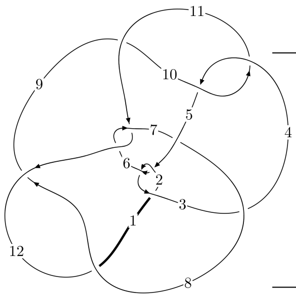
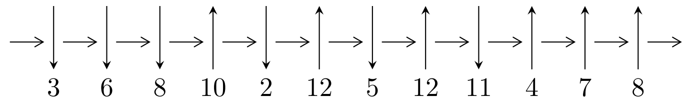
$12n_{0385}$ ($K12n_{0385}$)



A knot diagram[1]

Linearized knot diagam



Solving Sequence

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

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

$$\begin{aligned} I_1^u = \langle & -2.29531 \times 10^{124} u^{55} - 5.17327 \times 10^{124} u^{54} + \cdots + 4.70448 \times 10^{122} b + 9.01469 \times 10^{124}, \\ & 7.90126 \times 10^{124} u^{55} + 1.78040 \times 10^{125} u^{54} + \cdots + 4.70448 \times 10^{122} a - 3.09074 \times 10^{125},\ u^{56} + 2u^{55} + \cdots - 15u \\ I_2^u = \langle & 126249067 u^{19} - 438214333 u^{18} + \cdots + 593361451 b + 602467017, \\ & -1023562993 u^{19} + 1683425057 u^{18} + \cdots + 593361451 a + 2283136733,\ u^{20} - u^{19} + \cdots - u + 1 \rangle \end{aligned}$$

* 2 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 76 representations.

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[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. $\boldsymbol{I_1^u = \langle -2.30 \times 10^{124} u^{55} - 5.17 \times 10^{124} u^{54} + \cdots + 4.70 \times 10^{122} b + 9.01 \times 10^{124},\ 7.90 \times 10^{124} u^{55} + 1.78 \times 10^{125} u^{54} + \cdots + 4.70 \times 10^{122} a - 3.09 \times 10^{125},\ u^{56} + 2u^{55} + \cdots - 15u + 1 \rangle}$

(i) Arc colorings

$$a_6 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$

$$a_{12} = \begin{pmatrix} 0 \\ u \end{pmatrix}$$

$$a_3 = \begin{pmatrix} -167.952u^{55} - 378.447u^{54} + \cdots - 7319.21u + 656.977 \\ 48.7899u^{55} + 109.965u^{54} + \cdots + 2128.78u - 191.619 \end{pmatrix}$$

$$a_7 = \begin{pmatrix} 1 \\ -u^2 \end{pmatrix}$$

$$a_2 = \begin{pmatrix} -119.162u^{55} - 268.482u^{54} + \cdots - 5190.43u + 465.357 \\ 48.7899u^{55} + 109.965u^{54} + \cdots + 2128.78u - 191.619 \end{pmatrix}$$

$$a_1 = \begin{pmatrix} 50.7952u^{55} + 115.863u^{54} + \cdots + 2093.41u - 184.274 \\ -35.5785u^{55} - 80.8855u^{54} + \cdots - 1476.67u + 130.375 \end{pmatrix}$$

$$a_5 = \begin{pmatrix} -145.156u^{55} - 329.196u^{54} + \cdots - 6101.43u + 545.139 \\ 87.4444u^{55} + 197.890u^{54} + \cdots + 3716.70u - 332.270 \end{pmatrix}$$

$$a_8 = \begin{pmatrix} 21.0734u^{55} + 49.2382u^{54} + \cdots + 731.326u - 59.8342 \\ -19.6677u^{55} - 45.0556u^{54} + \cdots - 774.695u + 66.8772 \end{pmatrix}$$

$$a_4 = \begin{pmatrix} 332.270u^{55} + 751.984u^{54} + \cdots + 14152.1u - 1267.35 \\ -185.312u^{55} - 419.091u^{54} + \cdots - 7917.98u + 708.943 \end{pmatrix}$$

