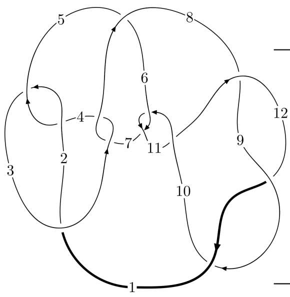
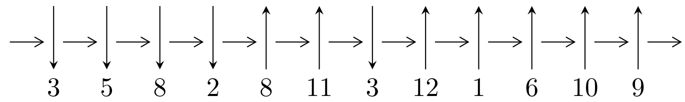
$12n_{0075}$ $(K12n_{0075})$



A knot diagram[1]

Linearized knot diagam



Solving Sequence

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

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

$$I_1^u = \langle -4.17318 \times 10^{15} u^{51} + 1.53597 \times 10^{16} u^{50} + \cdots + 1.39326 \times 10^{15} b + 3.61251 \times 10^{15},$$
$$3.45613 \times 10^{16} u^{51} - 1.28036 \times 10^{17} u^{50} + \cdots + 2.78652 \times 10^{15} a + 6.93027 \times 10^{15},\ u^{52} - 5u^{51} + \cdots + 14u +$$
$$I_2^u = \langle b,\ u^7 - 2u^6 - 2u^5 + 4u^4 + 2u^3 - u^2 + a - u - 3,\ u^8 - u^7 - 3u^6 + 2u^5 + 3u^4 - 2u - 1 \rangle$$
$$I_3^u = \langle a^2 + 5b + 3a + 5,\ a^3 + a^2 + 4a + 5,\ u + 1 \rangle$$

* 3 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 63 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. $\boldsymbol{I_1^u = \langle -4.17 \times 10^{15} u^{51} + 1.54 \times 10^{16} u^{50} + \cdots + 1.39 \times 10^{15} b + 3.61 \times 10^{15},\ 3.46 \times 10^{16} u^{51} - 1.28 \times 10^{17} u^{50} + \cdots + 2.79 \times 10^{15} a + 6.93 \times 10^{15},\ u^{52} - 5u^{51} + \cdots + 14u + 1 \rangle}$

