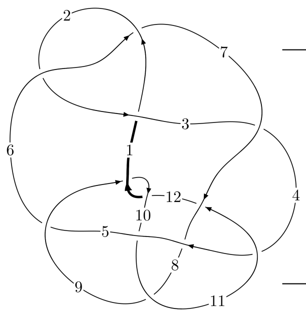
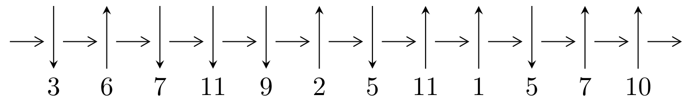
$12n_{0281}$ $(K12n_{0281})$



A knot diagram[1]

Linearized knot diagam



Solving Sequence

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

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

$$\begin{aligned} I_1^u = \langle & 1.82494 \times 10^{252} u^{57} + 1.82764 \times 10^{251} u^{56} + \cdots + 7.78104 \times 10^{252} b - 1.44190 \times 10^{253}, \\ & 1.60321 \times 10^{253} u^{57} + 2.56712 \times 10^{252} u^{56} + \cdots + 7.78104 \times 10^{252} a - 9.32328 \times 10^{253}, \\ & u^{58} + 51u^{56} + \cdots - 13u + 1 \rangle \\ I_2^u = \langle & -6.06692 \times 10^{19} u^{19} + 9.41482 \times 10^{19} u^{18} + \cdots + 3.14683 \times 10^{19} b + 6.57389 \times 10^{19}, \\ & 3.61452 \times 10^{19} u^{19} - 9.01759 \times 10^{19} u^{18} + \cdots + 3.14683 \times 10^{19} a - 2.09263 \times 10^{20},\ u^{20} - u^{19} + \cdots + 8u + 1 \rangle \end{aligned}$$

* 2 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 78 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. $\boldsymbol{I_1^u = \langle 1.82 \times 10^{252} u^{57} + 1.83 \times 10^{251} u^{56} + \cdots + 7.78 \times 10^{252} b - 1.44 \times 10^{253},\ 1.60 \times 10^{253} u^{57} + 2.57 \times 10^{252} u^{56} + \cdots + 7.78 \times 10^{252} a - 9.32 \times 10^{253},\ u^{58} + 51 u^{56} + \cdots - 13u + 1 \rangle}$

(i) Arc colorings

$$a_5 = \begin{pmatrix} 0 \\ u \end{pmatrix}$$

$$a_7 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$

$$a_8 = \begin{pmatrix} 1 \\ u^2 \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} -2.06041u^{57} - 0.329920u^{56} + \cdots - 90.1499u + 11.9821 \\ -0.234536u^{57} - 0.0234883u^{56} + \cdots - 14.4397u + 1.85309 \end{pmatrix}$$

$$a_9 = \begin{pmatrix} 1.04387u^{57} + 0.167750u^{56} + \cdots + 52.9864u - 10.8517 \\ 0.0421526u^{57} + 0.0173690u^{56} + \cdots - 0.700871u - 1.05817 \end{pmatrix}$$

$$a_{12} = \begin{pmatrix} -2.29494u^{57} - 0.353409u^{56} + \cdots - 104.590u + 13.8351 \\ -0.234536u^{57} - 0.0234883u^{56} + \cdots - 14.4397u + 1.85309 \end{pmatrix}$$

$$a_4 = \begin{pmatrix} -1.79431u^{57} - 0.269090u^{56} + \cdots - 65.9513u + 8.42012 \\ -0.213324u^{57} - 0.0357409u^{56} + \cdots - 2.42241u + 1.31296 \end{pmatrix}$$

$$a_3 = \begin{pmatrix} -2.00763u^{57} - 0.304831u^{56} + \cdots - 68.3737u + 9.73308 \\ -0.213324u^{57} - 0.0357409u^{56} + \cdots - 2.42241u + 1.31296 \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} -2.06041u^{57} - 0.329920u^{56} + \cdots - 90.1499u + 11.9821 \\ -0.208881u^{57} - 0.0233171u^{56} + \cdots - 12.2111u + 1.52317 \end{pmatrix}$$

$$a_1 = \begin{pmatrix} -0.509191u^{57} - 0.192771u^{56} + \cdots - 58.2608u + 2.04977 \\ -0.241169u^{57} - 0.0405319u^{56} + \cdots - 13.7690u + 1.62656 \end{pmatrix}$$

