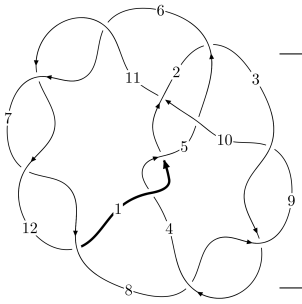
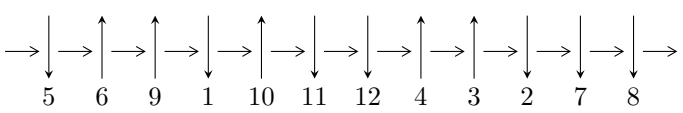
$12a_{1240}$ $(K12a_{1240})$



A knot diagram[1]

Linearized knot diagam



Solving Sequence

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

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

$$\begin{aligned} I_1^u = \langle & 4.60256 \times 10^{102} u^{64} + 5.40064 \times 10^{102} u^{63} + \cdots + 8.11475 \times 10^{103} b + 1.59562 \times 10^{105}, \\ & - 7.53145 \times 10^{104} u^{64} + 2.70697 \times 10^{104} u^{63} + \cdots + 1.40385 \times 10^{106} a + 3.91291 \times 10^{107}, \\ & u^{65} + u^{64} + \cdots + 354u + 173 \rangle \\ I_2^u = \langle & u^{15} + 8u^{13} + u^{12} + 23u^{11} + 6u^{10} + 26u^9 + 12u^8 + 4u^7 + 8u^6 - 9u^5 - u^4 - 2u^3 - 2u^2 + b - u - 1, \\ & - u^{16} + u^{15} + \cdots + a + 1, \\ & u^{17} + 10u^{15} + 40u^{13} - u^{12} + 80u^{11} - 7u^{10} + 80u^9 - 18u^8 + 31u^7 - 21u^6 - 4u^5 - 11u^4 - 5u^3 - 3u^2 - 2u - 1 \end{aligned}$$

* 2 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 82 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. $\boldsymbol{I_1^u = \langle 4.60 \times 10^{102} u^{64} + 5.40 \times 10^{102} u^{63} + \cdots + 8.11 \times 10^{103} b + 1.60 \times 10^{105},\ -7.53 \times 10^{104} u^{64} + 2.71 \times 10^{104} u^{63} + \cdots + 1.40 \times 10^{106} a + 3.91 \times 10^{107},\ u^{65} + u^{64} + \cdots + 354u + 173\rangle}$

(i) Arc colorings

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

$$a_8 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$

$$a_9 = \begin{pmatrix} 1 \\ -u^2 \end{pmatrix}$$

$$a_{12} = \begin{pmatrix} 0.0536485u^{64} - 0.0192824u^{63} + \cdots + 13.4066u - 27.8726 \\ -0.0567184u^{64} - 0.0665534u^{63} + \cdots - 38.2451u - 19.6632 \end{pmatrix}$$

$$a_1 = \begin{pmatrix} 0.110367u^{64} + 0.0472710u^{63} + \cdots + 51.6516u - 8.20942 \\ -0.0567184u^{64} - 0.0665534u^{63} + \cdots - 38.2451u - 19.6632 \end{pmatrix}$$

$$a_5 = \begin{pmatrix} 0.0429065u^{64} - 0.00292175u^{63} + \cdots + 21.3658u - 11.3738 \\ -0.0125258u^{64} - 0.0125001u^{63} + \cdots - 10.2360u - 7.41086 \end{pmatrix}$$

$$a_2 = \begin{pmatrix} -0.0400474u^{64} - 0.000625365u^{63} + \cdots - 4.46978u + 16.5675 \\ 0.00594570u^{64} + 0.0205051u^{63} + \cdots + 15.4488u + 6.51593 \end{pmatrix}$$

$$a_3 = \begin{pmatrix} -u \\ u^3 + u \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} u^2 + 1 \\ -u^4 - 2u^2 \end{pmatrix}$$

$$a_7 = \begin{pmatrix} 0.0399289u^{64} + 0.0211829u^{63} + \cdots + 33.3413u + 0.333312 \\ -0.00290844u^{64} - 0.00912864u^{63} + \cdots - 5.74412u - 4.59512 \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} -0.0230777u^{64} - 0.0466096u^{63} + \cdots - 13.8268u - 24.0009 \\ -0.0279384u^{64} - 0.0319295u^{63} + \cdots - 19.5314u - 12.5317 \end{pmatrix}$$

