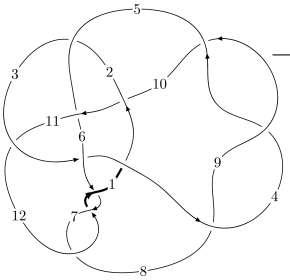
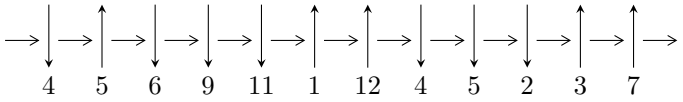
$12n_{0710}$ $(K12n_{0710})$



A knot diagram[1]

Linearized knot diagam



Solving Sequence

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

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

$$\begin{aligned} I_1^u = \langle & -9.84739 \times 10^{197} u^{63} + 8.49535 \times 10^{197} u^{62} + \cdots + 5.51022 \times 10^{197} b + 6.64943 \times 10^{198}, \\ & - 4.80929 \times 10^{198} u^{63} + 4.53927 \times 10^{198} u^{62} + \cdots + 5.51022 \times 10^{197} a + 5.22063 \times 10^{199}, \\ & u^{64} - u^{63} + \cdots - 20u + 1 \rangle \\ I_2^u = \langle & u^{16} - 6u^{14} + u^{13} + 9u^{12} - 3u^{11} + 5u^{10} - 2u^9 - 13u^8 + 2u^7 - 3u^6 + 8u^5 + 5u^4 - u^3 + u^2 + b - 4u, \\ & 1799u^{16} + 519u^{15} + \cdots + 4357a - 2411, \\ & u^{17} - 6u^{15} + u^{14} + 9u^{13} - 3u^{12} + 5u^{11} - 2u^{10} - 13u^9 + 2u^8 - 3u^7 + 8u^6 + 5u^5 - u^4 + u^3 - 4u^2 - 1 \rangle \end{aligned}$$

* 2 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 81 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. $\boldsymbol{I_1^u = \langle -9.85 \times 10^{197} u^{63} + 8.50 \times 10^{197} u^{62} + \cdots + 5.51 \times 10^{197} b + 6.65 \times 10^{198},\ -4.81 \times 10^{198} u^{63} + 4.54 \times 10^{198} u^{62} + \cdots + 5.51 \times 10^{197} a + 5.22 \times 10^{199},\ u^{64} - u^{63} + \cdots - 20u + 1 \rangle}$

(i) Arc colorings

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

$$a_9 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$

$$a_3 = \begin{pmatrix} 8.72794u^{63} - 8.23791u^{62} + \cdots + 1015.66u - 94.7444 \\ 1.78711u^{63} - 1.54174u^{62} + \cdots + 163.516u - 12.0675 \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} 1 \\ u^2 \end{pmatrix}$$

$$a_2 = \begin{pmatrix} 8.72794u^{63} - 8.23791u^{62} + \cdots + 1015.66u - 94.7444 \\ 1.73499u^{63} - 1.51601u^{62} + \cdots + 164.589u - 12.5575 \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} -8.50482u^{63} + 7.19420u^{62} + \cdots - 754.292u + 50.3055 \\ 0.558427u^{63} - 0.524436u^{62} + \cdots + 57.1044u - 5.14866 \end{pmatrix}$$

$$a_6 = \begin{pmatrix} -16.2392u^{63} + 14.0239u^{62} + \cdots - 1517.78u + 114.846 \\ -0.503613u^{63} + 0.312886u^{62} + \cdots - 20.3489u + 0.492578 \end{pmatrix}$$

$$a_{12} = \begin{pmatrix} 15.8056u^{63} - 14.3567u^{62} + \cdots + 1688.95u - 154.718 \\ 2.21528u^{63} - 1.93022u^{62} + \cdots + 209.938u - 16.2392 \end{pmatrix}$$

$$a_4 = \begin{pmatrix} u \\ u \end{pmatrix}$$

$$a_1 = \begin{pmatrix} 8.80462u^{63} - 8.28444u^{62} + \cdots + 1017.23u - 94.4734 \\ 1.81167u^{63} - 1.56254u^{62} + \cdots + 166.161u - 12.2864 \end{pmatrix}$$