$$a_2 = \begin{pmatrix} -0.507749u^{57} + 0.0273770u^{56} + \cdots - 44.2370u + 10.1377 \\ 0.125301u^{57} + 0.0350847u^{56} + \cdots + 1.61989u + 0.441525 \end{pmatrix}$$

$$a_6 = \begin{pmatrix} 1.13600u^{57} + 0.228021u^{56} + \cdots + 37.0000u - 3.53009 \\ 0.207315u^{57} + 0.0430301u^{56} + \cdots + 3.66730u - 1.06964 \end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= -1.19694u^{57} - 0.252356u^{56} + \cdots - 49.4008u + 2.76120$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{58} + 28u^{57} + \cdots + 886u + 121$
c_2, c_6	$u^{58} - 2u^{57} + \cdots - 40u + 11$
c_3	$u^{58} + 2u^{57} + \cdots - 2542u + 3839$
c_4, c_{10}	$u^{58} - u^{57} + \cdots + 10u + 1$
c_5	$u^{58} + 3u^{57} + \cdots + 60u + 88$
c_7	$u^{58} + 51u^{56} + \cdots - 13u + 1$
c_8	$u^{58} + 3u^{57} + \cdots + 12935u + 481$
c_9, c_{12}	$u^{58} + 6u^{57} + \cdots + 289u + 41$
c_{11}	$u^{58} - 3u^{57} + \cdots - 790066u + 205619$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{58} + 12y^{57} + \cdots + 130490y + 14641$
c_2, c_6	$y^{58} + 28y^{57} + \cdots + 886y + 121$
c_3	$y^{58} - 4y^{57} + \cdots - 237147274y + 14737921$
c_4, c_{10}	$y^{58} + 75y^{57} + \cdots - 50y + 1$
c_5	$y^{58} - 21y^{57} + \cdots - 103568y + 7744$
c_7	$y^{58} + 102y^{57} + \cdots - 15y + 1$
c_8	$y^{58} - 81y^{57} + \cdots + 2622113y + 231361$
c_9, c_{12}	$y^{58} + 22y^{57} + \cdots + 63341y + 1681$
c_{11}	$y^{58} - 77y^{57} + \cdots + 288375606396y + 42279173161$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = -0.605403 + 0.770255I$ $a = 0.476324 - 1.234450I$ $b = -0.836696 - 0.528282I$	$-3.29534 - 3.17863I$	0
$u = -0.605403 - 0.770255I$ $a = 0.476324 + 1.234450I$ $b = -0.836696 + 0.528282I$	$-3.29534 + 3.17863I$	0
$u = 0.785984 + 0.673927I$ $a = 0.503071 + 1.150720I$ $b = -0.611023 + 1.176480I$	$-3.08132 + 0.18394I$	0
$u = 0.785984 - 0.673927I$ $a = 0.503071 - 1.150720I$ $b = -0.611023 - 1.176480I$	$-3.08132 - 0.18394I$	0
$u = -0.933105 + 0.463612I$ $a = 0.616969 - 0.636242I$ $b = 0.49017 - 1.36421I$	$-0.163561 - 0.229805I$	0
$u = -0.933105 - 0.463612I$ $a = 0.616969 + 0.636242I$ $b = 0.49017 + 1.36421I$	$-0.163561 + 0.229805I$	0
$u = -1.027790 + 0.224558I$ $a = 0.284389 - 0.917517I$ $b = -0.586774 + 0.431083I$	$-2.33014 - 6.26866I$	0
$u = -1.027790 - 0.224558I$ $a = 0.284389 + 0.917517I$ $b = -0.586774 - 0.431083I$	$-2.33014 + 6.26866I$	0
$u = 0.927914 + 0.522270I$ $a = 0.693785 + 0.874215I$ $b = 0.21260 + 1.64706I$	$-1.22894 + 5.19635I$	0
$u = 0.927914 - 0.522270I$ $a = 0.693785 - 0.874215I$ $b = 0.21260 - 1.64706I$	$-1.22894 - 5.19635I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.202202+0.855913I$ $a=\ \ 0.634237-1.070540I$ $b=-0.589135+0.465773I$	$-2.01656+2.69465I$	0