$$a_9 = \begin{pmatrix} 21.0734u^{55} + 49.2382u^{54} + \cdots + 731.326u - 59.8342 \\ -21.9298u^{55} - 50.2637u^{54} + \cdots - 859.993u + 73.9686 \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} -u \\ u^3 + u \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} 20.4358u^{55} + 47.7320u^{54} + \cdots + 712.161u - 58.4629 \\ -21.2114u^{55} - 48.5599u^{54} + \cdots - 838.002u + 72.3663 \end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= -217.435u^{55} - 492.105u^{54} + \cdots - 9258.95u + 822.622$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{56} + 13u^{55} + \cdots + u + 1$
c_2, c_5	$u^{56} + 3u^{55} + \cdots - 7u + 1$
c_3	$u^{56} + 2u^{55} + \cdots + 43738u + 6847$
c_4, c_{10}	$u^{56} + u^{55} + \cdots + 130u + 43$
c_6, c_{11}	$u^{56} - 2u^{55} + \cdots + 15u + 1$
c_7	$u^{56} + u^{55} + \cdots - 8u + 19$
c_8, c_{12}	$u^{56} + 8u^{55} + \cdots + 25217681u + 3589991$
c_9	$u^{56} + 21u^{55} + \cdots + 36162u + 1849$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{56} + 67y^{55} + \cdots - 305y + 1$
c_2, c_5	$y^{56} - 13y^{55} + \cdots - y + 1$
c_3	$y^{56} + 76y^{55} + \cdots + 2879627170y + 46881409$
c_4, c_{10}	$y^{56} + 21y^{55} + \cdots + 36162y + 1849$
c_6, c_{11}	$y^{56} + 6y^{55} + \cdots - 25y + 1$
c_7	$y^{56} - 9y^{55} + \cdots + 17302y + 361$
c_8, c_{12}	$y^{56} - 78y^{55} + \cdots + 166741384065503y + 12888035380081$
c_9	$y^{56} + 49y^{55} + \cdots - 27712598y + 3418801$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.662954 + 0.763312I$ $a = 0.109755 + 0.857727I$ $b = 0.710096 - 0.628504I$	$-0.01661 + 7.26026I$	$0. - 10.22253I$
$u = 0.662954 - 0.763312I$ $a = 0.109755 - 0.857727I$ $b = 0.710096 + 0.628504I$	$-0.01661 - 7.26026I$	$0. + 10.22253I$
$u = -0.666863 + 0.770647I$ $a = 0.887690 - 0.725522I$ $b = -0.221964 + 0.922686I$	$1.78699 - 2.38449I$	0
$u = -0.666863 - 0.770647I$ $a = 0.887690 + 0.725522I$ $b = -0.221964 - 0.922686I$	$1.78699 + 2.38449I$	0
$u = 0.865491 + 0.431238I$ $a = 0.37766 - 3.20632I$ $b = -0.415607 + 0.220395I$	$-1.50834 + 5.13908I$	$-1.64354 - 9.78620I$
$u = 0.865491 - 0.431238I$ $a = 0.37766 + 3.20632I$ $b = -0.415607 - 0.220395I$	$-1.50834 - 5.13908I$	$-1.64354 + 9.78620I$
$u = -0.694616 + 0.641622I$ $a = -0.163620 + 0.995740I$ $b = -0.598031 - 0.619979I$	$2.04092 - 2.37552I$	$3.14853 + 4.55601I$
$u = -0.694616 - 0.641622I$ $a = -0.163620 - 0.995740I$ $b = -0.598031 + 0.619979I$	$2.04092 + 2.37552I$	$3.14853 - 4.55601I$
$u = 0.888013 + 0.699797I$ $a = 0.138881 - 0.344888I$ $b = 0.838168 + 0.413727I$	$-0.60327 + 3.12252I$	0