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

$$a_7 = \begin{pmatrix} -40.2656u^{63} + 34.5054u^{62} + \cdots - 3678.46u + 270.546 \\ 0.0988770u^{63} - 0.205876u^{62} + \cdots + 42.0367u - 5.78692 \end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= 7.79379u^{63} - 6.77904u^{62} + \cdots + 738.959u - 67.9797$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{64} - 8u^{63} + \cdots - 495872u - 62464$
c_2	$u^{64} + 3u^{63} + \cdots - 15u + 1$
c_3	$u^{64} + 2u^{63} + \cdots - 471u + 103$
c_4, c_8, c_9	$u^{64} - u^{63} + \cdots - 20u + 1$
c_5	$u^{64} + u^{63} + \cdots - 10u + 4$
c_6, c_7, c_{12}	$u^{64} + 28u^{62} + \cdots - 8u + 1$
c_{10}	$u^{64} + 3u^{63} + \cdots - 4u - 1$
c_{11}	$u^{64} - u^{63} + \cdots + 3928u + 509$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{64} + 2y^{63} + \cdots - 16309354496y + 3901751296$
c_2	$y^{64} - 55y^{63} + \cdots - 125y + 1$
c_3	$y^{64} - 24y^{63} + \cdots - 336995y + 10609$
c_4, c_8, c_9	$y^{64} - 13y^{63} + \cdots - 124y + 1$
c_5	$y^{64} - 19y^{63} + \cdots - 476y + 16$
c_6, c_7, c_{12}	$y^{64} + 56y^{63} + \cdots - 176y + 1$
c_{10}	$y^{64} + 59y^{63} + \cdots + 40y + 1$
c_{11}	$y^{64} - 27y^{63} + \cdots - 32929622y + 259081$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.946772 + 0.172113I$ $a = 1.20904 + 0.81815I$ $b = -0.039257 + 0.252693I$	$-7.03984 + 1.15992I$	$-8.45062 + 2.47620I$
$u = 0.946772 - 0.172113I$ $a = 1.20904 - 0.81815I$ $b = -0.039257 - 0.252693I$	$-7.03984 - 1.15992I$	$-8.45062 - 2.47620I$
$u = 0.620513 + 0.852057I$ $a = 0.451461 + 1.075960I$ $b = 0.012545 + 1.195140I$	$-5.26362 - 5.22706I$	0
$u = 0.620513 - 0.852057I$ $a = 0.451461 - 1.075960I$ $b = 0.012545 - 1.195140I$	$-5.26362 + 5.22706I$	0
$u = -0.895472 + 0.225273I$ $a = -0.719926 - 1.169420I$ $b = 0.45211 - 1.49025I$	$-7.09102 + 5.57768I$	$-9.78780 - 6.31285I$
$u = -0.895472 - 0.225273I$ $a = -0.719926 + 1.169420I$ $b = 0.45211 + 1.49025I$	$-7.09102 - 5.57768I$	$-9.78780 + 6.31285I$
$u = -1.10338$ $a = -1.27511$ $b = 1.02926$	-3.14419	6.64080
$u = -0.668464 + 0.594810I$ $a = -1.27542 + 1.56101I$ $b = 0.1150660 - 0.0493382I$	$-5.56259 + 7.46134I$	$-9.5893 - 10.8481I$
$u = -0.668464 - 0.594810I$ $a = -1.27542 - 1.56101I$ $b = 0.1150660 + 0.0493382I$	$-5.56259 - 7.46134I$	$-9.5893 + 10.8481I$
$u = -0.289994 + 0.835239I$ $a = -0.248954 + 0.912698I$ $b = -0.065209 + 1.277520I$	$0.67458 + 2.02494I$	$-4.55391 - 3.00809I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.289994-0.835239I$ $a=-0.248954-0.912698I$ $b=-0.065209-1.277520I$	$0.67458-2.02494I$	$-4.55391+3.00809I$
$u=\ \ 0.383113+0.779996I$ $a=\ \ 0.0624519+0.1220700I$ $b=-1.63610+0.76360I$	$-3.99030-6.24717I$	$-0.94568+7.75698I$
$u=\ \ 0.383113-0.779996I$ $a=\ \ 0.0624519-0.1220700I$ $b=-1.63610-0.76360I$	$-3.99030+6.24717I$	$-0.94568-7.75698I$