$u=-0.202202-0.855913I$ $a=\ \ 0.634237+1.070540I$ $b=-0.589135-0.465773I$	$-2.01656-2.69465I$	0
$u=-0.706681+0.907609I$ $a=\ \ 0.680830-0.663324I$ $b=-0.702951+0.508789I$	$-2.73261+2.20022I$	0
$u=-0.706681-0.907609I$ $a=\ \ 0.680830+0.663324I$ $b=-0.702951-0.508789I$	$-2.73261-2.20022I$	0
$u=\ \ 1.163070+0.118652I$ $a=-0.147695+0.083721I$ $b=\ \ 0.503768+0.861204I$	$-6.57959+2.03147I$	0
$u=\ \ 1.163070-0.118652I$ $a=-0.147695-0.083721I$ $b=\ \ 0.503768-0.861204I$	$-6.57959-2.03147I$	0
$u=-1.132900+0.423824I$ $a=\ \ 0.1080040-0.0408760I$ $b=\ \ 0.502102-0.864389I$	$-2.52083+1.44860I$	0
$u=-1.132900-0.423824I$ $a=\ \ 0.1080040+0.0408760I$ $b=\ \ 0.502102+0.864389I$	$-2.52083-1.44860I$	0
$u=\ \ 0.613710+0.275012I$ $a=\ \ 0.577920+1.169060I$ $b=-0.605409-0.442067I$	$0.68088+1.79356I$	$3.58716-3.49376I$
$u=\ \ 0.613710-0.275012I$ $a=\ \ 0.577920-1.169060I$ $b=-0.605409+0.442067I$	$0.68088-1.79356I$	$3.58716+3.49376I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.112698 + 0.641118I$ $a = 1.14677 + 1.24755I$ $b = -0.104986 - 0.459963I$	$-0.20219 + 1.76036I$	$2.87139 - 4.54013I$
$u = 0.112698 - 0.641118I$ $a = 1.14677 - 1.24755I$ $b = -0.104986 + 0.459963I$	$-0.20219 - 1.76036I$	$2.87139 + 4.54013I$
$u = 1.34164 + 0.50804I$ $a = 0.0413867 - 0.0772033I$ $b = 0.500717 + 0.867698I$	$-5.31571 - 6.25637I$	0
$u = 1.34164 - 0.50804I$ $a = 0.0413867 + 0.0772033I$ $b = 0.500717 - 0.867698I$	$-5.31571 + 6.25637I$	0
$u = -0.215717 + 0.466050I$ $a = 0.850318 + 0.391504I$ $b = -0.051763 - 0.414571I$	$-0.204392 + 1.155360I$	$-2.58460 - 5.42114I$
$u = -0.215717 - 0.466050I$ $a = 0.850318 - 0.391504I$ $b = -0.051763 + 0.414571I$	$-0.204392 - 1.155360I$	$-2.58460 + 5.42114I$
$u = -0.316089 + 0.016627I$ $a = -2.59472 + 1.52273I$ $b = 0.723432 + 0.374751I$	$-5.01306 + 2.02127I$	$-6.01042 - 2.94322I$
$u = -0.316089 - 0.016627I$ $a = -2.59472 - 1.52273I$ $b = 0.723432 - 0.374751I$	$-5.01306 - 2.02127I$	$-6.01042 + 2.94322I$
$u = 0.139498 + 0.148897I$ $a = -0.77014 - 3.28112I$ $b = -0.935346 + 0.418012I$	$2.35280 - 1.42837I$	$5.23226 - 0.77346I$
$u = 0.139498 - 0.148897I$ $a = -0.77014 + 3.28112I$ $b = -0.935346 - 0.418012I$	$2.35280 + 1.42837I$	$5.23226 + 0.77346I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.072363 + 0.140302I$ $a = -3.68001 + 2.57740I$ $b = -1.276320 - 0.323994I$	$1.40150 - 2.62563I$	$-2.39243 + 7.68960I$
$u = 0.072363 - 0.140302I$ $a = -3.68001 - 2.57740I$ $b = -1.276320 + 0.323994I$	$1.40150 + 2.62563I$	$-2.39243 - 7.68960I$
$u = -0.082246 + 0.130921I$ $a = 7.59312 + 2.53392I$ $b = 0.915246 - 0.256960I$	$-0.28851 + 4.07641I$	$2.15744 - 4.09621I$
