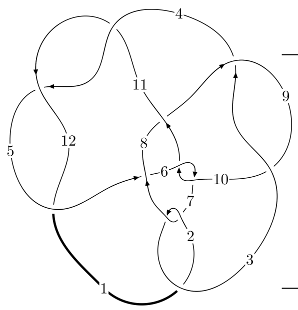
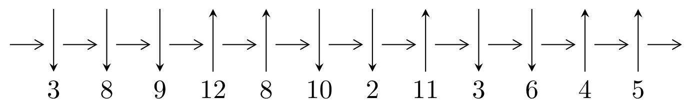
$12n_{0657}$ ($K12n_{0657}$)



A knot diagram[1]

Linearized knot diagam



Solving Sequence

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

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

$$I_1^u = \langle -1.49961 \times 10^{89} u^{57} - 4.30275 \times 10^{89} u^{56} + \cdots + 1.84762 \times 10^{90} b - 3.84519 \times 10^{90},$$
$$9.24565 \times 10^{90} u^{57} + 2.45942 \times 10^{91} u^{56} + \cdots + 2.03238 \times 10^{91} a - 1.65302 \times 10^{91},\ u^{58} + 4u^{57} + \cdots + 32u +$$
$$I_2^u = \langle 2u^{17} + u^{16} + \cdots + b - 1,$$
$$u^{16} - 11u^{14} + 50u^{12} - u^{11} - 121u^{10} + 5u^9 + 168u^8 - 7u^7 - 135u^6 - u^5 + 62u^4 + 8u^3 - 17u^2 + a - 5u + 2,$$
$$u^{18} - u^{17} + \cdots + 2u + 1 \rangle$$

* 2 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 76 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. $\boldsymbol{I^u_1 = \langle -1.50 \times 10^{89}u^{57} - 4.30 \times 10^{89}u^{56} + \cdots + 1.85 \times 10^{90}b - 3.85 \times 10^{90},\ 9.25 \times 10^{90}u^{57} + 2.46 \times 10^{91}u^{56} + \cdots + 2.03 \times 10^{91}a - 1.65 \times 10^{91},\ u^{58} + 4u^{57} + \cdots + 32u + 11\rangle}$