$u=-0.796858+0.814253I$ $a=-0.686138-0.874115I$ $b=-0.27617-1.49274I$	$2.89512-1.57067I$	0
$u=-0.796858-0.814253I$ $a=-0.686138+0.874115I$ $b=-0.27617+1.49274I$	$2.89512+1.57067I$	0
$u=\ \ 0.035583+0.837292I$ $a=-0.62456+1.59253I$ $b=-0.228134+1.170490I$	$2.11232+2.53049I$	$6.05426-0.21193I$
$u=\ \ 0.035583-0.837292I$ $a=-0.62456-1.59253I$ $b=-0.228134-1.170490I$	$2.11232-2.53049I$	$6.05426+0.21193I$
$u=\ \ 0.844863+0.928870I$ $a=\ \ 0.387692-1.093730I$ $b=-0.69297-1.71564I$	$2.47545-5.95909I$	0
$u=\ \ 0.844863-0.928870I$ $a=\ \ 0.387692+1.093730I$ $b=-0.69297+1.71564I$	$2.47545+5.95909I$	0
$u=\ \ 0.587299+0.456573I$ $a=\ \ 0.93747+1.58864I$ $b=-0.0271748-0.1050530I$	$-0.16641-4.17847I$	$-4.82690+9.90942I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.587299 - 0.456573I$ $a = 0.93747 - 1.58864I$ $b = -0.0271748 + 0.1050530I$	$-0.16641 + 4.17847I$	$-4.82690 - 9.90942I$
$u = 1.238920 + 0.253379I$ $a = 1.111320 - 0.076257I$ $b = -1.088670 + 0.250079I$	$-7.29418 + 2.08677I$	0
$u = 1.238920 - 0.253379I$ $a = 1.111320 + 0.076257I$ $b = -1.088670 - 0.250079I$	$-7.29418 - 2.08677I$	0
$u = -0.477853 + 0.522545I$ $a = 0.090224 + 0.464450I$ $b = -0.722519 - 0.003401I$	$-0.96798 + 1.68910I$	$-2.76791 - 3.93661I$
$u = -0.477853 - 0.522545I$ $a = 0.090224 - 0.464450I$ $b = -0.722519 + 0.003401I$	$-0.96798 - 1.68910I$	$-2.76791 + 3.93661I$
$u = -0.371645 + 0.583198I$ $a = -1.06104 - 1.22517I$ $b = 1.233790 - 0.127903I$	$-6.15703 + 3.05371I$	$-8.05868 - 2.43379I$
$u = -0.371645 - 0.583198I$ $a = -1.06104 + 1.22517I$ $b = 1.233790 + 0.127903I$	$-6.15703 - 3.05371I$	$-8.05868 + 2.43379I$
$u = -1.33914$ $a = -0.504517$ $b = -0.354254$	-3.83494	0
$u = -0.618625 + 0.231004I$ $a = -0.735330 + 0.900611I$ $b = -0.189147 + 0.040922I$	$-1.152910 + 0.804162I$	$-6.86180 - 2.21679I$
$u = -0.618625 - 0.231004I$ $a = -0.735330 - 0.900611I$ $b = -0.189147 - 0.040922I$	$-1.152910 - 0.804162I$	$-6.86180 + 2.21679I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.011990+0.646543I$ $a=\ 0.003999+0.200867I$ $b=\ 1.132340+0.833342I$	$1.23403+1.93321I$	$3.90920-0.55897I$
$u=-0.011990-0.646543I$ $a=\ 0.003999-0.200867I$ $b=\ 1.132340-0.833342I$	$1.23403-1.93321I$	$3.90920+0.55897I$
$u=-1.105410+0.786487I$ $a=\ 0.785257+0.977478I$ $b=-0.83922+1.31352I$	$1.89472+7.69635I$	0
$u=-1.105410-0.786487I$ $a=\ 0.785257-0.977478I$ $b=-0.83922-1.31352I$	$1.89472-7.69635I$	0
$u=\ 0.013218+1.373850I$ $a=\ 0.320460+1.126500I$ $b=\ 0.299346+1.263480I$	$-1.88910-1.60265I$	0
$u=\ 0.013218-1.373850I$ $a=\ 0.320460-1.126500I$ $b=\ 0.299346-1.263480I$	$-1.88910+1.60265I$	0
$u=\ 0.950982+1.013230I$ $a=-0.572316+1.036810I$ $b=\ 0.71235+1.43164I$	$6.24319-3.73740I$	0