(i) Arc colorings

$$a_8 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$
$$a_{12} = \begin{pmatrix} 0 \\ u \end{pmatrix}$$
$$a_9 = \begin{pmatrix} 1 \\ -u^2 \end{pmatrix}$$
$$a_1 = \begin{pmatrix} u \\ -u^3 + u \end{pmatrix}$$
$$a_4 = \begin{pmatrix} -12.4030u^{51} + 45.9484u^{50} + \cdots + 81.3098u - 2.48707 \\ 2.99526u^{51} - 11.0243u^{50} + \cdots - 30.7361u - 2.59285 \end{pmatrix}$$
$$a_{10} = \begin{pmatrix} -u^2 + 1 \\ u^4 - 2u^2 \end{pmatrix}$$
$$a_3 = \begin{pmatrix} -9.40778u^{51} + 34.9242u^{50} + \cdots + 50.5737u - 5.07992 \\ 2.99526u^{51} - 11.0243u^{50} + \cdots - 30.7361u - 2.59285 \end{pmatrix}$$
$$a_2 = \begin{pmatrix} 17.4460u^{51} - 64.6564u^{50} + \cdots - 149.987u - 4.05564 \\ -3.75474u^{51} + 13.9757u^{50} + \cdots + 42.5139u + 3.15715 \end{pmatrix}$$
$$a_7 = \begin{pmatrix} -9.55271u^{51} + 35.8772u^{50} + \cdots + 88.4408u + 2.91964 \\ 8.60172u^{51} - 33.2652u^{50} + \cdots - 104.422u - 7.28044 \end{pmatrix}$$
$$a_{11} = \begin{pmatrix} -u^5 + 2u^3 - u \\ u^7 - 3u^5 + 2u^3 + u \end{pmatrix}$$
$$a_6 = \begin{pmatrix} 8.36062u^{51} - 30.6096u^{50} + \cdots - 105.182u - 10.2144 \\ 3.75474u^{51} - 13.9757u^{50} + \cdots - 42.5139u - 3.15715 \end{pmatrix}$$
$$a_5 = \begin{pmatrix} 4.60588u^{51} - 16.6339u^{50} + \cdots - 62.6681u - 7.05722 \\ 3.75474u^{51} - 13.9757u^{50} + \cdots - 42.5139u - 3.15715 \end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes
$$= -\frac{11065552867124641}{1393259322402082}u^{51} + \frac{42789532669637567}{1393259322402082}u^{50} + \cdots + \frac{1199032770084567}{1393259322402082}u - \frac{7200606156302692}{696629661201041}$$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{52} + 14u^{51} + \cdots + 43u + 1$
c_2, c_4	$u^{52} - 10u^{51} + \cdots - u + 1$
c_3, c_7	$u^{52} - 2u^{51} + \cdots + 384u - 256$
c_5	$u^{52} + 3u^{51} + \cdots - u - 1$
c_6, c_{10}	$u^{52} + 2u^{51} + \cdots - 28u - 8$
c_8, c_9, c_{12}	$u^{52} + 5u^{51} + \cdots - 14u + 1$
c_{11}	$u^{52} - 24u^{51} + \cdots - 1488u + 64$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{52} + 58y^{51} + \cdots - 447y + 1$
c_2, c_4	$y^{52} - 14y^{51} + \cdots - 43y + 1$
c_3, c_7	$y^{52} + 54y^{51} + \cdots + 606208y + 65536$
c_5	$y^{52} - 61y^{51} + \cdots - 19y + 1$
c_6, c_{10}	$y^{52} - 24y^{51} + \cdots - 1488y + 64$
c_8, c_9, c_{12}	$y^{52} - 47y^{51} + \cdots - 104y + 1$
c_{11}	$y^{52} + 4y^{51} + \cdots - 498944y + 4096$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.864111+0.613274I$ $a=\ \ 0.72971-2.28554I$ $b=\ \ 0.08277+1.65392I$	$7.67792-2.14785I$	$7.33727+2.34757I$
$u=-0.864111-0.613274I$ $a=\ \ 0.72971+2.28554I$ $b=\ \ 0.08277-1.65392I$	$7.67792+2.14785I$	$7.33727-2.34757I$
$u=-0.278369+0.886469I$ $a=\ \ 0.81489-1.68991I$ $b=\ \ 0.52357+1.58617I$	$5.03572-9.87508I$	$3.10372+7.08066I$
$u=-0.278369-0.886469I$ $a=\ \ 0.81489+1.68991I$ $b=\ \ 0.52357-1.58617I$	$5.03572+9.87508I$	$3.10372-7.08066I$
$u=-0.344404+0.851796I$ $a=-0.85095+1.66493I$ $b=-0.08288-1.66614I$	$6.09934-2.94801I$	$4.84338+2.76292I$
$u=-0.344404-0.851796I$ $a=-0.85095-1.66493I$ $b=-0.08288+1.66614I$	$6.09934+2.94801I$	$4.84338-2.76292I$
$u=-0.959966+0.581836I$ $a=-0.84889+2.03520I$ $b=\ \ 0.40253-1.60177I$	$7.11104+4.74276I$	0
$u=-0.959966-0.581836I$ $a=-0.84889-2.03520I$ $b=\ \ 0.40253+1.60177I$	$7.11104-4.74276I$	0
$u=-1.149080+0.112159I$ $a=-0.11168+3.35174I$ $b=\ \ 0.257735-0.531872I$	$0.064366-0.675431I$	0
$u=-1.149080-0.112159I$ $a=-0.11168-3.35174I$ $b=\ \ 0.257735+0.531872I$	$0.064366+0.675431I$	0