(i) Arc colorings

$$a_4 = \begin{pmatrix} 0 \\ u \end{pmatrix}$$
$$a_{11} = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$
$$a_{12} = \begin{pmatrix} 1 \\ -u^2 \end{pmatrix}$$
$$a_5 = \begin{pmatrix} u \\ -u^3 + u \end{pmatrix}$$
$$a_1 = \begin{pmatrix} -u^2 + 1 \\ u^4 - 2u^2 \end{pmatrix}$$
$$a_9 = \begin{pmatrix} -0.454916u^{57} - 1.21012u^{56} + \cdots - 16.5801u + 0.813340 \\ 0.0811641u^{57} + 0.232880u^{56} + \cdots - 0.624802u + 2.08115 \end{pmatrix}$$
$$a_3 = \begin{pmatrix} -0.823019u^{57} - 2.12734u^{56} + \cdots + 7.49958u - 5.41326 \\ 0.711078u^{57} + 1.92531u^{56} + \cdots + 19.8006u + 6.32004 \end{pmatrix}$$
$$a_8 = \begin{pmatrix} -0.536080u^{57} - 1.44300u^{56} + \cdots - 15.9553u - 1.26781 \\ 0.0811641u^{57} + 0.232880u^{56} + \cdots - 0.624802u + 2.08115 \end{pmatrix}$$
$$a_6 = \begin{pmatrix} 1.05675u^{57} + 2.85391u^{56} + \cdots + 27.8234u + 9.33471 \\ -0.544200u^{57} - 1.45256u^{56} + \cdots - 6.12029u - 4.46684 \end{pmatrix}$$
$$a_2 = \begin{pmatrix} -0.132988u^{57} - 0.334327u^{56} + \cdots + 12.2892u - 3.37486 \\ -0.0459035u^{57} - 0.0804690u^{56} + \cdots + 3.58707u - 1.18299 \end{pmatrix}$$
$$a_7 = \begin{pmatrix} -1.48462u^{57} - 3.93193u^{56} + \cdots - 27.9977u - 11.9930 \\ 0.599967u^{57} + 1.56987u^{56} + \cdots + 8.28968u + 4.81357 \end{pmatrix}$$
$$a_{10} = \begin{pmatrix} -1.04371u^{57} - 2.79063u^{56} + \cdots - 20.8363u - 7.03854 \\ 0.545357u^{57} + 1.43212u^{56} + \cdots + 8.80444u + 4.70711 \end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= -2.03502u^{57} - 5.38837u^{56} + \cdots - 45.6934u - 9.66794$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{58} + 62u^{57} + \cdots + 142553u + 3481$
c_2, c_7	$u^{58} - 31u^{56} + \cdots + 3u + 59$
c_3, c_9	$u^{58} - u^{57} + \cdots - 2798u + 691$
c_4, c_{11}, c_{12}	$u^{58} - 4u^{57} + \cdots - 32u + 11$
c_5	$u^{58} + 12u^{57} + \cdots + 40669u + 11059$
c_6, c_{10}	$u^{58} + 2u^{57} + \cdots - 22u + 7$
c_8	$u^{58} - 2u^{57} + \cdots - 471u + 43$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{58} - 114y^{57} + \cdots + 2999991563y + 12117361$
c_2, c_7	$y^{58} - 62y^{57} + \cdots - 142553y + 3481$
c_3, c_9	$y^{58} + 29y^{57} + \cdots + 3857388y + 477481$
c_4, c_{11}, c_{12}	$y^{58} - 58y^{57} + \cdots + 8238y + 121$
c_5	$y^{58} + 24y^{57} + \cdots - 2110306137y + 122301481$
c_6, c_{10}	$y^{58} + 20y^{57} + \cdots + 538y + 49$
c_8	$y^{58} - 34y^{57} + \cdots + 76235y + 1849$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.961036 + 0.344710I$ $a = 0.410562 - 0.361563I$ $b = 0.0577451 + 0.0746282I$	$1.63603 - 1.28858I$	$3.68914 - 2.65059I$
$u = -0.961036 - 0.344710I$ $a = 0.410562 + 0.361563I$ $b = 0.0577451 - 0.0746282I$	$1.63603 + 1.28858I$	$3.68914 + 2.65059I$
$u = -0.300610 + 0.983201I$ $a = -0.664168 + 0.542961I$ $b = -1.154320 + 0.289838I$	$2.11065 - 4.12734I$	$0. + 10.48560I$
$u = -0.300610 - 0.983201I$ $a = -0.664168 - 0.542961I$ $b = -1.154320 - 0.289838I$	$2.11065 + 4.12734I$	$0. - 10.48560I$
$u = 0.177176 + 1.016420I$ $a = 0.995049 + 0.839431I$ $b = 1.006590 + 0.559897I$	$-5.40198 + 2.14911I$	0
$u = 0.177176 - 1.016420I$ $a = 0.995049 - 0.839431I$ $b = 1.006590 - 0.559897I$	$-5.40198 - 2.14911I$	0
$u = 1.022550 + 0.300737I$ $a = 1.392440 - 0.121333I$ $b = -0.681814 - 0.288239I$	$-4.73896 - 0.44542I$	0
$u = 1.022550 - 0.300737I$ $a = 1.392440 + 0.121333I$ $b = -0.681814 + 0.288239I$	$-4.73896 + 0.44542I$	0
$u = 0.457539 + 1.028850I$ $a = -0.639770 - 1.028050I$ $b = -1.149000 - 0.599343I$	$-4.99783 + 9.61291I$	0
$u = 0.457539 - 1.028850I$ $a = -0.639770 + 1.028050I$ $b = -1.149000 + 0.599343I$	$-4.99783 - 9.61291I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.508367 + 0.560466I$ $a = 0.702577 - 1.074160I$ $b = 0.816859 - 0.437304I$	$0.87869 - 1.96952I$	$-2.93815 + 3.59463I$
$u = -0.508367 - 0.560466I$ $a = 0.702577 + 1.074160I$ $b = 0.816859 + 0.437304I$	$0.87869 + 1.96952I$	$-2.93815 - 3.59463I$
$u = -1.243480 + 0.160915I$ $a = -0.12542 + 1.47361I$ $b = -1.005060 + 0.654457I$	$8.10144 - 2.64219I$	0
$u = -1.243480 - 0.160915I$ $a = -0.12542 - 1.47361I$ $b = -1.005060 - 0.654457I$	$8.10144 + 2.64219I$	0
$u = 1.250380 + 0.115527I$ $a = -0.024680 + 0.709566I$ $b = 0.162747 + 1.279110I$	$2.43342 + 2.95295I$	0
$u = 1.250380 - 0.115527I$ $a = -0.024680 - 0.709566I$ $b = 0.162747 - 1.279110I$	$2.43342 - 2.95295I$	0
$u = 0.918632 + 0.898388I$ $a = -0.630878 - 0.202092I$ $b = -0.981209 + 0.316327I$	$-3.71484 - 3.13825I$	0
$u = 0.918632 - 0.898388I$ $a = -0.630878 + 0.202092I$ $b = -0.981209 - 0.316327I$	$-3.71484 + 3.13825I$	0
$u = -1.276100 + 0.238628I$ $a = 0.149526 + 0.895072I$ $b = 0.670232 + 1.202320I$	$-2.49632 - 0.10646I$	0
$u = -1.276100 - 0.238628I$ $a = 0.149526 - 0.895072I$ $b = 0.670232 - 1.202320I$	$-2.49632 + 0.10646I$	0

