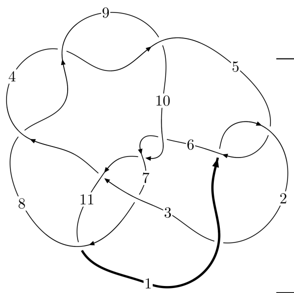
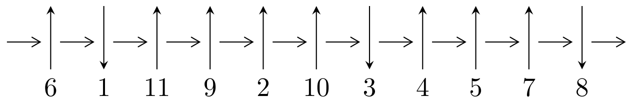
$11a_{113}$ $(K11a_{113})$



A knot diagram[1]

Linearized knot diagam



Solving Sequence

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

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

$$\begin{aligned}
I_1^u = \langle & 5.34839 \times 10^{80} u^{67} + 3.68124 \times 10^{80} u^{66} + \cdots + 1.27153 \times 10^{82} b - 1.90765 \times 10^{82}, \\
& 6.93735 \times 10^{81} u^{67} - 9.19994 \times 10^{80} u^{66} + \cdots + 1.27153 \times 10^{82} a - 4.71008 \times 10^{82},\ u^{68} + 12u^{66} + \cdots + 14u + \\
I_2^u = \langle & u^{12} + 3u^{10} + 7u^8 + 9u^6 + u^5 + 8u^4 + 2u^3 + 4u^2 + b + u + 2, \\
& u^{13} + 3u^{12} + 6u^{11} + 10u^{10} + 14u^9 + 20u^8 + 22u^7 + 25u^6 + 23u^5 + 22u^4 + 17u^3 + 11u^2 + a + 4u + 3, \\
& u^{14} + u^{13} + 4u^{12} + 3u^{11} + 9u^{10} + 6u^9 + 13u^8 + 8u^7 + 13u^6 + 8u^5 + 9u^4 + 4u^3 + 4u^2 + u + 1\rangle
\end{aligned}$$

* 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. $\boldsymbol{I_1^u =}$
$\boldsymbol{\langle 5.35\times10^{80}u^{67}+3.68\times10^{80}u^{66}+\cdots+1.27\times10^{82}b-1.91\times10^{82},\ 6.94\times10^{81}u^{67}-9.20\times10^{80}u^{66}+\cdots+1.27\times10^{82}a-4.71\times10^{82},\ u^{68}+12u^{66}+\cdots+14u+1\rangle}$