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.078334 + 0.779627I$ $a = -0.0018202 - 0.0329755I$ $b = -0.000332 - 0.629614I$	$-2.90851 - 2.74298I$	$4.20673 + 3.96739I$
$u = -0.078334 - 0.779627I$ $a = -0.0018202 + 0.0329755I$ $b = -0.000332 + 0.629614I$	$-2.90851 + 2.74298I$	$4.20673 - 3.96739I$
$u = 1.219950 + 0.081401I$ $a = 0.28979 + 1.63338I$ $b = -0.347717 - 1.160600I$	$5.43256 - 2.37277I$	0
$u = 1.219950 - 0.081401I$ $a = 0.28979 - 1.63338I$ $b = -0.347717 + 1.160600I$	$5.43256 + 2.37277I$	0
$u = -0.282889 + 0.711805I$ $a = 0.178611 - 0.588706I$ $b = 1.029030 + 0.101314I$	$-0.42821 - 3.83727I$	$2.28173 + 6.95386I$
$u = -0.282889 - 0.711805I$ $a = 0.178611 + 0.588706I$ $b = 1.029030 - 0.101314I$	$-0.42821 + 3.83727I$	$2.28173 - 6.95386I$
$u = -1.193430 + 0.324240I$ $a = 0.669986 - 0.648263I$ $b = -0.015350 + 0.613459I$	$0.485168 - 1.259080I$	0
$u = -1.193430 - 0.324240I$ $a = 0.669986 + 0.648263I$ $b = -0.015350 - 0.613459I$	$0.485168 + 1.259080I$	0
$u = -0.680369 + 0.289746I$ $a = 0.012168 - 0.147432I$ $b = 0.638639 - 0.199115I$	$1.074090 + 0.016258I$	$8.77032 - 1.10969I$
$u = -0.680369 - 0.289746I$ $a = 0.012168 + 0.147432I$ $b = 0.638639 + 0.199115I$	$1.074090 - 0.016258I$	$8.77032 + 1.10969I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -1.280180 + 0.138912I$ $a = 1.48485 + 1.45215I$ $b = -0.906569 - 0.186892I$	$2.21484 - 2.00952I$	0
$u = -1.280180 - 0.138912I$ $a = 1.48485 - 1.45215I$ $b = -0.906569 + 0.186892I$	$2.21484 + 2.00952I$	0
$u = -0.710230$ $a = 0.329379$ $b = 0.453636$	1.01816	10.6560
$u = -0.202574 + 0.614660I$ $a = -0.41637 - 1.80557I$ $b = -0.212659 + 0.790964I$	$-2.49821 - 1.98647I$	$1.56783 + 2.89756I$
$u = -0.202574 - 0.614660I$ $a = -0.41637 + 1.80557I$ $b = -0.212659 - 0.790964I$	$-2.49821 + 1.98647I$	$1.56783 - 2.89756I$
$u = 1.316330 + 0.333742I$ $a = -0.408950 - 0.703118I$ $b = -0.036069 + 0.646778I$	$1.46111 + 6.76040I$	0
$u = 1.316330 - 0.333742I$ $a = -0.408950 + 0.703118I$ $b = -0.036069 - 0.646778I$	$1.46111 - 6.76040I$	0
$u = 0.240670 + 0.591040I$ $a = -1.50879 - 1.89532I$ $b = -0.38554 + 1.46577I$	$2.88733 + 4.52304I$	$-0.03636 - 3.32255I$
$u = 0.240670 - 0.591040I$ $a = -1.50879 + 1.89532I$ $b = -0.38554 - 1.46577I$	$2.88733 - 4.52304I$	$-0.03636 + 3.32255I$
$u = 1.371880 + 0.190150I$ $a = 0.51449 - 1.70845I$ $b = -0.965667 + 0.552199I$	$3.35341 + 2.44910I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 1.371880 - 0.190150I$ $a = 0.51449 + 1.70845I$ $b = -0.965667 - 0.552199I$	$3.35341 - 2.44910I$	0
$u = 1.381790 + 0.242632I$ $a = 0.70682 + 2.59552I$ $b = -0.377861 - 1.015230I$	$2.55895 + 5.12601I$	0
$u = 1.381790 - 0.242632I$ $a = 0.70682 - 2.59552I$ $b = -0.377861 + 1.015230I$	$2.55895 - 5.12601I$	0
$u = -1.39431 + 0.23988I$ $a = -0.79430 + 4.03936I$ $b = -0.47035 - 1.61370I$	$8.11020 - 7.60143I$	0
$u = -1.39431 - 0.23988I$ $a = -0.79430 - 4.03936I$ $b = -0.47035 + 1.61370I$	$8.11020 + 7.60143I$	0
$u = -1.40452 + 0.18151I$ $a = 1.20569 - 4.10928I$ $b = 0.00116 + 1.68427I$	$8.93491 - 0.61807I$	0
$u = -1.40452 - 0.18151I$ $a = 1.20569 + 4.10928I$ $b = 0.00116 - 1.68427I$	$8.93491 + 0.61807I$	0
$u = 1.42142 + 0.11111I$ $a = -1.39366 - 1.43200I$ $b = 0.813091 + 0.784592I$	$7.33747 + 1.34403I$	0
$u = 1.42142 - 0.11111I$ $a = -1.39366 + 1.43200I$ $b = 0.813091 - 0.784592I$	$7.33747 - 1.34403I$	0
$u = 1.41493 + 0.27859I$ $a = -1.41802 + 1.14138I$ $b = 1.235590 - 0.150942I$	$4.99311 + 7.43624I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 1.41493 - 0.27859I$ $a = -1.41802 - 1.14138I$ $b = 1.235590 + 0.150942I$	$4.99311 - 7.43624I$	0
$u = 0.314249 + 0.443599I$ $a = 1.74200 + 2.01299I$ $b = -0.08624 - 1.45158I$	$3.45819 - 1.75596I$	$0.22172 + 1.56110I$
$u = 0.314249 - 0.443599I$ $a = 1.74200 - 2.01299I$ $b = -0.08624 + 1.45158I$	$3.45819 + 1.75596I$	$0.22172 - 1.56110I$
$u = 1.43910 + 0.36041I$ $a = 0.67098 + 3.42215I$ $b = 0.61263 - 1.61586I$	$10.5096 + 14.3678I$	0
$u = 1.43910 - 0.36041I$ $a = 0.67098 - 3.42215I$ $b = 0.61263 + 1.61586I$	$10.5096 - 14.3678I$	0
$u = 1.46087 + 0.32708I$ $a = -1.00755 - 3.48031I$ $b = -0.19562 + 1.75720I$	$11.89100 + 7.20080I$	0
$u = 1.46087 - 0.32708I$ $a = -1.00755 + 3.48031I$ $b = -0.19562 - 1.75720I$	$11.89100 - 7.20080I$	0
$u = -0.111943 + 0.439985I$ $a = -1.241660 - 0.569711I$ $b = -0.772681 - 0.211532I$	$-1.51612 - 0.05304I$	$-2.94270 + 1.44002I$
$u = -0.111943 - 0.439985I$ $a = -1.241660 + 0.569711I$ $b = -0.772681 + 0.211532I$	$-1.51612 + 0.05304I$	$-2.94270 - 1.44002I$
$u = 1.54580 + 0.02807I$ $a = -0.26431 + 4.14163I$ $b = 0.27010 - 1.83700I$	$16.1487 + 3.7905I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 1.54580 - 0.02807I$ $a = -0.26431 - 4.14163I$ $b = 0.27010 + 1.83700I$	$16.1487 - 3.7905I$	0
$u = -0.0947755$ $a = -7.83548$ $b = -0.476249$	-1.21791	-10.0970