$u = -0.082246 - 0.130921I$ $a = 7.59312 - 2.53392I$ $b = 0.915246 + 0.256960I$	$-0.28851 - 4.07641I$	$2.15744 + 4.09621I$
$u = 0.1302840 + 0.0411333I$ $a = 5.89662 - 7.40372I$ $b = 1.210170 - 0.117689I$	$-2.24712 + 9.22197I$	$-1.03586 - 7.84449I$
$u = 0.1302840 - 0.0411333I$ $a = 5.89662 + 7.40372I$ $b = 1.210170 + 0.117689I$	$-2.24712 - 9.22197I$	$-1.03586 + 7.84449I$
$u = -0.25501 + 2.08526I$ $a = -0.853720 + 0.095240I$ $b = 1.69702 + 0.80685I$	$8.43308 + 5.72964I$	0
$u = -0.25501 - 2.08526I$ $a = -0.853720 - 0.095240I$ $b = 1.69702 - 0.80685I$	$8.43308 - 5.72964I$	0
$u = 0.10045 + 2.09972I$ $a = 0.851816 + 0.083179I$ $b = -2.28410 - 0.51852I$	$9.71957 + 1.80340I$	0
$u = 0.10045 - 2.09972I$ $a = 0.851816 - 0.083179I$ $b = -2.28410 + 0.51852I$	$9.71957 - 1.80340I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.05252+2.17046I$ $a=-0.740950+0.004758I$ $b=\ \ 1.232640+0.312711I$	$5.97993-0.81701I$	0
$u=-0.05252-2.17046I$ $a=-0.740950-0.004758I$ $b=\ \ 1.232640-0.312711I$	$5.97993+0.81701I$	0
$u=\ \ 0.26686+2.16526I$ $a=-0.800876-0.131026I$ $b=\ \ 1.81818-0.56412I$	$10.20810-0.71624I$	0
$u=\ \ 0.26686-2.16526I$ $a=-0.800876+0.131026I$ $b=\ \ 1.81818+0.56412I$	$10.20810+0.71624I$	0
$u=-0.15055+2.20291I$ $a=\ \ 0.825604-0.038418I$ $b=-2.35720+0.13376I$	$10.67330+4.49403I$	0
$u=-0.15055-2.20291I$ $a=\ \ 0.825604+0.038418I$ $b=-2.35720-0.13376I$	$10.67330-4.49403I$	0
$u=\ \ 0.30268+2.31181I$ $a=\ \ 0.721619+0.003544I$ $b=-1.89927+0.30757I$	$2.64098-5.70905I$	0
$u=\ \ 0.30268-2.31181I$ $a=\ \ 0.721619-0.003544I$ $b=-1.89927-0.30757I$	$2.64098+5.70905I$	0
$u=\ \ 0.34239+2.31494I$ $a=-0.684662-0.216298I$ $b=\ \ 2.00993-0.07441I$	$9.93307+1.69714I$	0
$u=\ \ 0.34239-2.31494I$ $a=-0.684662+0.216298I$ $b=\ \ 2.00993+0.07441I$	$9.93307-1.69714I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.22218+2.35542I$ $a=\ \ 0.755369+0.052860I$ $b=-2.13863-0.54775I$	$8.46254+9.07820I$	0
$u=-0.22218-2.35542I$ $a=\ \ 0.755369-0.052860I$ $b=-2.13863+0.54775I$	$8.46254-9.07820I$	0
$u=-0.39552+2.35080I$ $a=-0.640216+0.260076I$ $b=\ \ 2.06046-0.12425I$	$7.93450-6.76711I$	0
$u=-0.39552-2.35080I$ $a=-0.640216-0.260076I$ $b=\ \ 2.06046+0.12425I$	$7.93450+6.76711I$	0
$u=\ \ 0.22078+2.39023I$ $a=\ \ 0.737856-0.080606I$ $b=-2.06346+0.70700I$	$5.9812-14.7941I$	0
$u=\ \ 0.22078-2.39023I$ $a=\ \ 0.737856+0.080606I$ $b=-2.06346-0.70700I$	$5.9812+14.7941I$	0
$u=-0.22242+2.48174I$ $a=-0.583026+0.113235I$ $b=\ \ 1.66663-0.04894I$	$5.45632+0.40195I$	0
$u=-0.22242-2.48174I$ $a=-0.583026-0.113235I$ $b=\ \ 1.66663+0.04894I$	$5.45632-0.40195I$	0