(i) Arc colorings

$$a_2 = \begin{pmatrix}0\\u\end{pmatrix}$$
$$a_5 = \begin{pmatrix}1\\0\end{pmatrix}$$
$$a_6 = \begin{pmatrix}1\\-u^2\end{pmatrix}$$
$$a_9 = \begin{pmatrix}-0.545593u^{67}+0.0723536u^{66}+\cdots-2.02184u+3.70427\\-0.0420628u^{67}-0.0289514u^{66}+\cdots-1.69314u+1.50029\end{pmatrix}$$
$$a_{10} = \begin{pmatrix}-0.587656u^{67}+0.0434022u^{66}+\cdots-3.71498u+5.20456\\-0.0420628u^{67}-0.0289514u^{66}+\cdots-1.69314u+1.50029\end{pmatrix}$$
$$a_7 = \begin{pmatrix}-0.355881u^{67}+0.380128u^{66}+\cdots+8.26080u-6.73774\\-0.194171u^{67}+0.115092u^{66}+\cdots-1.69115u-2.69071\end{pmatrix}$$
$$a_1 = \begin{pmatrix}-u\\u^3+u\end{pmatrix}$$
$$a_3 = \begin{pmatrix}-u^3\\u^5+u^3+u\end{pmatrix}$$
$$a_4 = \begin{pmatrix}-0.444897u^{67}-0.0337046u^{66}+\cdots-7.30208u+6.51254\\0.126760u^{67}-0.101224u^{66}+\cdots-0.515987u+2.55578\end{pmatrix}$$
$$a_8 = \begin{pmatrix}-0.322518u^{67}+0.382112u^{66}+\cdots+7.92528u-6.76024\\-0.224672u^{67}+0.0956000u^{66}+\cdots-5.25233u-2.97848\end{pmatrix}$$
$$a_{11} = \begin{pmatrix}-1.65034u^{67}+0.264278u^{66}+\cdots-36.4509u-9.08954\\-0.600905u^{67}+0.0210170u^{66}+\cdots-17.9861u-3.94419\end{pmatrix}$$
$$a_{11} = \begin{pmatrix}-1.65034u^{67}+0.264278u^{66}+\cdots-36.4509u-9.08954\\-0.600905u^{67}+0.0210170u^{66}+\cdots-17.9861u-3.94419\end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= -1.99975u^{67}+0.337333u^{66}+\cdots-36.0266u-0.689887$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1, c_5	$u^{68} + 12u^{66} + \cdots - 14u + 1$
c_2	$u^{68} + 24u^{67} + \cdots - 66u + 1$
c_3	$u^{68} + 5u^{67} + \cdots + 1376u + 161$
c_4, c_8, c_9	$u^{68} + u^{67} + \cdots - 13u - 19$
c_6, c_{10}	$u^{68} + u^{67} + \cdots + 99u - 13$
c_7	$u^{68} - u^{67} + \cdots - 83u - 123$
c_{11}	$u^{68} + 5u^{67} + \cdots - 131u - 179$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_5	$y^{68} + 24y^{67} + \cdots - 66y + 1$
c_2	$y^{68} + 48y^{67} + \cdots - 11082y + 1$
c_3	$y^{68} - 23y^{67} + \cdots - 1710480y + 25921$
c_4, c_8, c_9	$y^{68} - 75y^{67} + \cdots - 1537y + 361$
c_6, c_{10}	$y^{68} - 61y^{67} + \cdots + 17369y + 169$
c_7	$y^{68} + 17y^{67} + \cdots + 422135y + 15129$
c_{11}	$y^{68} + 21y^{67} + \cdots + 1105527y + 32041$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.056691 + 0.998319I$ $a = 0.429493 - 0.794328I$ $b = -1.354540 - 0.227994I$	$1.84313 + 3.63375I$	$5.00000 + 0.I$
$u = 0.056691 - 0.998319I$ $a = 0.429493 + 0.794328I$ $b = -1.354540 + 0.227994I$	$1.84313 - 3.63375I$	$5.00000 + 0.I$
$u = -0.737376 + 0.671219I$ $a = -2.08721 + 0.27350I$ $b = 1.58093 + 0.06731I$	$11.54460 + 0.21877I$	$17.6771 + 0.I$
$u = -0.737376 - 0.671219I$ $a = -2.08721 - 0.27350I$ $b = 1.58093 - 0.06731I$	$11.54460 - 0.21877I$	$17.6771 + 0.I$
$u = 0.124547 + 0.983422I$ $a = 0.010360 - 0.721178I$ $b = 0.219106 - 0.623961I$	$-3.12233 - 0.57125I$	0
$u = 0.124547 - 0.983422I$ $a = 0.010360 + 0.721178I$ $b = 0.219106 + 0.623961I$	$-3.12233 + 0.57125I$	0
$u = -0.350162 + 0.974636I$ $a = -0.417402 - 1.047070I$ $b = 0.832916 - 0.285678I$	$-1.26804 - 2.79796I$	0
$u = -0.350162 - 0.974636I$ $a = -0.417402 + 1.047070I$ $b = 0.832916 + 0.285678I$	$-1.26804 + 2.79796I$	0
$u = 0.786533 + 0.684928I$ $a = -1.66355 + 0.54319I$ $b = 1.72387 - 0.29020I$	$12.09960 - 0.83840I$	0