$$a_6 = \begin{pmatrix} 0.0320474u^{64} + 0.00430410u^{63} + \cdots + 17.5224u - 7.47526 \\ 0.0150469u^{64} + 0.0130919u^{63} + \cdots + 1.71790u - 0.984422 \end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= 0.103545u^{64} - 0.0564918u^{63} + \cdots + 57.0917u - 87.3956$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1, c_4	$u^{65} - 34u^{63} + \cdots + 25u - 1$
c_2	$u^{65} - 5u^{64} + \cdots - 1840u - 529$
c_3, c_8, c_9	$u^{65} + u^{64} + \cdots + 354u + 173$
c_5	$u^{65} + 2u^{64} + \cdots + 784u + 131$
c_6, c_7, c_{11} c_{12}	$u^{65} - u^{64} + \cdots + 16u + 1$
c_{10}	$u^{65} + 5u^{64} + \cdots + 1163u - 215$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_4	$y^{65} - 68y^{64} + \cdots - 201y - 1$
c_2	$y^{65} + 27y^{64} + \cdots - 5322798y - 279841$
c_3, c_8, c_9	$y^{65} + 77y^{64} + \cdots - 683978y - 29929$
c_5	$y^{65} + 20y^{64} + \cdots - 271428y - 17161$
c_6, c_7, c_{11} c_{12}	$y^{65} - 87y^{64} + \cdots - 500y - 1$
c_{10}	$y^{65} - 25y^{64} + \cdots + 3288859y - 46225$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.726071 + 0.758126I$ $a = -0.324975 - 0.706814I$ $b = -0.979305 + 0.369172I$	$-5.63744 + 7.47497I$	0
$u = 0.726071 - 0.758126I$ $a = -0.324975 + 0.706814I$ $b = -0.979305 - 0.369172I$	$-5.63744 - 7.47497I$	0
$u = 0.975827 + 0.494607I$ $a = -0.107308 + 0.453272I$ $b = 0.934240 + 0.048674I$	$-4.60698 - 1.82196I$	0
$u = 0.975827 - 0.494607I$ $a = -0.107308 - 0.453272I$ $b = 0.934240 - 0.048674I$	$-4.60698 + 1.82196I$	0
$u = 0.543682 + 0.626807I$ $a = -0.567121 - 1.246980I$ $b = -1.72542 + 0.11080I$	$-14.1457 + 2.3448I$	$-11.61428 - 2.93633I$
$u = 0.543682 - 0.626807I$ $a = -0.567121 + 1.246980I$ $b = -1.72542 - 0.11080I$	$-14.1457 - 2.3448I$	$-11.61428 + 2.93633I$
$u = -0.117879 + 1.166460I$ $a = -1.79246 + 0.68241I$ $b = -1.387970 + 0.003546I$	$-6.36326 - 2.20018I$	0
$u = -0.117879 - 1.166460I$ $a = -1.79246 - 0.68241I$ $b = -1.387970 - 0.003546I$	$-6.36326 + 2.20018I$	0
$u = 0.088335 + 0.787639I$ $a = 0.631221 + 0.409079I$ $b = 0.365744 - 0.340357I$	$-0.71879 + 1.22446I$	$-2.81178 - 5.97989I$
$u = 0.088335 - 0.787639I$ $a = 0.631221 - 0.409079I$ $b = 0.365744 + 0.340357I$	$-0.71879 - 1.22446I$	$-2.81178 + 5.97989I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.447830 + 0.608444I$ $a = -1.60044 - 0.14443I$ $b = -1.59034 - 0.09596I$	$-8.81586 - 2.32152I$	$-8.51550 - 4.26961I$
$u = 0.447830 - 0.608444I$ $a = -1.60044 + 0.14443I$ $b = -1.59034 + 0.09596I$	$-8.81586 + 2.32152I$	$-8.51550 + 4.26961I$
$u = 0.525484 + 0.504088I$ $a = 0.43025 + 2.02495I$ $b = 1.69411 + 0.00431I$	$-13.75730 + 1.38625I$	$-12.86514 - 4.98182I$
$u = 0.525484 - 0.504088I$ $a = 0.43025 - 2.02495I$ $b = 1.69411 - 0.00431I$	$-13.75730 - 1.38625I$	$-12.86514 + 4.98182I$