$u = 0.888013 - 0.699797I$ $a = 0.138881 + 0.344888I$ $b = 0.838168 - 0.413727I$	$-0.60327 - 3.12252I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.190436 + 1.123830I$ $a = 0.444310 + 0.527604I$ $b = -0.365972 + 0.069044I$	$-4.50386 - 1.21393I$	0
$u = 0.190436 - 1.123830I$ $a = 0.444310 - 0.527604I$ $b = -0.365972 - 0.069044I$	$-4.50386 + 1.21393I$	0
$u = -0.855002 + 0.041630I$ $a = -1.26036 + 1.03025I$ $b = -0.064318 - 0.244656I$	$1.51091 - 0.09931I$	$7.48576 - 0.57256I$
$u = -0.855002 - 0.041630I$ $a = -1.26036 - 1.03025I$ $b = -0.064318 + 0.244656I$	$1.51091 + 0.09931I$	$7.48576 + 0.57256I$
$u = -1.154250 + 0.028922I$ $a = -0.67805 + 1.69251I$ $b = 0.898070 - 0.760890I$	$4.21997 + 2.88917I$	0
$u = -1.154250 - 0.028922I$ $a = -0.67805 - 1.69251I$ $b = 0.898070 + 0.760890I$	$4.21997 - 2.88917I$	0
$u = 0.298553 + 0.783068I$ $a = 1.47696 + 1.31436I$ $b = 1.216760 - 0.521960I$	$-1.71963 + 1.34220I$	$1.33019 - 5.27887I$
$u = 0.298553 - 0.783068I$ $a = 1.47696 - 1.31436I$ $b = 1.216760 + 0.521960I$	$-1.71963 - 1.34220I$	$1.33019 + 5.27887I$
$u = 0.236859 + 1.215390I$ $a = -0.760833 - 0.660762I$ $b = 0.479782 + 0.683588I$	$-3.22157 - 1.15649I$	0
$u = 0.236859 - 1.215390I$ $a = -0.760833 + 0.660762I$ $b = 0.479782 - 0.683588I$	$-3.22157 + 1.15649I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = -1.221310 + 0.412682I$ $a = 0.141595 - 0.224601I$ $b = -0.965402 + 0.220051I$	$0.709733 + 0.991277I$	0
$u = -1.221310 - 0.412682I$ $a = 0.141595 + 0.224601I$ $b = -0.965402 - 0.220051I$	$0.709733 - 0.991277I$	0
$u = 0.681846 + 0.011526I$ $a = -3.05207 - 2.44743I$ $b = 0.446392 + 0.849165I$	$1.13214 - 4.01858I$	$5.94853 + 4.16003I$
$u = 0.681846 - 0.011526I$ $a = -3.05207 + 2.44743I$ $b = 0.446392 - 0.849165I$	$1.13214 + 4.01858I$	$5.94853 - 4.16003I$
$u = 0.529724 + 0.424634I$ $a = 0.48742 + 1.49607I$ $b = -0.811392 + 0.067619I$	$-3.17521 + 4.65332I$	$-7.74651 - 6.05847I$
$u = 0.529724 - 0.424634I$ $a = 0.48742 - 1.49607I$ $b = -0.811392 - 0.067619I$	$-3.17521 - 4.65332I$	$-7.74651 + 6.05847I$
$u = -0.153495 + 1.312610I$ $a = -1.18611 + 0.82511I$ $b = -0.994161 - 0.290702I$	$-6.82465 - 2.95148I$	0
$u = -0.153495 - 1.312610I$ $a = -1.18611 - 0.82511I$ $b = -0.994161 + 0.290702I$	$-6.82465 + 2.95148I$	0
$u = 1.054190 + 0.817175I$ $a = 1.74185 + 1.23072I$ $b = -0.915264 - 1.067760I$	$10.62210 + 1.04027I$	0
$u = 1.054190 - 0.817175I$ $a = 1.74185 - 1.23072I$ $b = -0.915264 + 1.067760I$	$10.62210 - 1.04027I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = -0.716286 + 1.170940I$ $a = -0.257562 + 1.315470I$ $b = -1.281030 - 0.421786I$	$-1.88294 - 7.50272I$	0
$u = -0.716286 - 1.170940I$ $a = -0.257562 - 1.315470I$ $b = -1.281030 + 0.421786I$	$-1.88294 + 7.50272I$	0
