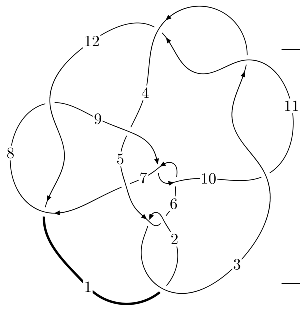
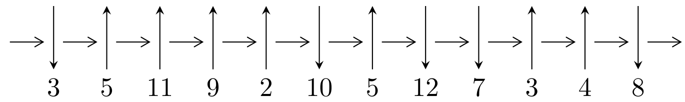
$12n_{0541}$ ($K12n_{0541}$)



A knot diagram[1]

Linearized knot diagam



Solving Sequence

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

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

$$\begin{aligned} I_1^u = \langle & -5.87639 \times 10^{132} u^{57} + 2.50106 \times 10^{132} u^{56} + \cdots + 2.99453 \times 10^{133} b - 8.33073 \times 10^{134}, \\ & 2.36705 \times 10^{135} u^{57} - 2.44899 \times 10^{134} u^{56} + \cdots + 2.90469 \times 10^{135} a + 2.58804 \times 10^{137}, \\ & u^{58} - u^{57} + \cdots + 1784u - 97 \rangle \\ I_2^u = \langle & 8348u^{16} + 3209u^{15} + \cdots + 199783b + 57302,\ -39879u^{16} + 47300u^{15} + \cdots + 199783a + 155745, \\ & u^{17} - 2u^{16} + \cdots - u + 1 \rangle \end{aligned}$$

* 2 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 75 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. $\boldsymbol{I^u_1 = \langle -5.88 \times 10^{132} u^{57} + 2.50 \times 10^{132} u^{56} + \cdots + 2.99 \times 10^{133} b - 8.33 \times 10^{134},\ 2.37 \times 10^{135} u^{57} - 2.45 \times 10^{134} u^{56} + \cdots + 2.90 \times 10^{135} a + 2.59 \times 10^{137},\ u^{58} - u^{57} + \cdots + 1784u - 97 \rangle}$