II. $\boldsymbol{I_2^u =}$
$\boldsymbol{\langle b,\ u^7-2u^6-2u^5+4u^4+2u^3-u^2+a-u-3,\ u^8-u^7-3u^6+2u^5+3u^4-2u-1\rangle}$

(i) Arc colorings

$$a_8 = \begin{pmatrix}1\\0\end{pmatrix}$$
$$a_{12} = \begin{pmatrix}0\\u\end{pmatrix}$$
$$a_9 = \begin{pmatrix}1\\-u^2\end{pmatrix}$$
$$a_1 = \begin{pmatrix}u\\-u^3+u\end{pmatrix}$$
$$a_4 = \begin{pmatrix}-u^7+2u^6+2u^5-4u^4-2u^3+u^2+u+3\\0\end{pmatrix}$$
$$a_{10} = \begin{pmatrix}-u^2+1\\u^4-2u^2\end{pmatrix}$$
$$a_3 = \begin{pmatrix}-u^7+2u^6+2u^5-4u^4-2u^3+u^2+u+3\\0\end{pmatrix}$$
$$a_2 = \begin{pmatrix}-u^7+2u^6+2u^5-4u^4-2u^3+u^2+2u+3\\-u^3+u\end{pmatrix}$$
$$a_7 = \begin{pmatrix}1\\0\end{pmatrix}$$
$$a_{11} = \begin{pmatrix}-u^5+2u^3-u\\u^7-3u^5+2u^3+u\end{pmatrix}$$
$$a_6 = \begin{pmatrix}u^3-2u\\u^3-u\end{pmatrix}$$
$$a_5 = \begin{pmatrix}-u\\u^3-u\end{pmatrix}$$