$u = 1.085940 + 0.879913I$ $a = 0.23842 - 2.61162I$ $b = -1.07014 + 0.95854I$	$10.09000 + 8.41326I$	0
$u = 1.085940 - 0.879913I$ $a = 0.23842 + 2.61162I$ $b = -1.07014 - 0.95854I$	$10.09000 - 8.41326I$	0
$u = 0.87694 + 1.16695I$ $a = 0.46590 - 1.84575I$ $b = -0.910716 + 0.995484I$	$9.48260 + 6.10181I$	0
$u = 0.87694 - 1.16695I$ $a = 0.46590 + 1.84575I$ $b = -0.910716 - 0.995484I$	$9.48260 - 6.10181I$	0
$u = -0.201309 + 0.484082I$ $a = 5.17876 - 2.75312I$ $b = 0.764547 + 1.016520I$	$0.36376 - 4.79110I$	$-12.4271 + 7.9106I$
$u = -0.201309 - 0.484082I$ $a = 5.17876 + 2.75312I$ $b = 0.764547 - 1.016520I$	$0.36376 + 4.79110I$	$-12.4271 - 7.9106I$
$u = 0.41214 + 1.42834I$ $a = 0.36344 + 1.45804I$ $b = 1.088950 - 0.558550I$	$-5.09935 + 3.68934I$	0
$u = 0.41214 - 1.42834I$ $a = 0.36344 - 1.45804I$ $b = 1.088950 + 0.558550I$	$-5.09935 - 3.68934I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.92562 + 1.19150I$ $a = 0.86660 + 1.42318I$ $b = -1.030690 - 0.930366I$	$9.09077 - 0.96024I$	0
$u = 0.92562 - 1.19150I$ $a = 0.86660 - 1.42318I$ $b = -1.030690 + 0.930366I$	$9.09077 + 0.96024I$	0
$u = 0.107311 + 0.465903I$ $a = 0.942601 + 0.990213I$ $b = 0.847141 - 0.344738I$	$-1.82336 + 0.66526I$	$-4.71538 - 3.25851I$
$u = 0.107311 - 0.465903I$ $a = 0.942601 - 0.990213I$ $b = 0.847141 + 0.344738I$	$-1.82336 - 0.66526I$	$-4.71538 + 3.25851I$
$u = -1.06310 + 1.14192I$ $a = -1.29601 + 1.16872I$ $b = 0.831104 - 1.076510I$	$9.09155 - 8.12513I$	0
$u = -1.06310 - 1.14192I$ $a = -1.29601 - 1.16872I$ $b = 0.831104 + 1.076510I$	$9.09155 + 8.12513I$	0
$u = -1.20609 + 1.00543I$ $a = -0.48936 - 1.88232I$ $b = 0.819158 + 1.011510I$	$9.61530 - 0.06348I$	0
$u = -1.20609 - 1.00543I$ $a = -0.48936 + 1.88232I$ $b = 0.819158 - 1.011510I$	$9.61530 + 0.06348I$	0
$u = -1.08874 + 1.16941I$ $a = -0.13787 - 2.22801I$ $b = 1.10246 + 0.90357I$	$8.1820 - 15.3204I$	0
$u = -1.08874 - 1.16941I$ $a = -0.13787 + 2.22801I$ $b = 1.10246 - 0.90357I$	$8.1820 + 15.3204I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -1.27615 + 1.03922I$ $a = -0.86060 + 1.41837I$ $b = 1.082350 - 0.866720I$	$8.74803 + 6.83361I$	0
$u = -1.27615 - 1.03922I$ $a = -0.86060 - 1.41837I$ $b = 1.082350 + 0.866720I$	$8.74803 - 6.83361I$	0
$u = 0.219793 + 0.185855I$ $a = -4.45335 - 0.50756I$ $b = 0.925176 + 0.237900I$	$-1.68718 - 0.25895I$	$-4.50240 - 0.85249I$
$u = 0.219793 - 0.185855I$ $a = -4.45335 + 0.50756I$ $b = 0.925176 - 0.237900I$	$-1.68718 + 0.25895I$	$-4.50240 + 0.85249I$
$u = 0.261423 + 0.003508I$ $a = 1.73394 - 2.85481I$ $b = -0.905464 + 0.831639I$	$4.59695 + 3.10196I$	$-6.56843 - 3.78158I$
$u = 0.261423 - 0.003508I$ $a = 1.73394 + 2.85481I$ $b = -0.905464 - 0.831639I$	$4.59695 - 3.10196I$	$-6.56843 + 3.78158I$