$u=\ 0.950982-1.013230I$ $a=-0.572316-1.036810I$ $b=\ 0.71235-1.43164I$	$6.24319+3.73740I$	0
$u=\ 1.041240+0.945389I$ $a=\ 0.619213-0.729729I$ $b=\ 0.03119-1.57922I$	$5.92743-3.46657I$	0
$u=\ 1.041240-0.945389I$ $a=\ 0.619213+0.729729I$ $b=\ 0.03119+1.57922I$	$5.92743+3.46657I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.75365+1.26029I$ $a=\ \ 0.351516+1.019420I$ $b=-0.55158+1.56256I$	$2.81189-0.22181I$	0
$u=-0.75365-1.26029I$ $a=\ \ 0.351516-1.019420I$ $b=-0.55158-1.56256I$	$2.81189+0.22181I$	0
$u=\ \ 1.20080+0.84927I$ $a=-0.699882+0.402344I$ $b=\ \ 0.26781+1.48082I$	$1.37657-0.71219I$	0
$u=\ \ 1.20080-0.84927I$ $a=-0.699882-0.402344I$ $b=\ \ 0.26781-1.48082I$	$1.37657+0.71219I$	0
$u=\ \ 1.45212+0.27560I$ $a=\ \ 0.417695-0.170926I$ $b=\ \ 0.290992-0.440231I$	$-7.88971-3.99663I$	0
$u=\ \ 1.45212-0.27560I$ $a=\ \ 0.417695+0.170926I$ $b=\ \ 0.290992+0.440231I$	$-7.88971+3.99663I$	0
$u=-1.07999+1.05627I$ $a=-0.415727-0.977749I$ $b=\ \ 0.80217-1.68585I$	$4.81609+11.04570I$	0
$u=-1.07999-1.05627I$ $a=-0.415727+0.977749I$ $b=\ \ 0.80217+1.68585I$	$4.81609-11.04570I$	0
$u=-1.03083+1.17483I$ $a=\ \ 0.607257+0.572212I$ $b=-0.06569+1.54841I$	$5.07836-3.02061I$	0
$u=-1.03083-1.17483I$ $a=\ \ 0.607257-0.572212I$ $b=-0.06569-1.54841I$	$5.07836+3.02061I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-1.25740+0.94452I$ $a=-0.615428-0.631213I$ $b=\ \ 0.15943-1.58725I$	$1.15663+8.11283I$	0
$u=-1.25740-0.94452I$ $a=-0.615428+0.631213I$ $b=\ \ 0.15943+1.58725I$	$1.15663-8.11283I$	0
$u=\ \ 1.57458$ $a=\ \ 0.222480$ $b=-0.761165$	-6.86713	0
$u=\ \ 1.26337+1.06035I$ $a=\ \ 0.460050-0.923357I$ $b=-0.86619-1.63300I$	$-0.4290-15.5943I$	0
$u=\ \ 1.26337-1.06035I$ $a=\ \ 0.460050+0.923357I$ $b=-0.86619+1.63300I$	$-0.4290+15.5943I$	0
$u=\ \ 0.243230+0.178886I$ $a=\ \ 1.27379-2.06709I$ $b=-0.18795-1.78955I$	$0.88489-2.86889I$	$-14.0400+9.1549I$
$u=\ \ 0.243230-0.178886I$ $a=\ \ 1.27379+2.06709I$ $b=-0.18795+1.78955I$	$0.88489+2.86889I$	$-14.0400-9.1549I$
$u=-1.70737+0.16902I$ $a=-0.205034+0.074320I$ $b=\ \ 0.802985+0.565756I$	$-11.04570+0.92948I$	0
$u=-1.70737-0.16902I$ $a=-0.205034-0.074320I$ $b=\ \ 0.802985-0.565756I$	$-11.04570-0.92948I$	0
$u=\ \ 0.91884+1.46723I$ $a=-0.481154+0.649766I$ $b=-0.09110+1.61339I$	$0.88806+6.77478I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = \quad 0.91884 - 1.46723I$ $a = -0.481154 - 0.649766I$ $b = -0.09110 - 1.61339I$	$0.88806 - 6.77478I$	0
$u = \quad 0.252679$ $a = \quad 4.27072$ $b = -1.09929$	-2.21307	-3.38650
$u = \quad 0.1323300 + 0.0240192I$ $a = -8.60478 + 7.49523I$ $b = \quad 0.347677 + 0.732130I$	$-1.86639 - 2.54965I$	$-8.65506 + 4.62722I$
$u = \quad 0.1323300 - 0.0240192I$ $a = -8.60478 - 7.49523I$ $b = \quad 0.347677 - 0.732130I$	$-1.86639 + 2.54965I$	$-8.65506 - 4.62722I$