(i) Arc colorings

$$a_4 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$
$$a_9 = \begin{pmatrix} 0 \\ u \end{pmatrix}$$
$$a_5 = \begin{pmatrix} 1 \\ -u^2 \end{pmatrix}$$
$$a_{11} = \begin{pmatrix} -0.814905u^{57} + 0.0843114u^{56} + \cdots + 1564.87u - 89.0986 \\ 0.196237u^{57} - 0.0835210u^{56} + \cdots - 465.329u + 27.8198 \end{pmatrix}$$
$$a_{12} = \begin{pmatrix} -0.618667u^{57} + 0.000790408u^{56} + \cdots + 1099.54u - 61.2788 \\ 0.196237u^{57} - 0.0835210u^{56} + \cdots - 465.329u + 27.8198 \end{pmatrix}$$
$$a_3 = \begin{pmatrix} 1.26264u^{57} - 0.178664u^{56} + \cdots - 2319.14u + 134.740 \\ -0.886420u^{57} + 0.185562u^{56} + \cdots + 1779.38u - 102.951 \end{pmatrix}$$
$$a_2 = \begin{pmatrix} 1.24998u^{57} - 0.173335u^{56} + \cdots - 2287.18u + 132.545 \\ -0.876439u^{57} + 0.192317u^{56} + \cdots + 1767.53u - 102.241 \end{pmatrix}$$
$$a_1 = \begin{pmatrix} -1.47512u^{57} + 0.219193u^{56} + \cdots + 3001.64u - 177.485 \\ 1.07633u^{57} - 0.215056u^{56} + \cdots - 2148.64u + 124.617 \end{pmatrix}$$
$$a_8 = \begin{pmatrix} -1.24859u^{57} + 0.152603u^{56} + \cdots + 2443.79u - 145.739 \\ 0.383117u^{57} - 0.00368130u^{56} + \cdots - 639.387u + 36.4933 \end{pmatrix}$$
$$a_7 = \begin{pmatrix} -0.680762u^{57} + 0.0174945u^{56} + \cdots + 1249.05u - 75.9216 \\ 0.0844112u^{57} + 0.117389u^{56} + \cdots + 77.5028u - 5.48038 \end{pmatrix}$$
$$a_{10} = \begin{pmatrix} 1.24700u^{57} - 0.233097u^{56} + \cdots - 2487.40u + 146.530 \\ -1.82228u^{57} + 0.192500u^{56} + \cdots + 3348.40u - 192.831 \end{pmatrix}$$
$$a_6 = \begin{pmatrix} 1.14160u^{57} + 0.209026u^{56} + \cdots - 1445.32u + 77.9733 \\ -1.50016u^{57} - 0.128282u^{56} + \cdots + 2270.12u - 129.468 \end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= -0.0616248u^{57} + 0.0782720u^{56} + \cdots + 282.553u - 10.0154$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{58} + 57u^{57} + \cdots - 77375u + 361$
c_2, c_5	$u^{58} + 3u^{57} + \cdots + 293u - 19$
c_3, c_{10}, c_{11}	$u^{58} - 2u^{57} + \cdots - 334u + 116$
c_4	$u^{58} - u^{57} + \cdots + 1784u - 97$
c_6, c_9	$u^{58} - 4u^{57} + \cdots - 11u + 1$
c_7	$u^{58} + 7u^{57} + \cdots - 31992u - 20788$
c_8, c_{12}	$u^{58} + u^{57} + \cdots + 14968u - 1819$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{58} - 151y^{57} + \cdots - 8652137019y + 130321$
c_2, c_5	$y^{58} + 57y^{57} + \cdots - 77375y + 361$
c_3, c_{10}, c_{11}	$y^{58} - 54y^{57} + \cdots + 91908y + 13456$
c_4	$y^{58} - 35y^{57} + \cdots - 1420360y + 9409$
c_6, c_9	$y^{58} + 18y^{57} + \cdots - 5y + 1$
c_7	$y^{58} - 23y^{57} + \cdots - 4796634792y + 432140944$
c_8, c_{12}	$y^{58} + 33y^{57} + \cdots + 9212984y + 3308761$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.940914 + 0.335118I$ $a = 0.070878 + 0.648829I$ $b = 0.333376 + 0.570263I$	$1.77937 + 1.64554I$	$2.35543 - 4.26345I$
$u = 0.940914 - 0.335118I$ $a = 0.070878 - 0.648829I$ $b = 0.333376 - 0.570263I$	$1.77937 - 1.64554I$	$2.35543 + 4.26345I$
$u = 0.533417 + 0.837553I$ $a = -1.203420 - 0.385244I$ $b = 0.000815 + 0.660806I$	$-6.45413 - 3.97977I$	$-0.21992 + 1.71785I$
$u = 0.533417 - 0.837553I$ $a = -1.203420 + 0.385244I$ $b = 0.000815 - 0.660806I$	$-6.45413 + 3.97977I$	$-0.21992 - 1.71785I$