II.
$\boldsymbol{I_2^u = \langle 1.26 \times 10^8 u^{19} - 4.38 \times 10^8 u^{18} + \cdots + 5.93 \times 10^8 b + 6.02 \times 10^8,\ -1.02 \times 10^9 u^{19} + 1.68 \times 10^9 u^{18} + \cdots + 5.93 \times 10^8 a + 2.28 \times 10^9,\ u^{20} - u^{19} + \cdots - u + 1\rangle}$

(i) Arc colorings

$$a_6 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$
$$a_{12} = \begin{pmatrix} 0 \\ u \end{pmatrix}$$
$$a_3 = \begin{pmatrix} 1.72502u^{19} - 2.83710u^{18} + \cdots - 5.51268u - 3.84780 \\ -0.212769u^{19} + 0.738528u^{18} + \cdots + 1.78694u - 1.01535 \end{pmatrix}$$
$$a_7 = \begin{pmatrix} 1 \\ -u^2 \end{pmatrix}$$
$$a_2 = \begin{pmatrix} 1.51226u^{19} - 2.09857u^{18} + \cdots - 3.72574u - 4.86315 \\ -0.212769u^{19} + 0.738528u^{18} + \cdots + 1.78694u - 1.01535 \end{pmatrix}$$
$$a_1 = \begin{pmatrix} -u^{18} - 4u^{16} + \cdots - 12u - 6 \\ 1.14159u^{19} - 1.40554u^{18} + \cdots - 0.857291u - 1.04241 \end{pmatrix}$$
$$a_5 = \begin{pmatrix} 1.41283u^{19} - 0.466556u^{18} + \cdots + 7.01592u - 3.71394 \\ 0.650572u^{19} - 1.01233u^{18} + \cdots - 0.860745u + 1.30063 \end{pmatrix}$$
$$a_8 = \begin{pmatrix} -u^{19} - 4u^{17} + \cdots - 12u^2 - 6u \\ -0.263948u^{19} + 0.440918u^{18} + \cdots + 0.0991862u - 1.14159 \end{pmatrix}$$
$$a_4 = \begin{pmatrix} -1.30063u^{19} + 1.95120u^{18} + \cdots + 5.94534u + 0.439886 \\ 1.56096u^{19} - 3.14489u^{18} + \cdots - 5.50991u + 2.86901 \end{pmatrix}$$
$$a_9 = \begin{pmatrix} -u^{19} - 4u^{17} + \cdots - 12u^2 - 6u \\ -0.263948u^{19} + 0.440918u^{18} + \cdots + 0.0991862u - 2.14159 \end{pmatrix}$$
$$a_{11} = \begin{pmatrix} -u \\ u^3 + u \end{pmatrix}$$
$$a_{10} = \begin{pmatrix} -0.870938u^{19} - 0.0534748u^{18} + \cdots - 6.44092u - 0.823030 \\ -0.403352u^{19} + 0.575848u^{18} + \cdots + 0.593579u - 1.24298 \end{pmatrix}$$