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.214091 + 0.659200I$ $a = 0.42003 + 1.64314I$ $b = -0.474121 + 0.960246I$	$-7.21101 + 3.94882I$	$-5.14255 - 3.51346I$
$u = 0.214091 - 0.659200I$ $a = 0.42003 - 1.64314I$ $b = -0.474121 - 0.960246I$	$-7.21101 - 3.94882I$	$-5.14255 + 3.51346I$
$u = -1.340150 + 0.006307I$ $a = -0.671961 - 0.615224I$ $b = 1.44910 - 0.06502I$	$6.41008 + 2.01791I$	0
$u = -1.340150 - 0.006307I$ $a = -0.671961 + 0.615224I$ $b = 1.44910 + 0.06502I$	$6.41008 - 2.01791I$	0
$u = 1.208760 + 0.634237I$ $a = 0.615633 + 0.389195I$ $b = 0.868802 - 0.223405I$	$-2.30604 + 3.66617I$	0
$u = 1.208760 - 0.634237I$ $a = 0.615633 - 0.389195I$ $b = 0.868802 + 0.223405I$	$-2.30604 - 3.66617I$	0
$u = 1.361830 + 0.160284I$ $a = -0.384112 + 0.899780I$ $b = 1.46541 + 0.58759I$	$6.81065 + 3.86139I$	0
$u = 1.361830 - 0.160284I$ $a = -0.384112 - 0.899780I$ $b = 1.46541 - 0.58759I$	$6.81065 - 3.86139I$	0
$u = 1.357900 + 0.198010I$ $a = -1.41096 - 0.24260I$ $b = 0.980223 + 0.173254I$	$-2.00761 + 5.36474I$	0
$u = 1.357900 - 0.198010I$ $a = -1.41096 + 0.24260I$ $b = 0.980223 - 0.173254I$	$-2.00761 - 5.36474I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.351158 + 0.438829I$ $a = -1.90822 + 1.84789I$ $b = -0.931746 - 0.128227I$	$5.20133 + 0.56913I$	$3.17376 + 3.13957I$
$u = -0.351158 - 0.438829I$ $a = -1.90822 - 1.84789I$ $b = -0.931746 + 0.128227I$	$5.20133 - 0.56913I$	$3.17376 - 3.13957I$
$u = -1.41665 + 0.25497I$ $a = -0.167580 - 0.716545I$ $b = -0.39722 - 1.42369I$	$-1.94189 - 7.25945I$	0
$u = -1.41665 - 0.25497I$ $a = -0.167580 + 0.716545I$ $b = -0.39722 + 1.42369I$	$-1.94189 + 7.25945I$	0
$u = -1.38880 + 0.42731I$ $a = 0.271840 + 0.657054I$ $b = -1.238430 + 0.075451I$	$5.55129 - 1.69307I$	0
$u = -1.38880 - 0.42731I$ $a = 0.271840 - 0.657054I$ $b = -1.238430 - 0.075451I$	$5.55129 + 1.69307I$	0
$u = -0.020913 + 0.538103I$ $a = -1.45595 - 2.11846I$ $b = 0.699320 - 0.714521I$	$-6.48919 - 2.77189I$	$-4.31702 + 3.80378I$
$u = -0.020913 - 0.538103I$ $a = -1.45595 + 2.11846I$ $b = 0.699320 + 0.714521I$	$-6.48919 + 2.77189I$	$-4.31702 - 3.80378I$
$u = -1.40623 + 0.43425I$ $a = -0.151715 - 1.142070I$ $b = 1.25232 - 0.77633I$	$-0.39560 - 7.30241I$	0
$u = -1.40623 - 0.43425I$ $a = -0.151715 + 1.142070I$ $b = 1.25232 + 0.77633I$	$-0.39560 + 7.30241I$	0