$u = 0.965855 + 0.129569I$ $a = 1.113392 + 0.042885I$ $b = -1.21907 + 0.95214I$	$-2.00228 + 1.64608I$	$6.20898 - 1.56936I$
$u = 0.965855 - 0.129569I$ $a = 1.113392 - 0.042885I$ $b = -1.21907 - 0.95214I$	$-2.00228 - 1.64608I$	$6.20898 + 1.56936I$
$u = -1.007521 + 0.242272I$ $a = -0.829841 + 0.512646I$ $b = 0.530354 + 0.625433I$	$4.33258 - 1.31394I$	$8.82093 - 0.72054I$
$u = -1.007521 - 0.242272I$ $a = -0.829841 - 0.512646I$ $b = 0.530354 - 0.625433I$	$4.33258 + 1.31394I$	$8.82093 + 0.72054I$
$u = 0.651210 + 0.709503I$ $a = 0.763151 - 0.282177I$ $b = -0.553097 - 0.053434I$	$0.84503 + 2.28235I$	$-1.95290 - 6.63736I$
$u = 0.651210 - 0.709503I$ $a = 0.763151 + 0.282177I$ $b = -0.553097 + 0.053434I$	$0.84503 - 2.28235I$	$-1.95290 + 6.63736I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.925221 + 0.121993I$ $a = 2.81123 + 0.85530I$ $b = -1.335825 - 0.306901I$	$-2.16189 - 0.49659I$	$5.68631 - 0.44795I$
$u = 0.925221 - 0.121993I$ $a = 2.81123 - 0.85530I$ $b = -1.335825 + 0.306901I$	$-2.16189 + 0.49659I$	$5.68631 + 0.44795I$
$u = -0.871211 + 0.645662I$ $a = -60.488418 + 6.10I$ $b = -0.408786 + 1.020246I$	$-6.33690 - 1.89605I$	$0. + 3.04775I$
$u = -0.871211 - 0.645662I$ $a = -60.488418 - 6.10I$ $b = -0.408786 - 1.020246I$	$-6.33690 + 1.89605I$	$0. - 3.04775I$
$u = -1.050300 + 0.294172I$ $a = 2.71489 - 0.03928I$ $b = -1.272275 + 0.309727I$	$-3.03611 - 7.19983I$	$4.74744 + 5.63439I$
$u = -1.050300 - 0.294172I$ $a = 2.71489 + 0.03928I$ $b = -1.272275 - 0.309727I$	$-3.03611 + 7.19983I$	$4.74744 - 5.63439I$
$u = -1.010203 + 0.412736I$ $a = 1.52613 + 1.10002I$ $b = -1.65214 + 0.15953I$	$12.04110 - 1.74691I$	$11.96174 + 0.I$
$u = -1.010203 - 0.412736I$ $a = 1.52613 - 1.10002I$ $b = -1.65214 - 0.15953I$	$12.04110 + 1.74691I$	$11.96174 + 0.I$
$u = 1.070601 + 0.256261I$ $a = 0.212194 + 0.279123I$ $b = 0.232507 + 0.484962I$	$1.89676 + 1.25482I$	$2.00000 + 0.I$
$u = 1.070601 - 0.256261I$ $a = 0.212194 - 0.279123I$ $b = 0.232507 - 0.484962I$	$1.89676 - 1.25482I$	$2.00000 + 0.I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.764087 + 0.799193I$ $a = -0.835657 + 0.390939I$ $b = -0.074847 - 0.721706I$	$-6.80237 - 3.50038I$	$0. + 2.31257I$
$u = -0.764087 - 0.799193I$ $a = -0.835657 - 0.390939I$ $b = -0.074847 + 0.721706I$	$-6.80237 + 3.50038I$	$0. - 2.31257I$
$u = 1.080654 + 0.302294I$ $a = -1.10389 + 1.63263I$ $b = 1.110899 + 0.164797I$	$3.68955 + 0.99282I$	$0. + 5.78441I$
$u = 1.080654 - 0.302294I$ $a = -1.10389 - 1.63263I$ $b = 1.110899 - 0.164797I$	$3.68955 - 0.99282I$	$0. - 5.78441I$
$u = 1.12582$ $a = -3.41567$ $b = 1.14657$	3.83802	-56.3460
$u = -0.855805$ $a = -2.49525$ $b = 1.31986$	2.77980	-0.400550
$u = 1.034985 + 0.489339I$ $a = -1.84386 + 0.74811I$ $b = 1.76254 + 0.04368I$	$9.76113 + 2.08154I$	0
$u = 1.034985 - 0.489339I$ $a = -1.84386 - 0.74811I$ $b = 1.76254 - 0.04368I$	$9.76113 - 2.08154I$	0
$u = 1.125366 + 0.516938I$ $a = 0.355709 + 0.158453I$ $b = -0.341555 - 1.213756I$	$-4.45556 + 9.01614I$	0