(ii) Obstruction class $= 1$

(iii) Cusp Shapes $= -\frac{3555961983}{593361451}u^{19} + \frac{2757595505}{593361451}u^{18} + \cdots - \frac{5543396896}{593361451}u + \frac{1259815944}{593361451}$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{20}-10u^{19}+\cdots-11u+1$
c_2	$u^{20}-5u^{18}+\cdots+u+1$
c_3	$u^{20}+u^{19}+\cdots-18u+29$
c_4	$u^{20}+6u^{18}+\cdots-2u+1$
c_5	$u^{20}-5u^{18}+\cdots-u+1$
c_6	$u^{20}-u^{19}+\cdots-u+1$
c_7	$u^{20}+2u^{19}+\cdots+2u+1$
c_8	$u^{20}-u^{19}+\cdots-u+1$
c_9	$u^{20}-12u^{19}+\cdots-12u+1$
c_{10}	$u^{20}+6u^{18}+\cdots+2u+1$
c_{11}	$u^{20}+u^{19}+\cdots+u+1$
c_{12}	$u^{20}+u^{19}+\cdots+u+1$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{20} + 6y^{19} + \cdots + 5y + 1$
c_2, c_5	$y^{20} - 10y^{19} + \cdots - 11y + 1$
c_3	$y^{20} + 7y^{19} + \cdots + 2576y + 841$
c_4, c_{10}	$y^{20} + 12y^{19} + \cdots + 12y + 1$
c_6, c_{11}	$y^{20} + 9y^{19} + \cdots + y + 1$
c_7	$y^{20} - 18y^{19} + \cdots - 16y + 1$
c_8, c_{12}	$y^{20} + y^{19} + \cdots + 9y + 1$
c_9	$y^{20} + 12y^{19} + \cdots + 8y + 1$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.977898 + 0.441216I$ $a = 0.11731 - 1.61850I$ $b = 0.674570 + 0.231745I$	$-1.72530 + 4.24965I$	$-3.26588 - 2.33166I$
$u = 0.977898 - 0.441216I$ $a = 0.11731 + 1.61850I$ $b = 0.674570 - 0.231745I$	$-1.72530 - 4.24965I$	$-3.26588 + 2.33166I$
$u = -1.076060 + 0.058214I$ $a = -0.160408 - 0.538138I$ $b = -0.805721 + 0.086002I$	$0.528220 + 0.140723I$	$-2.50468 + 1.63082I$
$u = -1.076060 - 0.058214I$ $a = -0.160408 + 0.538138I$ $b = -0.805721 - 0.086002I$	$0.528220 - 0.140723I$	$-2.50468 - 1.63082I$
$u = -0.087264 + 1.114970I$ $a = 0.667120 - 0.276565I$ $b = -0.609605 + 0.520631I$	$-3.84868 - 0.50039I$	$-4.16213 - 1.44471I$
$u = -0.087264 - 1.114970I$ $a = 0.667120 + 0.276565I$ $b = -0.609605 - 0.520631I$	$-3.84868 + 0.50039I$	$-4.16213 + 1.44471I$
$u = 0.385593 + 1.095040I$ $a = -0.892880 - 0.744846I$ $b = 0.614448 + 0.455281I$	$-4.07608 - 2.12478I$	$-4.95751 + 6.84383I$
$u = 0.385593 - 1.095040I$ $a = -0.892880 + 0.744846I$ $b = 0.614448 - 0.455281I$	$-4.07608 + 2.12478I$	$-4.95751 - 6.84383I$
$u = -0.782687 + 0.053190I$ $a = -0.68017 + 1.64534I$ $b = 0.901068 - 0.798573I$	$5.14619 + 3.00289I$	$9.39397 - 1.79457I$
$u = -0.782687 - 0.053190I$ $a = -0.68017 - 1.64534I$ $b = 0.901068 + 0.798573I$	$5.14619 - 3.00289I$	$9.39397 + 1.79457I$