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 1.46204 + 0.36462I$ $a = 0.326405 - 0.912619I$ $b = -1.44645 - 0.46355I$	$7.77629 + 8.86284I$	0
$u = 1.46204 - 0.36462I$ $a = 0.326405 + 0.912619I$ $b = -1.44645 + 0.46355I$	$7.77629 - 8.86284I$	0
$u = 0.443286 + 0.212059I$ $a = -0.662346 + 0.537430I$ $b = 0.716948 + 0.729738I$	$0.67091 + 2.53345I$	$-6.84359 - 5.09477I$
$u = 0.443286 - 0.212059I$ $a = -0.662346 - 0.537430I$ $b = 0.716948 - 0.729738I$	$0.67091 - 2.53345I$	$-6.84359 + 5.09477I$
$u = 0.105029 + 0.468274I$ $a = 0.858036 - 0.852783I$ $b = -0.148908 - 0.554790I$	$-0.879280 - 0.837953I$	$-6.06157 + 3.85318I$
$u = 0.105029 - 0.468274I$ $a = 0.858036 + 0.852783I$ $b = -0.148908 + 0.554790I$	$-0.879280 + 0.837953I$	$-6.06157 - 3.85318I$
$u = 1.52144 + 0.16063I$ $a = 0.147683 - 1.054080I$ $b = -0.988171 - 0.419538I$	$11.65080 + 1.76628I$	0
$u = 1.52144 - 0.16063I$ $a = 0.147683 + 1.054080I$ $b = -0.988171 + 0.419538I$	$11.65080 - 1.76628I$	0
$u = -1.55510 + 0.06787I$ $a = -0.415660 - 0.379485I$ $b = 1.24881 - 0.70054I$	$7.53900 - 3.50491I$	0
$u = -1.55510 - 0.06787I$ $a = -0.415660 + 0.379485I$ $b = 1.24881 + 0.70054I$	$7.53900 + 3.50491I$	0