$u = 1.125366 - 0.516938I$ $a = 0.355709 - 0.158453I$ $b = -0.341555 + 1.213756I$	$-4.45556 - 9.01614I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = -0.583369 + 0.471942I$ $a = 0.906827 - 0.159977I$ $b = -1.056792 - 0.724510I$	$-4.47025 + 4.18059I$	$3.66036 + 0.35432I$
$u = -0.583369 - 0.471942I$ $a = 0.906827 + 0.159977I$ $b = -1.056792 + 0.724510I$	$-4.47025 - 4.18059I$	$3.66036 - 0.35432I$
$u = -0.642745 + 1.117227I$ $a = -0.677478 - 0.528065I$ $b = 1.38029 + 0.34754I$	$-2.13403 + 0.38137I$	0
$u = -0.642745 - 1.117227I$ $a = -0.677478 + 0.528065I$ $b = 1.38029 - 0.34754I$	$-2.13403 - 0.38137I$	0
$u = -1.266436 + 0.283598I$ $a = -0.231931 - 0.055908I$ $b = 0.115661 - 0.792769I$	$2.77371 - 4.65817I$	0
$u = -1.266436 - 0.283598I$ $a = -0.231931 + 0.055908I$ $b = 0.115661 + 0.792769I$	$2.77371 + 4.65817I$	0
$u = 0.133420 + 1.293482I$ $a = 0.506063 - 0.156731I$ $b = -1.212023 - 0.070395I$	$2.31699 + 2.80503I$	0
$u = 0.133420 - 1.293482I$ $a = 0.506063 + 0.156731I$ $b = -1.212023 + 0.070395I$	$2.31699 - 2.80503I$	0
$u = -0.092161 + 0.641529I$ $a = 0.745862 + 0.457465I$ $b = -0.029115 + 0.407151I$	$-1.00291 + 1.11740I$	$-3.14500 - 3.42823I$
$u = -0.092161 - 0.641529I$ $a = 0.745862 - 0.457465I$ $b = -0.029115 - 0.407151I$	$-1.00291 - 1.11740I$	$-3.14500 + 3.42823I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = -1.23862 + 0.71542I$ $a = -1.60887 - 0.65001I$ $b = 1.56327 - 0.41113I$	$0.02922 - 7.12922I$	0
$u = -1.23862 - 0.71542I$ $a = -1.60887 + 0.65001I$ $b = 1.56327 + 0.41113I$	$0.02922 + 7.12922I$	0
$u = 0.33316 + 1.48876I$ $a = -0.535919 + 0.241081I$ $b = 1.319861 - 0.286645I$	$-2.23668 - 7.41399I$	0
$u = 0.33316 - 1.48876I$ $a = -0.535919 - 0.241081I$ $b = 1.319861 + 0.286645I$	$-2.23668 + 7.41399I$	0
$u = -1.44897 + 0.50507I$ $a = 1.53403 + 0.66868I$ $b = -1.36703 + 0.37200I$	$7.46963 - 8.93919I$	0
$u = -1.44897 - 0.50507I$ $a = 1.53403 - 0.66868I$ $b = -1.36703 - 0.37200I$	$7.46963 + 8.93919I$	0
$u = -1.59471 + 0.00998I$ $a = -1.42842 - 0.37780I$ $b = 1.233841 - 0.219379I$	$6.14050 + 1.10464I$	0
$u = -1.59471 - 0.00998I$ $a = -1.42842 + 0.37780I$ $b = 1.233841 + 0.219379I$	$6.14050 - 1.10464I$	0
$u = 1.42479 + 0.72384I$ $a = -1.49680 + 0.55137I$ $b = 1.53282 + 0.49056I$	$1.4653 + 15.0640I$	0
$u = 1.42479 - 0.72384I$ $a = -1.49680 - 0.55137I$ $b = 1.53282 - 0.49056I$	$1.4653 - 15.0640I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = -1.31455 + 0.95653I$ $a = -0.714101 - 0.583436I$ $b = 1.147400 - 0.209950I$	$6.14857 - 4.22250I$	0
$u = -1.31455 - 0.95653I$ $a = -0.714101 + 0.583436I$ $b = 1.147400 + 0.209950I$	$6.14857 + 4.22250I$	0
$u = 1.53853 + 0.59391I$ $a = 1.38151 - 0.46043I$ $b = -1.375930 - 0.263074I$	$6.89923 + 4.20846I$	0
$u = 1.53853 - 0.59391I$ $a = 1.38151 + 0.46043I$ $b = -1.375930 + 0.263074I$	$6.89923 - 4.20846I$	0
$u = 1.38872 + 0.97759I$ $a = 1.095330 - 0.541285I$ $b = -1.42429 - 0.21441I$	$7.42590 + 4.50935I$	0
$u = 1.38872 - 0.97759I$ $a = 1.095330 + 0.541285I$ $b = -1.42429 + 0.21441I$	$7.42590 - 4.50935I$	0
$u = 0.1030383 + 0.0339846I$ $a = 4.99261 + 2.60125I$ $b = 0.825929 + 0.148313I$	$1.42553 + 0.34617I$	$7.67238 + 0.67525I$
$u = 0.1030383 - 0.0339846I$ $a = 4.99261 - 2.60125I$ $b = 0.825929 - 0.148313I$	$1.42553 - 0.34617I$	$7.67238 - 0.67525I$