$u = 0.786533 - 0.684928I$ $a = -1.66355 - 0.54319I$ $b = 1.72387 + 0.29020I$	$12.09960 + 0.83840I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.830250 + 0.658865I$ $a = -0.250221 + 0.410875I$ $b = 0.798752 - 0.772203I$	$5.67993 - 5.34809I$	0
$u = 0.830250 - 0.658865I$ $a = -0.250221 - 0.410875I$ $b = 0.798752 + 0.772203I$	$5.67993 + 5.34809I$	0
$u = -0.749134 + 0.751065I$ $a = -2.64257 - 0.98796I$ $b = 1.50979 + 0.07061I$	$7.17486 + 3.06656I$	0
$u = -0.749134 - 0.751065I$ $a = -2.64257 + 0.98796I$ $b = 1.50979 - 0.07061I$	$7.17486 - 3.06656I$	0
$u = -0.906668 + 0.562915I$ $a = -0.063631 + 0.203600I$ $b = 0.565448 + 0.170026I$	$4.68598 - 2.04595I$	0
$u = -0.906668 - 0.562915I$ $a = -0.063631 - 0.203600I$ $b = 0.565448 - 0.170026I$	$4.68598 + 2.04595I$	0
$u = 0.789964 + 0.729685I$ $a = -2.20736 + 1.00128I$ $b = 1.50674 + 0.17499I$	$7.19896 + 3.40495I$	0
$u = 0.789964 - 0.729685I$ $a = -2.20736 - 1.00128I$ $b = 1.50674 - 0.17499I$	$7.19896 - 3.40495I$	0
$u = -0.024461 + 1.086200I$ $a = -0.840798 - 0.156923I$ $b = -1.47061 + 0.12446I$	$6.24502 - 0.43169I$	0
$u = -0.024461 - 1.086200I$ $a = -0.840798 + 0.156923I$ $b = -1.47061 - 0.12446I$	$6.24502 + 0.43169I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.668707 + 0.865207I$ $a = 0.704861 + 0.333087I$ $b = -0.616750 + 0.357372I$	$4.01661 + 1.17981I$	0
$u = 0.668707 - 0.865207I$ $a = 0.704861 - 0.333087I$ $b = -0.616750 - 0.357372I$	$4.01661 - 1.17981I$	0
$u = 0.679050 + 0.858235I$ $a = -0.77402 + 1.29486I$ $b = 0.400623 + 0.354831I$	$4.03879 + 4.03484I$	0
$u = 0.679050 - 0.858235I$ $a = -0.77402 - 1.29486I$ $b = 0.400623 - 0.354831I$	$4.03879 - 4.03484I$	0
$u = -0.710320 + 0.840348I$ $a = -1.094730 - 0.412872I$ $b = 0.418566 - 1.103500I$	$4.26526 - 0.78149I$	0
$u = -0.710320 - 0.840348I$ $a = -1.094730 + 0.412872I$ $b = 0.418566 + 1.103500I$	$4.26526 + 0.78149I$	0
$u = -0.703267 + 0.893390I$ $a = -0.176298 + 0.303056I$ $b = -0.611742 - 1.091160I$	$4.10083 - 4.63563I$	0
$u = -0.703267 - 0.893390I$ $a = -0.176298 - 0.303056I$ $b = -0.611742 + 1.091160I$	$4.10083 + 4.63563I$	0
$u = 0.564977 + 0.999135I$ $a = -1.220080 + 0.538963I$ $b = 0.536796 + 0.482587I$	$-0.51569 + 6.32863I$	0
$u = 0.564977 - 0.999135I$ $a = -1.220080 - 0.538963I$ $b = 0.536796 - 0.482587I$	$-0.51569 - 6.32863I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.493291+1.042080I$ $a=-0.032396-0.417531I$ $b=\ \ 0.538420+0.338146I$	$-0.59382-3.25955I$	0
$u=-0.493291-1.042080I$ $a=-0.032396+0.417531I$ $b=\ \ 0.538420-0.338146I$	$-0.59382+3.25955I$	0
$u=-0.152408+1.170190I$ $a=-0.442695+0.367195I$ $b=-0.308154+0.476045I$	$-1.12613-4.69478I$	0
$u=-0.152408-1.170190I$ $a=-0.442695-0.367195I$ $b=-0.308154-0.476045I$	$-1.12613+4.69478I$	0
$u=-0.709893+0.967350I$ $a=\ \ 2.26969+1.36925I$ $b=-1.55119+0.14708I$	$6.51252-8.62631I$	0
$u=-0.709893-0.967350I$ $a=\ \ 2.26969-1.36925I$ $b=-1.55119-0.14708I$	$6.51252+8.62631I$	0
$u=-0.072290+0.784893I$ $a=\ \ 1.44712+1.00338I$ $b=-0.867537+0.492868I$	$0.479696+1.218850I$	$3.82242-2.62908I$
$u=-0.072290-0.784893I$ $a=\ \ 1.44712-1.00338I$ $b=-0.867537-0.492868I$	$0.479696-1.218850I$	$3.82242+2.62908I$
$u=-1.036660+0.628687I$ $a=\ \ 1.76825+0.21237I$ $b=-1.62760-0.23134I$	$13.7366+9.0871I$	0
$u=-1.036660-0.628687I$ $a=\ \ 1.76825-0.21237I$ $b=-1.62760+0.23134I$	$13.7366-9.0871I$	0