$u = -0.334819 + 0.628588I$ $a = -0.278152 - 0.888652I$ $b = 0.103555 + 0.660906I$	$-2.26471 - 4.03136I$	$-5.94020 + 7.20403I$
$u = -0.334819 - 0.628588I$ $a = -0.278152 + 0.888652I$ $b = 0.103555 - 0.660906I$	$-2.26471 + 4.03136I$	$-5.94020 - 7.20403I$
$u = -0.983839 + 0.840083I$ $a = 0.958856 - 0.844751I$ $b = 1.71710 + 0.09388I$	$-15.1766 - 9.3107I$	0
$u = -0.983839 - 0.840083I$ $a = 0.958856 + 0.844751I$ $b = 1.71710 - 0.09388I$	$-15.1766 + 9.3107I$	0
$u = 0.317310 + 0.626994I$ $a = 2.68952 + 0.91215I$ $b = 1.61060 - 0.07096I$	$-9.00930 + 4.95002I$	$-7.74249 - 6.87275I$
$u = 0.317310 - 0.626994I$ $a = 2.68952 - 0.91215I$ $b = 1.61060 + 0.07096I$	$-9.00930 - 4.95002I$	$-7.74249 + 6.87275I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.177809 + 1.350850I$ $a = -0.357829 + 0.197902I$ $b = -0.017560 + 0.381554I$	$-4.20596 + 3.45721I$	0
$u = 0.177809 - 1.350850I$ $a = -0.357829 - 0.197902I$ $b = -0.017560 - 0.381554I$	$-4.20596 - 3.45721I$	0
$u = -0.401140 + 0.489673I$ $a = 1.45507 + 0.87862I$ $b = 0.0202678 + 0.0500323I$	$-1.70244 + 1.41602I$	$-3.83791 + 4.34485I$
$u = -0.401140 - 0.489673I$ $a = 1.45507 - 0.87862I$ $b = 0.0202678 - 0.0500323I$	$-1.70244 - 1.41602I$	$-3.83791 - 4.34485I$
$u = -1.261060 + 0.536996I$ $a = -0.741092 + 0.442516I$ $b = -1.70945 + 0.01249I$	$-14.0841 + 2.0654I$	0
$u = -1.261060 - 0.536996I$ $a = -0.741092 - 0.442516I$ $b = -1.70945 - 0.01249I$	$-14.0841 - 2.0654I$	0
$u = -0.134645 + 0.584405I$ $a = 0.197801 - 1.366820I$ $b = 0.927502 + 0.501106I$	$-4.67220 + 0.02550I$	$-14.8497 + 0.6733I$
$u = -0.134645 - 0.584405I$ $a = 0.197801 + 1.366820I$ $b = 0.927502 - 0.501106I$	$-4.67220 - 0.02550I$	$-14.8497 - 0.6733I$
$u = -0.413347 + 0.412272I$ $a = -1.49091 + 0.92346I$ $b = -0.707354 - 0.303831I$	$-1.02330 - 3.62936I$	$-5.37000 + 9.36655I$
$u = -0.413347 - 0.412272I$ $a = -1.49091 - 0.92346I$ $b = -0.707354 + 0.303831I$	$-1.02330 + 3.62936I$	$-5.37000 - 9.36655I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.372758+0.426791I$ $a=0.574567-0.058040I$ $b=0.625825-0.291328I$	$-1.20365+0.84496I$	$-6.02969-0.14737I$
$u=-0.372758-0.426791I$ $a=0.574567+0.058040I$ $b=0.625825+0.291328I$	$-1.20365-0.84496I$	$-6.02969+0.14737I$
$u=-0.233988+0.506859I$ $a=-0.55207+2.38792I$ $b=-0.886599-0.003824I$	$-4.55371-1.42223I$	$-13.6222+4.9294I$
$u=-0.233988-0.506859I$ $a=-0.55207-2.38792I$ $b=-0.886599+0.003824I$	$-4.55371+1.42223I$	$-13.6222-4.9294I$
$u=-0.16373+1.44899I$ $a=-1.220880+0.298307I$ $b=-0.980392+0.272927I$	$-7.19630-1.13487I$	0
$u=-0.16373-1.44899I$ $a=-1.220880-0.298307I$ $b=-0.980392-0.272927I$	$-7.19630+1.13487I$	0
$u=0.483700+0.237329I$ $a=0.445616+0.385675I$ $b=-0.083539-0.423218I$	$0.791769+1.065080I$	$2.72009-3.18149I$