II.
$\boldsymbol{I_2^u = \langle -6.07\times 10^{19}u^{19} + 9.41\times 10^{19}u^{18} + \cdots + 3.15\times 10^{19}b + 6.57\times 10^{19},\ 3.61\times 10^{19}u^{19} - 9.02\times 10^{19}u^{18} + \cdots + 3.15\times 10^{19}a - 2.09\times 10^{20},\ u^{20} - u^{19} + \cdots + 8u + 1\rangle}$

(i) Arc colorings

$$a_5 = \begin{pmatrix} 0 \\ u \end{pmatrix}$$
$$a_7 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$
$$a_8 = \begin{pmatrix} 1 \\ u^2 \end{pmatrix}$$
$$a_{11} = \begin{pmatrix} -1.14862u^{19} + 2.86561u^{18} + \cdots + 52.5661u + 6.64996 \\ 1.92794u^{19} - 2.99184u^{18} + \cdots - 2.72601u - 2.08905 \end{pmatrix}$$
$$a_9 = \begin{pmatrix} 4.30867u^{19} - 5.11776u^{18} + \cdots + 67.3450u + 7.63162 \\ -0.169783u^{19} - 0.679356u^{18} + \cdots - 23.1178u - 2.73782 \end{pmatrix}$$
$$a_{12} = \begin{pmatrix} 0.779322u^{19} - 0.126232u^{18} + \cdots + 49.8401u + 4.56091 \\ 1.92794u^{19} - 2.99184u^{18} + \cdots - 2.72601u - 2.08905 \end{pmatrix}$$
$$a_4 = \begin{pmatrix} -1.08905u^{19} - 0.838895u^{18} + \cdots - 59.9916u - 5.98639 \\ 1.87298u^{19} - 2.05692u^{18} + \cdots + 45.3503u + 6.23661 \end{pmatrix}$$
$$a_3 = \begin{pmatrix} 0.783934u^{19} - 2.89581u^{18} + \cdots - 14.6413u + 0.250227 \\ 1.87298u^{19} - 2.05692u^{18} + \cdots + 45.3503u + 6.23661 \end{pmatrix}$$
$$a_{10} = \begin{pmatrix} -1.14862u^{19} + 2.86561u^{18} + \cdots + 52.5661u + 6.64996 \\ 1.85691u^{19} - 2.41990u^{18} + \cdots + 9.86126u - 0.372063 \end{pmatrix}$$
$$a_1 = \begin{pmatrix} 5.08799u^{19} - 5.24399u^{18} + \cdots + 117.185u + 12.1925 \\ 1.91394u^{19} - 2.98258u^{18} + \cdots - 4.89004u - 1.89814 \end{pmatrix}$$
$$a_2 = \begin{pmatrix} 3.98051u^{19} - 5.59567u^{18} + \cdots + 17.9946u + 1.21621 \\ 0.195657u^{19} - 0.183933u^{18} + \cdots + 10.8593u + 2.67733 \end{pmatrix}$$
$$a_6 = \begin{pmatrix} 0.627937u^{19} - 2.48485u^{18} + \cdots - 44.1527u - 4.83777 \\ 0.804343u^{19} - 0.816067u^{18} + \cdots + 28.1407u + 4.32267 \end{pmatrix}$$