II. $I_2^u = \langle u^{16} - 6u^{14} + \cdots + b - 4u,\ 1799u^{16} + 519u^{15} + \cdots + 4357a - 2411,\ u^{17} - 6u^{15} + \cdots - 4u^2 - 1\rangle$

(i) Arc colorings

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

$$a_9 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$

$$a_3 = \begin{pmatrix} -0.412899u^{16} - 0.119119u^{15} + \cdots + 2.76589u + 0.553362 \\ -u^{16} + 6u^{14} + \cdots - u^2 + 4u \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} 1 \\ u^2 \end{pmatrix}$$

$$a_2 = \begin{pmatrix} -0.412899u^{16} - 0.119119u^{15} + \cdots + 2.76589u + 0.553362 \\ -0.833142u^{16} - 0.295387u^{15} + \cdots + 3.58710u - 0.119119 \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} -0.553362u^{16} + 0.412899u^{15} + \cdots + 2.19876u - 1.76589 \\ 0.119119u^{16} + 0.833142u^{15} + \cdots + 0.446638u - 3.58710 \end{pmatrix}$$

$$a_6 = \begin{pmatrix} 0.765894u^{16} + 0.553362u^{15} + \cdots - 1.61189u - 2.19876 \\ 1.35300u^{16} + 0.434244u^{15} + \cdots - 3.84599u - 1.64540 \end{pmatrix}$$

$$a_{12} = \begin{pmatrix} -0.377094u^{16} + 0.784485u^{15} + \cdots + 2.87124u - 0.345651 \\ -0.553362u^{16} + 0.412899u^{15} + \cdots + 2.19876u - 0.765894 \end{pmatrix}$$

$$a_4 = \begin{pmatrix} u \\ u \end{pmatrix}$$

$$a_1 = \begin{pmatrix} -0.784485u^{16} - 0.0417719u^{15} + \cdots + 2.34565u + 0.377094 \\ -1.20473u^{16} - 0.218040u^{15} + \cdots + 3.16686u - 0.295387 \end{pmatrix}$$

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

$$a_7 = \begin{pmatrix} -0.476934u^{16} - 0.0236401u^{15} + \cdots - 0.595593u - 0.165710 \\ 0.719302u^{16} - 0.0904292u^{15} + \cdots - 2.22975u - 0.381455 \end{pmatrix}$$