$u=0.483700-0.237329I$ $a=0.445616-0.385675I$ $b=-0.083539+0.423218I$	$0.791769-1.065080I$	$2.72009+3.18149I$
$u=-0.10831+1.47851I$ $a=1.76451-0.09693I$ $b=0.952847+0.203501I$	$-7.28087-5.40688I$	0
$u=-0.10831-1.47851I$ $a=1.76451+0.09693I$ $b=0.952847-0.203501I$	$-7.28087+5.40688I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.497221$ $a=-0.274816$ $b=\ \ 1.21610$	-2.77118	1.37870
$u=-0.05022+1.56060I$ $a=\ \ 1.22584-0.84884I$ $b=\ \ 0.893368+0.290820I$	$-11.64490-2.37865I$	0
$u=-0.05022-1.56060I$ $a=\ \ 1.22584+0.84884I$ $b=\ \ 0.893368-0.290820I$	$-11.64490+2.37865I$	0
$u=\ \ 0.15087+1.57314I$ $a=-2.17718-1.21481I$ $b=-1.69886+0.07549I$	$18.6332+3.8056I$	0
$u=\ \ 0.15087-1.57314I$ $a=-2.17718+1.21481I$ $b=-1.69886-0.07549I$	$18.6332-3.8056I$	0
$u=-0.08895+1.58719I$ $a=-0.128172-0.447048I$ $b=\ \ 0.041223+0.495260I$	$-9.03428-0.28268I$	0
$u=-0.08895-1.58719I$ $a=-0.128172+0.447048I$ $b=\ \ 0.041223-0.495260I$	$-9.03428+0.28268I$	0
$u=-0.02863+1.60404I$ $a=-1.029160+0.070588I$ $b=-0.974979-0.838184I$	$-12.36230-0.51802I$	0
$u=-0.02863-1.60404I$ $a=-1.029160-0.070588I$ $b=-0.974979+0.838184I$	$-12.36230+0.51802I$	0
$u=-0.08706+1.60503I$ $a=-0.173991-0.074369I$ $b=-0.141617-0.998457I$	$-9.99826-5.54560I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.08706-1.60503I$ $a=-0.173991+0.074369I$ $b=-0.141617+0.998457I$	$-9.99826+5.54560I$	0
$u=0.08728+1.61094I$ $a=-2.73738-0.27305I$ $b=-1.71337+0.05252I$	$-16.8071+6.4261I$	0
$u=0.08728-1.61094I$ $a=-2.73738+0.27305I$ $b=-1.71337-0.05252I$	$-16.8071-6.4261I$	0
$u=0.16484+1.61723I$ $a=1.93553+0.68337I$ $b=1.78156-0.24078I$	$17.6410+5.0053I$	0
$u=0.16484-1.61723I$ $a=1.93553-0.68337I$ $b=1.78156+0.24078I$	$17.6410-5.0053I$	0
$u=0.20239+1.63940I$ $a=1.181390+0.350848I$ $b=1.078620-0.622811I$	$-13.7279+10.9139I$	0
$u=0.20239-1.63940I$ $a=1.181390-0.350848I$ $b=1.078620+0.622811I$	$-13.7279-10.9139I$	0
$u=0.10820+1.65060I$ $a=2.27932+0.08486I$ $b=1.72742+0.06163I$	$-16.9343-0.1738I$	0
$u=0.10820-1.65060I$ $a=2.27932-0.08486I$ $b=1.72742-0.06163I$	$-16.9343+0.1738I$	0
$u=0.26868+1.68165I$ $a=-0.897135-0.531965I$ $b=-0.951609+0.306784I$	$-12.11670+3.02699I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.26868 - 1.68165I$ $a = -0.897135 + 0.531965I$ $b = -0.951609 - 0.306784I$	$-12.11670 - 3.02699I$	0
$u = -0.30378 + 1.69326I$ $a = -1.89667 + 0.85876I$ $b = -1.74870 - 0.17461I$	$15.9285 - 14.2148I$	0
$u = -0.30378 - 1.69326I$ $a = -1.89667 - 0.85876I$ $b = -1.74870 + 0.17461I$	$15.9285 + 14.2148I$	0
$u = -0.43555 + 1.77362I$ $a = 1.73566 - 0.73698I$ $b = 1.71505 + 0.08053I$	$17.8768 - 4.5753I$	0
$u = -0.43555 - 1.77362I$ $a = 1.73566 + 0.73698I$ $b = 1.71505 - 0.08053I$	$17.8768 + 4.5753I$	0

