 7)(u^{53} - 2u^{52} + \cdots - 40u - 19)$
c_7	$(u^{19} + 3u^{18} + \cdots + u + 1)(u^{53} + 16u^{52} + \cdots - 1526u - 127)$
c_8	$(u^{19} + 12u^{17} + \cdots + 17u - 7)(u^{53} + u^{52} + \cdots + 307064u - 83053)$
c_9	$(u^{19} + 3u^{18} + \cdots + 6u - 1)(u^{53} - 4u^{52} + \cdots - 9953511u - 5353931)$
c_{10}	$(u^{19} + u^{18} + \cdots - 2u - 1)(u^{53} + 2u^{52} + \cdots - 17u - 13)$
c_{11}	$(u^{19} + u^{18} + \cdots - 3u - 7)(u^{53} - 2u^{52} + \cdots - 40u - 19)$
c_{12}	$(u^{19} - u^{18} + \cdots + 3u - 1)(u^{53} + 44u^{51} + \cdots - 895504u - 204397)$

IV. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1	$(y^{19} - 47y^{18} + \cdots + 1138y - 81)$ $\cdot (y^{53} - 198y^{52} + \cdots + 8975185y - 2401)$
c_2, c_5	$(y^{19} - 23y^{18} + \cdots + 142y - 9)(y^{53} - 78y^{52} + \cdots + 5037y - 49)$
c_3, c_{10}	$(y^{19} + 17y^{18} + \cdots - 10y - 1)(y^{53} + 34y^{52} + \cdots - 23y - 169)$
c_4	$(y^{19} + 2y^{18} + \cdots + 11y - 1)$ $\cdot (y^{53} + 27y^{52} + \cdots - 3258740414y - 316448521)$
c_6, c_{11}	$(y^{19} + 13y^{18} + \cdots - 61y - 49)(y^{53} + 38y^{52} + \cdots + 1866y - 361)$
c_7	$(y^{19} - 7y^{18} + \cdots - 7y - 1)(y^{53} + 6y^{52} + \cdots - 286000y - 16129)$
c_8	$(y^{19} + 24y^{18} + \cdots + 1283y - 49)$ $\cdot (y^{53} + 109y^{52} + \cdots + 44431418090y - 6897800809)$
c_9	$(y^{19} + 25y^{18} + \cdots + 4y - 1)$ $\cdot (y^{53} + 74y^{52} + \cdots - 616501666366053y - 28664577152761)$
c_{12}	$(y^{19} + 15y^{18} + \cdots + 7y - 1)$ $\cdot (y^{53} + 88y^{52} + \cdots - 165123439470y - 41778133609)$