(ii) Obstruction class $= 1$

(iii) Cusp Shapes $= \frac{4895}{4357}u^{16} - \frac{17871}{4357}u^{15} + \cdots - \frac{1601}{4357}u + \frac{40507}{4357}$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{17} - 3u^{16} + \cdots + 16u + 8$
c_2	$u^{17} + 2u^{16} + \cdots + 5u + 1$
c_3	$u^{17} - 3u^{16} + \cdots + 3u - 1$
c_4	$u^{17} - 6u^{15} + \cdots + 4u^2 + 1$
c_5	$u^{17} - 7u^{15} + \cdots + 6u^2 - 1$
c_6, c_7	$u^{17} + u^{16} + \cdots + 2u + 1$
c_8, c_9	$u^{17} - 6u^{15} + \cdots - 4u^2 - 1$
c_{10}	$u^{17} + 4u^{15} + \cdots - 6u^2 + 1$
c_{11}	$u^{17} - 4u^{16} + \cdots - 10u + 1$
c_{12}	$u^{17} - u^{16} + \cdots + 2u - 1$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{17} - 13y^{16} + \cdots + 1056y - 64$
c_2	$y^{17} - 14y^{16} + \cdots + 13y - 1$
c_3	$y^{17} - 15y^{16} + \cdots + 7y - 1$
c_4, c_8, c_9	$y^{17} - 12y^{16} + \cdots - 8y - 1$
c_5	$y^{17} - 14y^{16} + \cdots + 12y - 1$
c_6, c_7, c_{12}	$y^{17} + 17y^{16} + \cdots + 8y - 1$
c_{10}	$y^{17} + 8y^{16} + \cdots + 12y - 1$
c_{11}	$y^{17} - 6y^{16} + \cdots + 54y - 1$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = \ 0.149188 + 0.977232I$ $a = -0.79763 + 1.52107I$ $b = -0.152663 + 0.999992I$	$-0.89531 + 2.12840I$	$-0.45628 - 2.87598I$
$u = \ 0.149188 - 0.977232I$ $a = -0.79763 - 1.52107I$ $b = -0.152663 - 0.999992I$	$-0.89531 - 2.12840I$	$-0.45628 + 2.87598I$
$u = \ 1.020910 + 0.194503I$ $a = \ 1.65137 + 0.24597I$ $b = -0.945206 + 0.180079I$	$-8.03635 + 1.72262I$	$-15.7327 - 0.2949I$
$u = \ 1.020910 - 0.194503I$ $a = \ 1.65137 - 0.24597I$ $b = -0.945206 - 0.180079I$	$-8.03635 - 1.72262I$	$-15.7327 + 0.2949I$
$u = -0.954068$ $a = -1.55900$ $b = \ 1.04814$	-3.49060	-17.7910
$u = -1.17160$ $a = \ 0.342429$ $b = \ 0.853536$	-4.40670	-11.4820
$u = -0.364678 + 0.678159I$ $a = -0.95485 + 1.05414I$ $b = \ 0.615085 + 1.143820I$	$-4.99963 + 6.37553I$	$-7.40202 - 7.64030I$
$u = -0.364678 - 0.678159I$ $a = -0.95485 - 1.05414I$ $b = \ 0.615085 - 1.143820I$	$-4.99963 - 6.37553I$	$-7.40202 + 7.64030I$
$u = \ 1.220370 + 0.298347I$ $a = -0.234736 + 0.427057I$ $b = -0.773210 + 0.189028I$	$-8.67583 - 4.10381I$	$-13.17542 + 4.42000I$
$u = \ 1.220370 - 0.298347I$ $a = -0.234736 - 0.427057I$ $b = -0.773210 - 0.189028I$	$-8.67583 + 4.10381I$	$-13.17542 - 4.42000I$