II. $\boldsymbol{I_2^u = \langle 8348u^{16} + 3209u^{15} + \cdots + 199783b + 57302,\ -3.99 \times 10^4u^{16} + 4.73 \times 10^4u^{15} + \cdots + 2.00 \times 10^5a + 1.56 \times 10^5,\ u^{17} - 2u^{16} + \cdots - u + 1\rangle}$

(i) Arc colorings

$$a_4 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$

$$a_9 = \begin{pmatrix} 0 \\ u \end{pmatrix}$$

$$a_5 = \begin{pmatrix} 1 \\ -u^2 \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} 0.199612u^{16} - 0.236757u^{15} + \cdots + 1.87312u - 0.779571 \\ -0.0417853u^{16} - 0.0160624u^{15} + \cdots - 0.484210u - 0.286821 \end{pmatrix}$$

$$a_{12} = \begin{pmatrix} 0.157826u^{16} - 0.252819u^{15} + \cdots + 1.38891u - 1.06639 \\ -0.0417853u^{16} - 0.0160624u^{15} + \cdots - 0.484210u - 0.286821 \end{pmatrix}$$

$$a_3 = \begin{pmatrix} 0.139501u^{16} + 1.02080u^{15} + \cdots - 0.617520u + 1.83298 \\ -0.297328u^{16} + 0.232017u^{15} + \cdots + 0.228608u + 0.233413 \end{pmatrix}$$

$$a_2 = \begin{pmatrix} -0.0183249u^{16} + 1.27362u^{15} + \cdots - 2.00643u + 2.89937 \\ -0.563296u^{16} + 1.26921u^{15} + \cdots + 0.133615u + 0.170580 \end{pmatrix}$$

$$a_1 = \begin{pmatrix} 0.295110u^{16} - 0.758863u^{15} + \cdots + 2.89244u - 1.47504 \\ -0.300636u^{16} + 0.854487u^{15} + \cdots - 0.346986u - 0.388962 \end{pmatrix}$$

$$a_8 = \begin{pmatrix} -0.189210u^{16} + 0.143726u^{15} + \cdots - 2.26936u - 0.123159 \\ 0.937167u^{16} - 1.60837u^{15} + \cdots + 1.90857u + 0.157826 \end{pmatrix}$$

$$a_7 = \begin{pmatrix} -1.06605u^{16} + 1.70820u^{15} + \cdots - 4.13244u - 0.515680 \\ 1.17186u^{16} - 2.01743u^{15} + \cdots + 1.22093u - 0.0313841 \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} -0.228968u^{16} + 0.744758u^{15} + \cdots + 1.77459u + 2.93958 \\ -0.0242663u^{16} - 0.275739u^{15} + \cdots - 0.648233u - 1.22886 \end{pmatrix}$$

$$a_6 = \begin{pmatrix} 0.611088u^{16} - 1.31361u^{15} + \cdots + 0.322930u - 4.29246 \\ -0.218152u^{16} + 0.296712u^{15} + \cdots - 0.434396u + 2.30109 \end{pmatrix}$$