(ii) Obstruction class $= 1$

(iii) Cusp Shapes $= -3u^7+10u^6+7u^5-25u^4-9u^3+12u^2+8u+13$

(iv) u-Polynomials at the component

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

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_2, c_4	$(y-1)^8$
c_3, c_7	y^8
c_5, c_{11}	$y^8 + 5y^7 + 11y^6 + 6y^5 - 17y^4 - 34y^3 - 22y^2 - 4y + 1$
c_6, c_{10}	$y^8 - 3y^7 + 7y^6 - 10y^5 + 11y^4 - 10y^3 + 6y^2 - 4y + 1$
c_8, c_9, c_{12}	$y^8 - 7y^7 + 19y^6 - 22y^5 + 3y^4 + 14y^3 - 6y^2 - 4y + 1$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -1.180120 + 0.268597I$ $a = -0.281371 - 1.128550I$ $b = 0$	$-0.604279 - 1.131230I$	$-2.43193 + 0.79885I$
$u = -1.180120 - 0.268597I$ $a = -0.281371 + 1.128550I$ $b = 0$	$-0.604279 + 1.131230I$	$-2.43193 - 0.79885I$
$u = -0.108090 + 0.747508I$ $a = 0.208670 + 0.825203I$ $b = 0$	$-3.80435 - 2.57849I$	$-5.57469 + 3.25625I$
$u = -0.108090 - 0.747508I$ $a = 0.208670 - 0.825203I$ $b = 0$	$-3.80435 + 2.57849I$	$-5.57469 - 3.25625I$
$u = 1.37100$ $a = 0.829189$ $b = 0$	4.85780	8.00600
$u = 1.334530 + 0.318930I$ $a = 0.284386 - 0.605794I$ $b = 0$	$0.73474 + 6.44354I$	$-0.28408 - 3.92092I$
$u = 1.334530 - 0.318930I$ $a = 0.284386 + 0.605794I$ $b = 0$	$0.73474 - 6.44354I$	$-0.28408 + 3.92092I$
$u = -0.463640$ $a = 2.74744$ $b = 0$	-0.799899	11.5750

III. $\boldsymbol{I_3^u = \langle a^2 + 5b + 3a + 5,\ a^3 + a^2 + 4a + 5,\ u + 1\rangle}$

(i) Arc colorings

$$a_8 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$
$$a_{12} = \begin{pmatrix} 0 \\ -1 \end{pmatrix}$$
$$a_9 = \begin{pmatrix} 1 \\ -1 \end{pmatrix}$$
$$a_1 = \begin{pmatrix} -1 \\ 0 \end{pmatrix}$$
$$a_4 = \begin{pmatrix} a \\ -\frac{1}{5}a^2 - \frac{3}{5}a - 1 \end{pmatrix}$$
$$a_{10} = \begin{pmatrix} 0 \\ -1 \end{pmatrix}$$
$$a_3 = \begin{pmatrix} -\frac{1}{5}a^2 + \frac{2}{5}a - 1 \\ -\frac{1}{5}a^2 - \frac{3}{5}a - 1 \end{pmatrix}$$
$$a_2 = \begin{pmatrix} -2 \\ -\frac{2}{5}a^2 - \frac{1}{5}a \end{pmatrix}$$
$$a_7 = \begin{pmatrix} 0 \\ -\frac{2}{5}a^2 - \frac{1}{5}a \end{pmatrix}$$
$$a_{11} = \begin{pmatrix} 0 \\ -1 \end{pmatrix}$$
$$a_6 = \begin{pmatrix} 0 \\ -\frac{2}{5}a^2 - \frac{1}{5}a \end{pmatrix}$$
$$a_5 = \begin{pmatrix} \frac{2}{5}a^2 + \frac{1}{5}a \\ -\frac{2}{5}a^2 - \frac{1}{5}a \end{pmatrix}$$