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.101251+0.723699I$ $a=\ \ 0.74002+1.48739I$ $b=\ \ 0.189611+1.355260I$	$1.54744-2.88304I$	$-4.82319+5.28958I$
$u=-0.101251-0.723699I$ $a=\ \ 0.74002-1.48739I$ $b=\ \ 0.189611-1.355260I$	$1.54744+2.88304I$	$-4.82319-5.28958I$
$u=\ \ 0.048493+0.560424I$ $a=\ \ 0.462572+1.307690I$ $b=-0.15325+1.77110I$	$1.27811-2.77051I$	$6.14370+6.81768I$
$u=\ \ 0.048493-0.560424I$ $a=\ \ 0.462572-1.307690I$ $b=-0.15325-1.77110I$	$1.27811+2.77051I$	$6.14370-6.81768I$
$u=\ \ 1.70710$ $a=\ \ 0.372194$ $b=-0.585789$	-6.49789	3.79890
$u=-1.76376+0.17105I$ $a=-0.444554+0.205648I$ $b=\ \ 0.561689+0.054472I$	$-10.85430-2.09747I$	$-9.31725+4.36886I$
$u=-1.76376-0.17105I$ $a=-0.444554-0.205648I$ $b=\ \ 0.561689-0.054472I$	$-10.85430+2.09747I$	$-9.31725-4.36886I$

III. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1	$(u^{17}-3u^{16}+\cdots+16u+8)(u^{64}-8u^{63}+\cdots-495872u-62464)$
c_2	$(u^{17}+2u^{16}+\cdots+5u+1)(u^{64}+3u^{63}+\cdots-15u+1)$
c_3	$(u^{17}-3u^{16}+\cdots+3u-1)(u^{64}+2u^{63}+\cdots-471u+103)$
c_4	$(u^{17}-6u^{15}+\cdots+4u^2+1)(u^{64}-u^{63}+\cdots-20u+1)$
c_5	$(u^{17}-7u^{15}+\cdots+6u^2-1)(u^{64}+u^{63}+\cdots-10u+4)$
c_6, c_7	$(u^{17}+u^{16}+\cdots+2u+1)(u^{64}+28u^{62}+\cdots-8u+1)$
c_8, c_9	$(u^{17}-6u^{15}+\cdots-4u^2-1)(u^{64}-u^{63}+\cdots-20u+1)$
c_{10}	$(u^{17}+4u^{15}+\cdots-6u^2+1)(u^{64}+3u^{63}+\cdots-4u-1)$
c_{11}	$(u^{17}-4u^{16}+\cdots-10u+1)(u^{64}-u^{63}+\cdots+3928u+509)$
c_{12}	$(u^{17}-u^{16}+\cdots+2u-1)(u^{64}+28u^{62}+\cdots-8u+1)$

IV. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1	$(y^{17} - 13y^{16} + \cdots + 1056y - 64)$ $\cdot (y^{64} + 2y^{63} + \cdots - 16309354496y + 3901751296)$
c_2	$(y^{17} - 14y^{16} + \cdots + 13y - 1)(y^{64} - 55y^{63} + \cdots - 125y + 1)$
c_3	$(y^{17} - 15y^{16} + \cdots + 7y - 1)(y^{64} - 24y^{63} + \cdots - 336995y + 10609)$
c_4, c_8, c_9	$(y^{17} - 12y^{16} + \cdots - 8y - 1)(y^{64} - 13y^{63} + \cdots - 124y + 1)$
c_5	$(y^{17} - 14y^{16} + \cdots + 12y - 1)(y^{64} - 19y^{63} + \cdots - 476y + 16)$
c_6, c_7, c_{12}	$(y^{17} + 17y^{16} + \cdots + 8y - 1)(y^{64} + 56y^{63} + \cdots - 176y + 1)$
c_{10}	$(y^{17} + 8y^{16} + \cdots + 12y - 1)(y^{64} + 59y^{63} + \cdots + 40y + 1)$
c_{11}	$(y^{17} - 6y^{16} + \cdots + 54y - 1)$ $\cdot (y^{64} - 27y^{63} + \cdots - 32929622y + 259081)$