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.781642 + 0.941987I$ $a = 0.20384 + 1.85338I$ $b = 1.084510 - 0.387004I$	$-3.42619 + 7.04333I$	$-5.70410 - 7.29708I$
$u = 0.781642 - 0.941987I$ $a = 0.20384 - 1.85338I$ $b = 1.084510 + 0.387004I$	$-3.42619 - 7.04333I$	$-5.70410 + 7.29708I$
$u = -0.283961 + 0.610275I$ $a = -2.13713 + 3.17616I$ $b = -1.252840 - 0.458676I$	$-2.20020 - 1.12205I$	$-13.00820 + 1.65018I$
$u = -0.283961 - 0.610275I$ $a = -2.13713 - 3.17616I$ $b = -1.252840 + 0.458676I$	$-2.20020 + 1.12205I$	$-13.00820 - 1.65018I$
$u = -0.20797 + 1.48001I$ $a = -0.568940 + 1.193110I$ $b = -1.050630 - 0.501085I$	$-5.33797 - 4.70204I$	$-5.36335 + 8.18569I$
$u = -0.20797 - 1.48001I$ $a = -0.568940 - 1.193110I$ $b = -1.050630 + 0.501085I$	$-5.33797 + 4.70204I$	$-5.36335 - 8.18569I$
$u = 0.312824 + 0.305189I$ $a = -6.00260 - 1.71848I$ $b = -0.599146 + 0.975616I$	$0.75185 + 4.88757I$	$6.59227 - 12.27741I$
$u = 0.312824 - 0.305189I$ $a = -6.00260 + 1.71848I$ $b = -0.599146 - 0.975616I$	$0.75185 - 4.88757I$	$6.59227 + 12.27741I$
$u = 0.47998 + 1.50322I$ $a = 0.453856 + 1.329260I$ $b = 1.043350 - 0.471419I$	$-5.55104 + 1.76510I$	$-3.52040 - 0.02107I$
$u = 0.47998 - 1.50322I$ $a = 0.453856 - 1.329260I$ $b = 1.043350 + 0.471419I$	$-5.55104 - 1.76510I$	$-3.52040 + 0.02107I$

III. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1	$(u^{20}-10u^{19}+\cdots-11u+1)(u^{56}+13u^{55}+\cdots+u+1)$
c_2	$(u^{20}-5u^{18}+\cdots+u+1)(u^{56}+3u^{55}+\cdots-7u+1)$
c_3	$(u^{20}+u^{19}+\cdots-18u+29)(u^{56}+2u^{55}+\cdots+43738u+6847)$
c_4	$(u^{20}+6u^{18}+\cdots-2u+1)(u^{56}+u^{55}+\cdots+130u+43)$
c_5	$(u^{20}-5u^{18}+\cdots-u+1)(u^{56}+3u^{55}+\cdots-7u+1)$
c_6	$(u^{20}-u^{19}+\cdots-u+1)(u^{56}-2u^{55}+\cdots+15u+1)$
c_7	$(u^{20}+2u^{19}+\cdots+2u+1)(u^{56}+u^{55}+\cdots-8u+19)$
c_8	$(u^{20}-u^{19}+\cdots-u+1)(u^{56}+8u^{55}+\cdots+2.52177\times10^{7}u+3589991)$
c_9	$(u^{20}-12u^{19}+\cdots-12u+1)(u^{56}+21u^{55}+\cdots+36162u+1849)$
c_{10}	$(u^{20}+6u^{18}+\cdots+2u+1)(u^{56}+u^{55}+\cdots+130u+43)$
c_{11}	$(u^{20}+u^{19}+\cdots+u+1)(u^{56}-2u^{55}+\cdots+15u+1)$
c_{12}	$(u^{20}+u^{19}+\cdots+u+1)(u^{56}+8u^{55}+\cdots+2.52177\times10^{7}u+3589991)$

IV. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1	$(y^{20}+6y^{19}+\cdots+5y+1)(y^{56}+67y^{55}+\cdots-305y+1)$
c_2, c_5	$(y^{20}-10y^{19}+\cdots-11y+1)(y^{56}-13y^{55}+\cdots-y+1)$
c_3	$(y^{20}+7y^{19}+\cdots+2576y+841)$ $\cdot\,(y^{56}+76y^{55}+\cdots+2879627170y+46881409)$
c_4, c_{10}	$(y^{20}+12y^{19}+\cdots+12y+1)(y^{56}+21y^{55}+\cdots+36162y+1849)$
c_6, c_{11}	$(y^{20}+9y^{19}+\cdots+y+1)(y^{56}+6y^{55}+\cdots-25y+1)$
c_7	$(y^{20}-18y^{19}+\cdots-16y+1)(y^{56}-9y^{55}+\cdots+17302y+361)$
c_8, c_{12}	$(y^{20}+y^{19}+\cdots+9y+1)$ $\cdot\,(y^{56}-78y^{55}+\cdots+166741384065503y+12888035380081)$
c_9	$(y^{20}+12y^{19}+\cdots+8y+1)$ $\cdot\,(y^{56}+49y^{55}+\cdots-27712598y+3418801)$