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 1.55296 + 0.10743I$ $a = -0.265564 + 0.772783I$ $b = 1.29007 + 0.93480I$	$7.76727 + 4.14815I$	0
$u = 1.55296 - 0.10743I$ $a = -0.265564 - 0.772783I$ $b = 1.29007 - 0.93480I$	$7.76727 - 4.14815I$	0
$u = -1.54876 + 0.39196I$ $a = 0.309319 + 1.063530I$ $b = -1.38659 + 0.73109I$	$1.4411 - 14.7651I$	0
$u = -1.54876 - 0.39196I$ $a = 0.309319 - 1.063530I$ $b = -1.38659 - 0.73109I$	$1.4411 + 14.7651I$	0
$u = -1.69455 + 0.13644I$ $a = 0.354754 + 0.421724I$ $b = -0.995880 + 0.147977I$	$5.71581 - 0.60212I$	0
$u = -1.69455 - 0.13644I$ $a = 0.354754 - 0.421724I$ $b = -0.995880 - 0.147977I$	$5.71581 + 0.60212I$	0
$u = -0.041702 + 0.155977I$ $a = 4.67058 - 1.41112I$ $b = 1.293750 - 0.398711I$	$2.00910 - 2.36209I$	$6.75260 - 1.70759I$
$u = -0.041702 - 0.155977I$ $a = 4.67058 + 1.41112I$ $b = 1.293750 + 0.398711I$	$2.00910 + 2.36209I$	$6.75260 + 1.70759I$

II.
$\boldsymbol{I_2^u = \langle 2u^{17}+u^{16}+\cdots+b-1,\ u^{16}-11u^{14}+\cdots+a+2,\ u^{18}-u^{17}+\cdots+2u+1\rangle}$

(i) Arc colorings

$$a_4 = \begin{pmatrix} 0 \\ u \end{pmatrix}$$
$$a_{11} = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$
$$a_{12} = \begin{pmatrix} 1 \\ -u^2 \end{pmatrix}$$
$$a_5 = \begin{pmatrix} u \\ -u^3+u \end{pmatrix}$$
$$a_1 = \begin{pmatrix} -u^2+1 \\ u^4-2u^2 \end{pmatrix}$$
$$a_9 = \begin{pmatrix} -u^{16}+11u^{14}+\cdots+5u-2 \\ -2u^{17}-u^{16}+\cdots+5u+1 \end{pmatrix}$$
$$a_3 = \begin{pmatrix} u^{17}-2u^{16}+\cdots+19u+4 \\ 2u^{17}-21u^{15}+\cdots-10u^2+2u \end{pmatrix}$$
$$a_8 = \begin{pmatrix} 2u^{17}-20u^{15}+\cdots+2u^2-3 \\ -2u^{17}-u^{16}+\cdots+5u+1 \end{pmatrix}$$
$$a_6 = \begin{pmatrix} 3u^{17}-31u^{15}+\cdots-7u^2+7u \\ -u^{17}+10u^{15}+\cdots+5u+1 \end{pmatrix}$$
$$a_2 = \begin{pmatrix} 2u^{17}-2u^{16}+\cdots+18u+1 \\ 2u^{17}-21u^{15}+\cdots+2u-1 \end{pmatrix}$$
$$a_7 = \begin{pmatrix} -u^{17}+u^{16}+\cdots-12u-1 \\ u^{16}-10u^{14}+\cdots-5u-1 \end{pmatrix}$$
$$a_{10} = \begin{pmatrix} u^{16}-u^{15}+\cdots-u+4 \\ u^{16}-10u^{14}+\cdots-u+1 \end{pmatrix}$$