(ii) Obstruction class $= 1$

(iii) Cusp Shapes $= -\frac{9}{5}a^2 + \frac{13}{5}a - 5$

(iv) u-Polynomials at the component

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

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_3, c_7	$y^3 + 3y^2 + 2y - 1$
c_2, c_4	$y^3 - y^2 + 2y - 1$
c_5	$y^3 - 5y^2 + 10y - 1$
c_6, c_{10}, c_{11}	y^3
c_8, c_9, c_{12}	$(y-1)^3$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_3^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -1.00000$ $a = -1.18504$ $b = -0.569840$	0.531480	-10.6090
$u = -1.00000$ $a = \ \ 0.09252 + 2.05200I$ $b = -0.215080 - 1.307140I$	$4.66906 - 2.82812I$	$2.80443 + 4.65175I$
$u = -1.00000$ $a = \ \ 0.09252 - 2.05200I$ $b = -0.215080 + 1.307140I$	$4.66906 + 2.82812I$	$2.80443 - 4.65175I$

IV. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1	$((u-1)^8)(u^3-u^2+2u-1)(u^{52}+14u^{51}+\cdots+43u+1)$
c_2	$((u-1)^8)(u^3+u^2-1)(u^{52}-10u^{51}+\cdots-u+1)$
c_3	$u^8(u^3-u^2+2u-1)(u^{52}-2u^{51}+\cdots+384u-256)$
c_4	$((u+1)^8)(u^3-u^2+1)(u^{52}-10u^{51}+\cdots-u+1)$
c_5	$(u^3+3u^2+2u-1)(u^8+3u^7+\cdots+4u+1)$ $\cdot(u^{52}+3u^{51}+\cdots-u-1)$
c_6	$u^3(u^8+u^7+\cdots-2u-1)(u^{52}+2u^{51}+\cdots-28u-8)$
c_7	$u^8(u^3+u^2+2u+1)(u^{52}-2u^{51}+\cdots+384u-256)$
c_8, c_9	$(u+1)^3(u^8-u^7-3u^6+2u^5+3u^4-2u-1)$ $\cdot(u^{52}+5u^{51}+\cdots-14u+1)$
c_{10}	$u^3(u^8-u^7+\cdots+2u-1)(u^{52}+2u^{51}+\cdots-28u-8)$
c_{11}	$u^3(u^8-3u^7+7u^6-10u^5+11u^4-10u^3+6u^2-4u+1)$ $\cdot(u^{52}-24u^{51}+\cdots-1488u+64)$
c_{12}	$(u-1)^3(u^8+u^7-3u^6-2u^5+3u^4+2u-1)$ $\cdot(u^{52}+5u^{51}+\cdots-14u+1)$

V. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1	$((y-1)^8)(y^3+3y^2+2y-1)(y^{52}+58y^{51}+\cdots-447y+1)$
c_2, c_4	$((y-1)^8)(y^3-y^2+2y-1)(y^{52}-14y^{51}+\cdots-43y+1)$
c_3, c_7	$y^8(y^3+3y^2+2y-1)(y^{52}+54y^{51}+\cdots+606208y+65536)$
c_5	$(y^3-5y^2+10y-1)$ $\cdot\,(y^8+5y^7+11y^6+6y^5-17y^4-34y^3-22y^2-4y+1)$ $\cdot\,(y^{52}-61y^{51}+\cdots-19y+1)$
c_6, c_{10}	$y^3(y^8-3y^7+7y^6-10y^5+11y^4-10y^3+6y^2-4y+1)$ $\cdot\,(y^{52}-24y^{51}+\cdots-1488y+64)$
c_8, c_9, c_{12}	$(y-1)^3(y^8-7y^7+19y^6-22y^5+3y^4+14y^3-6y^2-4y+1)$ $\cdot\,(y^{52}-47y^{51}+\cdots-104y+1)$
c_{11}	$y^3(y^8+5y^7+11y^6+6y^5-17y^4-34y^3-22y^2-4y+1)$ $\cdot\,(y^{52}+4y^{51}+\cdots-498944y+4096)$