(ii) Obstruction class $= 1$

(iii) Cusp Shapes $= -\frac{146937}{199783}u^{16} + \frac{266860}{199783}u^{15} + \cdots - \frac{1546318}{199783}u + \frac{976260}{199783}$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{17} - 14u^{16} + \cdots - 2u + 1$
c_2	$u^{17} + 7u^{15} + \cdots - 4u - 1$
c_3	$u^{17} + 3u^{16} + \cdots - 2u - 4$
c_4	$u^{17} - 2u^{16} + \cdots - u + 1$
c_5	$u^{17} + 7u^{15} + \cdots - 4u + 1$
c_6	$u^{17} - 3u^{16} + \cdots + 4u - 1$
c_7	$u^{17} - 4u^{16} + \cdots + 372u - 112$
c_8	$u^{17} + 5u^{15} + \cdots - u + 1$
c_9	$u^{17} + 3u^{16} + \cdots + 4u + 1$
c_{10}, c_{11}	$u^{17} - 3u^{16} + \cdots - 2u + 4$
c_{12}	$u^{17} + 5u^{15} + \cdots - u - 1$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{17} - 22y^{16} + \cdots - 106y - 1$
c_2, c_5	$y^{17} + 14y^{16} + \cdots - 2y - 1$
c_3, c_{10}, c_{11}	$y^{17} - 21y^{16} + \cdots + 76y - 16$
c_4	$y^{17} - 10y^{16} + \cdots - 5y - 1$
c_6, c_9	$y^{17} + 15y^{16} + \cdots + 4y - 1$
c_7	$y^{17} - 2y^{16} + \cdots + 176y - 12544$
c_8, c_{12}	$y^{17} + 10y^{16} + \cdots - 21y - 1$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.970144 + 0.202908I$ $a = -0.011213 - 0.922509I$ $b = 0.662169 - 0.368643I$	$2.55719 - 1.05254I$	$11.97796 - 4.49796I$
$u = -0.970144 - 0.202908I$ $a = -0.011213 + 0.922509I$ $b = 0.662169 + 0.368643I$	$2.55719 + 1.05254I$	$11.97796 + 4.49796I$
$u = -0.508256 + 0.803351I$ $a = -0.570535 - 0.270137I$ $b = 0.851157 + 0.086718I$	$1.36731 - 1.86051I$	$6.85893 - 0.03979I$
$u = -0.508256 - 0.803351I$ $a = -0.570535 + 0.270137I$ $b = 0.851157 - 0.086718I$	$1.36731 + 1.86051I$	$6.85893 + 0.03979I$
$u = 1.062864 + 0.150224I$ $a = -1.94519 + 0.86163I$ $b = 1.67703 + 0.21097I$	$10.70310 + 0.68133I$	$7.67112 + 1.20401I$
$u = 1.062864 - 0.150224I$ $a = -1.94519 - 0.86163I$ $b = 1.67703 - 0.21097I$	$10.70310 - 0.68133I$	$7.67112 - 1.20401I$
$u = -1.13364$ $a = -2.79532$ $b = 1.20439$	3.96818	18.5360
$u = 1.191259 + 0.476062I$ $a = 0.579866 + 0.337573I$ $b = -0.212468 + 0.511834I$	$3.86157 + 2.44826I$	$6.12662 - 4.15068I$
$u = 1.191259 - 0.476062I$ $a = 0.579866 - 0.337573I$ $b = -0.212468 - 0.511834I$	$3.86157 - 2.44826I$	$6.12662 + 4.15068I$
$u = -1.100900 + 0.673399I$ $a = 1.43082 + 0.85348I$ $b = -1.68729 + 0.07463I$	$11.25170 - 2.75197I$	$7.76583 + 4.36939I$