(ii) Obstruction class $= 1$

(iii) Cusp Shapes $= \frac{86912471356230966919}{31468322960334269681}u^{19} - \frac{121955116805407308520}{31468322960334269681}u^{18} + \cdots - \frac{77257384023725289987}{31468322960334269681}u - \frac{180061111953374962015}{31468322960334269681}$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{20}-11u^{19}+\cdots-7u+1$
c_2	$u^{20}-u^{19}+\cdots-u+1$
c_3	$u^{20}+u^{19}+\cdots+u+1$
c_4	$u^{20}+11u^{18}+\cdots+3u+1$
c_5	$u^{20}+2u^{19}+\cdots-3u+1$
c_6	$u^{20}+u^{19}+\cdots+u+1$
c_7	$u^{20}-u^{19}+\cdots+8u+1$
c_8	$u^{20}+6u^{19}+\cdots-2u+1$
c_9	$u^{20}+5u^{19}+\cdots-2u+1$
c_{10}	$u^{20}+11u^{18}+\cdots-3u+1$
c_{11}	$u^{20}+2u^{19}+\cdots-5u+1$
c_{12}	$u^{20}-5u^{19}+\cdots+2u+1$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{20} + 3y^{19} + \cdots - 9y + 1$
c_2, c_6	$y^{20} + 11y^{19} + \cdots + 7y + 1$
c_3	$y^{20} - 5y^{19} + \cdots + 11y + 1$
c_4, c_{10}	$y^{20} + 22y^{19} + \cdots + 27y + 1$
c_5	$y^{20} - 14y^{19} + \cdots + 9y + 1$
c_7	$y^{20} + 9y^{19} + \cdots + 14y + 1$
c_8	$y^{20} - 14y^{19} + \cdots + 10y + 1$
c_9, c_{12}	$y^{20} + 9y^{19} + \cdots - 6y + 1$
c_{11}	$y^{20} - 6y^{19} + \cdots + 9y + 1$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.654375 + 0.832677I$ $a = \quad 0.503183 - 0.846050I$ $b = -0.194792 - 0.729886I$	$-2.71864 - 1.45971I$	$-0.89646 + 2.17815I$
$u = -0.654375 - 0.832677I$ $a = \quad 0.503183 + 0.846050I$ $b = -0.194792 + 0.729886I$	$-2.71864 + 1.45971I$	$-0.89646 - 2.17815I$
$u = -1.326230 + 0.153242I$ $a = -0.233237 - 0.656743I$ $b = -0.470432 - 0.684847I$	$-1.99836 - 2.67759I$	$0.08880 + 3.61083I$
$u = -1.326230 - 0.153242I$ $a = -0.233237 + 0.656743I$ $b = -0.470432 + 0.684847I$	$-1.99836 + 2.67759I$	$0.08880 - 3.61083I$
$u = -0.283343 + 0.478254I$ $a = -0.479487 + 0.030100I$ $b = -0.958183 + 0.057779I$	$1.50477 + 1.79654I$	$-1.48765 - 0.69459I$
$u = -0.283343 - 0.478254I$ $a = -0.479487 - 0.030100I$ $b = -0.958183 - 0.057779I$	$1.50477 - 1.79654I$	$-1.48765 + 0.69459I$
$u = -0.065192 + 0.513948I$ $a = \quad 2.12487 + 0.49208I$ $b = -0.029629 + 0.829824I$	$-4.95539 + 3.67611I$	$-6.05419 - 4.52419I$
$u = -0.065192 - 0.513948I$ $a = \quad 2.12487 - 0.49208I$ $b = -0.029629 - 0.829824I$	$-4.95539 - 3.67611I$	$-6.05419 + 4.52419I$
$u = -0.388734 + 0.189482I$ $a = -2.19950 + 1.65173I$ $b = -0.172656 + 1.147900I$	$-1.14234 + 0.98756I$	$-2.34913 - 0.96839I$
$u = -0.388734 - 0.189482I$ $a = -2.19950 - 1.65173I$ $b = -0.172656 - 1.147900I$	$-1.14234 - 0.98756I$	$-2.34913 + 0.96839I$