(ii) Obstruction class $= 1$

(iii) Cusp Shapes $= -3u^{17}-7u^{16}+30u^{15}+69u^{14}-127u^{13}-279u^{12}+295u^{11}+593u^{10}-398u^9-710u^8+286u^7+484u^6-61u^5-186u^4-42u^3+33u^2+27u+8$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{18} - 19u^{17} + \cdots + 7u + 1$
c_2	$u^{18} + u^{17} + \cdots + u + 1$
c_3	$u^{18} + 6u^{16} + \cdots + 12u^2 + 1$
c_4	$u^{18} + u^{17} + \cdots - 2u + 1$
c_5	$u^{18} - u^{17} + \cdots + 637u + 169$
c_6	$u^{18} + u^{17} + \cdots + 9u^2 + 1$
c_7	$u^{18} - u^{17} + \cdots - u + 1$
c_8	$u^{18} + 3u^{17} + \cdots + 3u + 1$
c_9	$u^{18} + 6u^{16} + \cdots + 12u^2 + 1$
c_{10}	$u^{18} - u^{17} + \cdots + 9u^2 + 1$
c_{11}, c_{12}	$u^{18} - u^{17} + \cdots + 2u + 1$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{18} - 23y^{17} + \cdots - 113y + 1$
c_2, c_7	$y^{18} - 19y^{17} + \cdots + 7y + 1$
c_3, c_9	$y^{18} + 12y^{17} + \cdots + 24y + 1$
c_4, c_{11}, c_{12}	$y^{18} - 23y^{17} + \cdots + 10y + 1$
c_5	$y^{18} - y^{17} + \cdots + 80275y + 28561$
c_6, c_{10}	$y^{18} + 15y^{17} + \cdots + 18y + 1$
c_8	$y^{18} - 11y^{17} + \cdots + 3y + 1$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = -0.887779 + 0.112048I$ $a = 0.089265 - 0.331367I$ $b = 0.461534 - 0.749043I$	$1.39736 - 2.22617I$	$1.56231 + 2.33825I$
$u = -0.887779 - 0.112048I$ $a = 0.089265 + 0.331367I$ $b = 0.461534 + 0.749043I$	$1.39736 + 2.22617I$	$1.56231 - 2.33825I$
$u = 0.758736 + 0.433252I$ $a = -0.977741 + 0.684412I$ $b = 0.369099 - 0.429483I$	$-5.13432 - 1.67601I$	$-1.62747 + 2.23910I$
$u = 0.758736 - 0.433252I$ $a = -0.977741 - 0.684412I$ $b = 0.369099 + 0.429483I$	$-5.13432 + 1.67601I$	$-1.62747 - 2.23910I$
$u = 1.143310 + 0.336155I$ $a = 0.949765 + 0.051215I$ $b = 0.058602 + 0.523758I$	$-3.76019 + 4.59860I$	$-1.93853 - 3.26173I$
$u = 1.143310 - 0.336155I$ $a = 0.949765 - 0.051215I$ $b = 0.058602 - 0.523758I$	$-3.76019 - 4.59860I$	$-1.93853 + 3.26173I$
$u = -0.383102 + 0.444250I$ $a = 0.823217 - 0.923482I$ $b = 1.133460 - 0.522137I$	$1.76189 - 2.88146I$	$1.41103 + 9.64361I$
$u = -0.383102 - 0.444250I$ $a = 0.823217 + 0.923482I$ $b = 1.133460 + 0.522137I$	$1.76189 + 2.88146I$	$1.41103 - 9.64361I$
$u = -1.45384 + 0.15707I$ $a = 0.292000 + 1.088040I$ $b = -1.046950 + 0.117848I$	$9.99566 - 0.53098I$	$4.50651 - 0.51925I$
$u = -1.45384 - 0.15707I$ $a = 0.292000 - 1.088040I$ $b = -1.046950 - 0.117848I$	$9.99566 + 0.53098I$	$4.50651 + 0.51925I$