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = -1.100900 - 0.673399I$ $a = 1.43082 - 0.85348I$ $b = -1.68729 - 0.07463I$	$11.25170 + 2.75197I$	$7.76583 - 4.36939I$
$u = 0.324184 + 0.493088I$ $a = 1.14602 - 2.01373I$ $b = -1.163915 + 0.557113I$	$-3.68022 + 1.37740I$	$0.58952 - 1.80800I$
$u = 0.324184 - 0.493088I$ $a = 1.14602 + 2.01373I$ $b = -1.163915 - 0.557113I$	$-3.68022 - 1.37740I$	$0.58952 + 1.80800I$
$u = 0.035739 + 0.505687I$ $a = 1.21696 + 2.00062I$ $b = -0.868479 - 0.500362I$	$-4.70902 + 5.44482I$	$2.78546 - 5.13325I$
$u = 0.035739 - 0.505687I$ $a = 1.21696 - 2.00062I$ $b = -0.868479 + 0.500362I$	$-4.70902 - 5.44482I$	$2.78546 + 5.13325I$
$u = 1.53207 + 1.08092I$ $a = 1.050932 - 0.481893I$ $b = -1.360397 - 0.190149I$	$7.91801 + 4.90263I$	$13.9568 - 8.5595I$
$u = 1.53207 - 1.08092I$ $a = 1.050932 + 0.481893I$ $b = -1.360397 + 0.190149I$	$7.91801 - 4.90263I$	$13.9568 + 8.5595I$

III. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1	$(u^{17} - 14u^{16} + \cdots - 2u + 1)(u^{58} + 57u^{57} + \cdots - 77375u + 361)$
c_2	$(u^{17} + 7u^{15} + \cdots - 4u - 1)(u^{58} + 3u^{57} + \cdots + 293u - 19)$
c_3	$(u^{17} + 3u^{16} + \cdots - 2u - 4)(u^{58} - 2u^{57} + \cdots - 334u + 116)$
c_4	$(u^{17} - 2u^{16} + \cdots - u + 1)(u^{58} - u^{57} + \cdots + 1784u - 97)$
c_5	$(u^{17} + 7u^{15} + \cdots - 4u + 1)(u^{58} + 3u^{57} + \cdots + 293u - 19)$
c_6	$(u^{17} - 3u^{16} + \cdots + 4u - 1)(u^{58} - 4u^{57} + \cdots - 11u + 1)$
c_7	$(u^{17} - 4u^{16} + \cdots + 372u - 112)(u^{58} + 7u^{57} + \cdots - 31992u - 20788)$
c_8	$(u^{17} + 5u^{15} + \cdots - u + 1)(u^{58} + u^{57} + \cdots + 14968u - 1819)$
c_9	$(u^{17} + 3u^{16} + \cdots + 4u + 1)(u^{58} - 4u^{57} + \cdots - 11u + 1)$
c_{10}, c_{11}	$(u^{17} - 3u^{16} + \cdots - 2u + 4)(u^{58} - 2u^{57} + \cdots - 334u + 116)$
c_{12}	$(u^{17} + 5u^{15} + \cdots - u - 1)(u^{58} + u^{57} + \cdots + 14968u - 1819)$

IV. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1	$(y^{17} - 22y^{16} + \cdots - 106y - 1)$ $\cdot (y^{58} - 151y^{57} + \cdots - 8652137019y + 130321)$
c_2, c_5	$(y^{17} + 14y^{16} + \cdots - 2y - 1)(y^{58} + 57y^{57} + \cdots - 77375y + 361)$
c_3, c_{10}, c_{11}	$(y^{17} - 21y^{16} + \cdots + 76y - 16)(y^{58} - 54y^{57} + \cdots + 91908y + 13456)$
c_4	$(y^{17} - 10y^{16} + \cdots - 5y - 1)(y^{58} - 35y^{57} + \cdots - 1420360y + 9409)$
c_6, c_9	$(y^{17} + 15y^{16} + \cdots + 4y - 1)(y^{58} + 18y^{57} + \cdots - 5y + 1)$
c_7	$(y^{17} - 2y^{16} + \cdots + 176y - 12544)$ $\cdot (y^{58} - 23y^{57} + \cdots - 4796634792y + 432140944)$
c_8, c_{12}	$(y^{17} + 10y^{16} + \cdots - 21y - 1)$ $\cdot (y^{58} + 33y^{57} + \cdots + 9212984y + 3308761)$