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = -0.093068 + 0.385354I$ $a = -2.58480 + 1.87857I$ $b = 0.137373 - 1.131910I$	$-3.37351 + 4.07065I$	$-4.00523 - 3.92466I$
$u = -0.093068 - 0.385354I$ $a = -2.58480 - 1.87857I$ $b = 0.137373 + 1.131910I$	$-3.37351 - 4.07065I$	$-4.00523 + 3.92466I$
$u = 1.51215 + 0.68020I$ $a = 0.028861 + 0.571314I$ $b = -0.338355 + 0.609590I$	$-5.61868 - 0.78543I$	$-3.44115 + 0.39623I$
$u = 1.51215 - 0.68020I$ $a = 0.028861 - 0.571314I$ $b = -0.338355 - 0.609590I$	$-5.61868 + 0.78543I$	$-3.44115 - 0.39623I$
$u = 1.69347 + 0.07041I$ $a = -0.187449 + 0.482061I$ $b = -0.478407 + 0.564426I$	$-4.74636 + 7.31948I$	$-2.74412 - 7.73216I$
$u = 1.69347 - 0.07041I$ $a = -0.187449 - 0.482061I$ $b = -0.478407 - 0.564426I$	$-4.74636 - 7.31948I$	$-2.74412 + 7.73216I$
$u = -0.00070 + 2.14683I$ $a = -0.831417 - 0.035871I$ $b = 2.17981 + 0.27698I$	$9.85332 + 2.88141I$	$0.90247 - 3.92917I$
$u = -0.00070 - 2.14683I$ $a = -0.831417 + 0.035871I$ $b = 2.17981 - 0.27698I$	$9.85332 - 2.88141I$	$0.90247 + 3.92917I$
$u = 0.10602 + 2.37201I$ $a = -0.641018 - 0.047557I$ $b = 1.325270 + 0.136830I$	$6.61544 - 1.15788I$	$6.48667 + 6.36754I$
$u = 0.10602 - 2.37201I$ $a = -0.641018 + 0.047557I$ $b = 1.325270 - 0.136830I$	$6.61544 + 1.15788I$	$6.48667 - 6.36754I$

III. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1	$(u^{20} - 11u^{19} + \cdots - 7u + 1)(u^{58} + 28u^{57} + \cdots + 886u + 121)$
c_2	$(u^{20} - u^{19} + \cdots - u + 1)(u^{58} - 2u^{57} + \cdots - 40u + 11)$
c_3	$(u^{20} + u^{19} + \cdots + u + 1)(u^{58} + 2u^{57} + \cdots - 2542u + 3839)$
c_4	$(u^{20} + 11u^{18} + \cdots + 3u + 1)(u^{58} - u^{57} + \cdots + 10u + 1)$
c_5	$(u^{20} + 2u^{19} + \cdots - 3u + 1)(u^{58} + 3u^{57} + \cdots + 60u + 88)$
c_6	$(u^{20} + u^{19} + \cdots + u + 1)(u^{58} - 2u^{57} + \cdots - 40u + 11)$
c_7	$(u^{20} - u^{19} + \cdots + 8u + 1)(u^{58} + 51u^{56} + \cdots - 13u + 1)$
c_8	$(u^{20} + 6u^{19} + \cdots - 2u + 1)(u^{58} + 3u^{57} + \cdots + 12935u + 481)$
c_9	$(u^{20} + 5u^{19} + \cdots - 2u + 1)(u^{58} + 6u^{57} + \cdots + 289u + 41)$
c_{10}	$(u^{20} + 11u^{18} + \cdots - 3u + 1)(u^{58} - u^{57} + \cdots + 10u + 1)$
c_{11}	$(u^{20} + 2u^{19} + \cdots - 5u + 1)(u^{58} - 3u^{57} + \cdots - 790066u + 205619)$
c_{12}	$(u^{20} - 5u^{19} + \cdots + 2u + 1)(u^{58} + 6u^{57} + \cdots + 289u + 41)$

IV. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1	$(y^{20}+3y^{19}+\cdots-9y+1)(y^{58}+12y^{57}+\cdots+130490y+14641)$
c_2, c_6	$(y^{20}+11y^{19}+\cdots+7y+1)(y^{58}+28y^{57}+\cdots+886y+121)$
c_3	$(y^{20}-5y^{19}+\cdots+11y+1)$ $\cdot(y^{58}-4y^{57}+\cdots-237147274y+14737921)$
c_4, c_{10}	$(y^{20}+22y^{19}+\cdots+27y+1)(y^{58}+75y^{57}+\cdots-50y+1)$
c_5	$(y^{20}-14y^{19}+\cdots+9y+1)(y^{58}-21y^{57}+\cdots-103568y+7744)$
c_7	$(y^{20}+9y^{19}+\cdots+14y+1)(y^{58}+102y^{57}+\cdots-15y+1)$
c_8	$(y^{20}-14y^{19}+\cdots+10y+1)$ $\cdot(y^{58}-81y^{57}+\cdots+2622113y+231361)$
c_9, c_{12}	$(y^{20}+9y^{19}+\cdots-6y+1)(y^{58}+22y^{57}+\cdots+63341y+1681)$
c_{11}	$(y^{20}-6y^{19}+\cdots+9y+1)$ $\cdot(y^{58}-77y^{57}+\cdots+288375606396y+42279173161)$