II.

$\boldsymbol{I_2^u = \langle u^{15}+8u^{13}+\cdots+b-1,\ -u^{16}+u^{15}+\cdots+a+1,\ u^{17}+10u^{15}+\cdots-2u-1\rangle}$

(i) Arc colorings

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

$$a_8 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$

$$a_9 = \begin{pmatrix} 1 \\ -u^2 \end{pmatrix}$$

$$a_{12} = \begin{pmatrix} u^{16} - u^{15} + \cdots - u - 1 \\ -u^{15} - 8u^{13} + \cdots + u + 1 \end{pmatrix}$$

$$a_1 = \begin{pmatrix} u^{16} + 10u^{14} + \cdots - 2u - 2 \\ -u^{15} - 8u^{13} + \cdots + u + 1 \end{pmatrix}$$

$$a_5 = \begin{pmatrix} -u^{16} - 10u^{14} + \cdots + u + 2 \\ -u^{15} + u^{14} + \cdots + 2u^3 + 2u \end{pmatrix}$$

$$a_2 = \begin{pmatrix} -u^5 - 3u^3 - 2u \\ u^{16} - u^{15} + \cdots - u^2 + u \end{pmatrix}$$

$$a_3 = \begin{pmatrix} -u \\ u^3 + u \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} u^2 + 1 \\ -u^4 - 2u^2 \end{pmatrix}$$

$$a_7 = \begin{pmatrix} u^{15} - u^{14} + \cdots + u^3 - 2u \\ u^{15} + 9u^{13} + \cdots - 2u - 2 \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} -u^6 - 4u^4 - 3u^2 + 1 \\ u^{15} + 8u^{13} + \cdots - u^2 - u \end{pmatrix}$$

$$a_6 = \begin{pmatrix} -u^{16} - 9u^{14} + \cdots + 3u^2 + 1 \\ -u^{15} + u^{14} + \cdots + 2u^3 + u \end{pmatrix}$$

(ii) Obstruction class $= 1$

(iii) Cusp Shapes $= -u^{16} - 3u^{15} - 8u^{14} - 26u^{13} - 24u^{12} - 85u^{11} - 31u^{10} - 126u^9 - 12u^8 - 75u^7 + 6u^6 + u^5 + 13u^4 + 16u^3 + 19u^2 + 7u - 6$

(iv) u-Polynomials at the component

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

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_4	$y^{17} - 17y^{16} + \cdots + 11y - 1$
c_2	$y^{17} + 6y^{16} + \cdots - 6y - 1$
c_3, c_8, c_9	$y^{17} + 20y^{16} + \cdots - 2y - 1$
c_5	$y^{17} + 3y^{16} + \cdots + 6y^2 - 1$
c_6, c_7, c_{11} c_{12}	$y^{17} - 24y^{16} + \cdots + 16y - 1$
c_{10}	$y^{17} - 6y^{16} + \cdots + 3y - 1$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.139852+1.214420I$ $a=\ 1.287590+0.470581I$ $b=\ 1.52103+0.06882I$	$-11.11750-4.71969I$	$-12.69339+3.70079I$
$u=-0.139852-1.214420I$ $a=\ 1.287590-0.470581I$ $b=\ 1.52103-0.06882I$	$-11.11750+4.71969I$	$-12.69339-3.70079I$
$u=\ 0.770505$ $a=\ 0.356369$ $b=-1.71199$	-13.5631	-10.8690
$u=-0.313732+0.658301I$ $a=-2.46686-0.50202I$ $b=-1.56317+0.07758I$	$-8.98775+3.06986I$	$-11.77160-5.40163I$
$u=-0.313732-0.658301I$ $a=-2.46686+0.50202I$ $b=-1.56317-0.07758I$	$-8.98775-3.06986I$	$-11.77160+5.40163I$
$u=\ 0.150767+1.264220I$ $a=-0.036312+0.695026I$ $b=-0.280089+0.210720I$	$-4.79179+3.71423I$	$-13.1910-5.6524I$
$u=\ 0.150767-1.264220I$ $a=-0.036312-0.695026I$ $b=-0.280089-0.210720I$	$-4.79179-3.71423I$	$-13.1910+5.6524I$
$u=-0.155556+1.352930I$ $a=-1.43538+0.81001I$ $b=-1.195950+0.186568I$	$-7.82356-2.21494I$	$-13.60579+3.56873I$
$u=-0.155556-1.352930I$ $a=-1.43538-0.81001I$ $b=-1.195950-0.186568I$	$-7.82356+2.21494I$	$-13.60579-3.56873I$
$u=\ 0.344357+0.507264I$ $a=\ 1.69631-0.60701I$ $b=\ 0.435868+0.235200I$	$-1.98177-1.91528I$	$-11.51112+7.56473I$