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 1.48783 + 0.11385I$ $a = 0.078910 - 1.084200I$ $b = -1.091720 - 0.722143I$	$10.62920 + 2.91434I$	$4.17629 - 3.27745I$
$u = 1.48783 - 0.11385I$ $a = 0.078910 + 1.084200I$ $b = -1.091720 + 0.722143I$	$10.62920 - 2.91434I$	$4.17629 + 3.27745I$
$u = 1.54419 + 0.09001I$ $a = -0.288335 + 0.654660I$ $b = 1.44443 + 0.99383I$	$8.50423 + 4.51006I$	$9.09047 - 7.39147I$
$u = 1.54419 - 0.09001I$ $a = -0.288335 - 0.654660I$ $b = 1.44443 - 0.99383I$	$8.50423 - 4.51006I$	$9.09047 + 7.39147I$
$u = -1.64388 + 0.28012I$ $a = -0.301507 - 0.405678I$ $b = 1.183200 - 0.160247I$	$6.07303 - 1.21729I$	$10.42303 + 3.11644I$
$u = -1.64388 - 0.28012I$ $a = -0.301507 + 0.405678I$ $b = 1.183200 + 0.160247I$	$6.07303 + 1.21729I$	$10.42303 - 3.11644I$
$u = -0.065465 + 0.318414I$ $a = -4.66557 + 0.43662I$ $b = -1.011650 + 0.306442I$	$5.07676 - 1.32129I$	$0.89638 + 6.13933I$
$u = -0.065465 - 0.318414I$ $a = -4.66557 - 0.43662I$ $b = -1.011650 - 0.306442I$	$5.07676 + 1.32129I$	$0.89638 - 6.13933I$

III. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1	$(u^{18}-19u^{17}+\cdots+7u+1)(u^{58}+62u^{57}+\cdots+142553u+3481)$
c_2	$(u^{18}+u^{17}+\cdots+u+1)(u^{58}-31u^{56}+\cdots+3u+59)$
c_3	$(u^{18}+6u^{16}+\cdots+12u^2+1)(u^{58}-u^{57}+\cdots-2798u+691)$
c_4	$(u^{18}+u^{17}+\cdots-2u+1)(u^{58}-4u^{57}+\cdots-32u+11)$
c_5	$(u^{18}-u^{17}+\cdots+637u+169)(u^{58}+12u^{57}+\cdots+40669u+11059)$
c_6	$(u^{18}+u^{17}+\cdots+9u^2+1)(u^{58}+2u^{57}+\cdots-22u+7)$
c_7	$(u^{18}-u^{17}+\cdots-u+1)(u^{58}-31u^{56}+\cdots+3u+59)$
c_8	$(u^{18}+3u^{17}+\cdots+3u+1)(u^{58}-2u^{57}+\cdots-471u+43)$
c_9	$(u^{18}+6u^{16}+\cdots+12u^2+1)(u^{58}-u^{57}+\cdots-2798u+691)$
c_{10}	$(u^{18}-u^{17}+\cdots+9u^2+1)(u^{58}+2u^{57}+\cdots-22u+7)$
c_{11}, c_{12}	$(u^{18}-u^{17}+\cdots+2u+1)(u^{58}-4u^{57}+\cdots-32u+11)$

IV. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1	$(y^{18} - 23y^{17} + \cdots - 113y + 1)$ $\cdot (y^{58} - 114y^{57} + \cdots + 2999991563y + 12117361)$
c_2, c_7	$(y^{18} - 19y^{17} + \cdots + 7y + 1)(y^{58} - 62y^{57} + \cdots - 142553y + 3481)$
c_3, c_9	$(y^{18} + 12y^{17} + \cdots + 24y + 1)$ $\cdot (y^{58} + 29y^{57} + \cdots + 3857388y + 477481)$
c_4, c_{11}, c_{12}	$(y^{18} - 23y^{17} + \cdots + 10y + 1)(y^{58} - 58y^{57} + \cdots + 8238y + 121)$
c_5	$(y^{18} - y^{17} + \cdots + 80275y + 28561)$ $\cdot (y^{58} + 24y^{57} + \cdots - 2110306137y + 122301481)$
c_6, c_{10}	$(y^{18} + 15y^{17} + \cdots + 18y + 1)(y^{58} + 20y^{57} + \cdots + 538y + 49)$
c_8	$(y^{18} - 11y^{17} + \cdots + 3y + 1)(y^{58} - 34y^{57} + \cdots + 76235y + 1849)$