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.344357 - 0.507264I$ $a = 1.69631 + 0.60701I$ $b = 0.435868 - 0.235200I$	$-1.98177 + 1.91528I$	$-11.51112 - 7.56473I$
$u = -0.413428 + 0.204442I$ $a = -1.37361 - 0.56067I$ $b = 0.983355 + 0.195981I$	$-3.72761 + 0.27179I$	$-7.30557 - 0.70090I$
$u = -0.413428 - 0.204442I$ $a = -1.37361 + 0.56067I$ $b = 0.983355 - 0.195981I$	$-3.72761 - 0.27179I$	$-7.30557 + 0.70090I$
$u = -0.06863 + 1.60082I$ $a = -0.854604 + 0.519619I$ $b = -0.759245 - 0.457661I$	$-10.71870 - 1.63142I$	$-9.76522 + 0.61847I$
$u = -0.06863 - 1.60082I$ $a = -0.854604 - 0.519619I$ $b = -0.759245 + 0.457661I$	$-10.71870 + 1.63142I$	$-9.76522 - 0.61847I$
$u = 0.21082 + 1.61302I$ $a = 2.00469 + 0.90354I$ $b = 1.71420 - 0.09994I$	$-19.7367 + 3.7909I$	$-9.22182 - 1.00044I$
$u = 0.21082 - 1.61302I$ $a = 2.00469 - 0.90354I$ $b = 1.71420 + 0.09994I$	$-19.7367 - 3.7909I$	$-9.22182 + 1.00044I$

III. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1	$(u^{17}+3u^{16}+\cdots-3u-1)(u^{65}-34u^{63}+\cdots+25u-1)$
c_2	$(u^{17}+3u^{15}+\cdots+2u-1)(u^{65}-5u^{64}+\cdots-1840u-529)$
c_3	$(u^{17}+10u^{15}+\cdots-2u+1)(u^{65}+u^{64}+\cdots+354u+173)$
c_4	$(u^{17}-3u^{16}+\cdots-3u+1)(u^{65}-34u^{63}+\cdots+25u-1)$
c_5	$(u^{17}+u^{16}+\cdots+2u^3+1)(u^{65}+2u^{64}+\cdots+784u+131)$
c_6, c_7	$(u^{17}-12u^{15}+\cdots+2u+1)(u^{65}-u^{64}+\cdots+16u+1)$
c_8, c_9	$(u^{17}+10u^{15}+\cdots-2u-1)(u^{65}+u^{64}+\cdots+354u+173)$
c_{10}	$(u^{17}+2u^{16}+\cdots-3u-1)(u^{65}+5u^{64}+\cdots+1163u-215)$
c_{11}, c_{12}	$(u^{17}-12u^{15}+\cdots+2u-1)(u^{65}-u^{64}+\cdots+16u+1)$

IV. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1, c_4	$(y^{17} - 17y^{16} + \cdots + 11y - 1)(y^{65} - 68y^{64} + \cdots - 201y - 1)$
c_2	$(y^{17} + 6y^{16} + \cdots - 6y - 1)(y^{65} + 27y^{64} + \cdots - 5322798y - 279841)$
c_3, c_8, c_9	$(y^{17} + 20y^{16} + \cdots - 2y - 1)(y^{65} + 77y^{64} + \cdots - 683978y - 29929)$
c_5	$(y^{17} + 3y^{16} + \cdots + 6y^2 - 1)(y^{65} + 20y^{64} + \cdots - 271428y - 17161)$
c_6, c_7, c_{11} c_{12}	$(y^{17} - 24y^{16} + \cdots + 16y - 1)(y^{65} - 87y^{64} + \cdots - 500y - 1)$
c_{10}	$(y^{17} - 6y^{16} + \cdots + 3y - 1)(y^{65} - 25y^{64} + \cdots + 3288859y - 46225)$