Solutions to I^u_1	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.687079+1.010450I$ $a=\ 1.32026+2.12559I$ $b=-1.51603+0.10725I$	$10.52170-5.68294I$	0
$u=-0.687079-1.010450I$ $a=\ 1.32026-2.12559I$ $b=-1.51603-0.10725I$	$10.52170+5.68294I$	0
$u=\ 0.742606+0.989112I$ $a=\ 1.71217-0.97802I$ $b=-1.52663+0.03900I$	$6.41405+2.38016I$	0
$u=\ 0.742606-0.989112I$ $a=\ 1.71217+0.97802I$ $b=-1.52663-0.03900I$	$6.41405-2.38016I$	0
$u=\ 0.560580+0.511556I$ $a=\ 1.077470-0.460333I$ $b=-0.359314+0.358132I$	$0.85594-1.76487I$	$7.42480+4.84873I$
$u=\ 0.560580-0.511556I$ $a=\ 1.077470+0.460333I$ $b=-0.359314-0.358132I$	$0.85594+1.76487I$	$7.42480-4.84873I$
$u=\ 0.713931+1.015970I$ $a=\ 1.41258-1.55830I$ $b=-1.65304-0.39573I$	$11.09840+6.52113I$	0
$u=\ 0.713931-1.015970I$ $a=\ 1.41258+1.55830I$ $b=-1.65304+0.39573I$	$11.09840-6.52113I$	0
$u=\ 0.725112+1.032960I$ $a=\ 1.016130-0.612765I$ $b=-0.696435-0.914112I$	$4.55307+11.17470I$	0
$u=\ 0.725112-1.032960I$ $a=\ 1.016130+0.612765I$ $b=-0.696435+0.914112I$	$4.55307-11.17470I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.506212 + 0.514162I$ $a = 1.000830 - 0.052860I$ $b = -0.358987 + 0.452126I$	$1.004420 - 0.901476I$	$8.36804 + 5.20975I$
$u = -0.506212 - 0.514162I$ $a = 1.000830 + 0.052860I$ $b = -0.358987 - 0.452126I$	$1.004420 + 0.901476I$	$8.36804 - 5.20975I$
$u = -0.772141 + 1.064070I$ $a = 0.404218 + 0.523737I$ $b = -0.378482 + 0.463468I$	$3.24077 - 4.14481I$	0
$u = -0.772141 - 1.064070I$ $a = 0.404218 - 0.523737I$ $b = -0.378482 - 0.463468I$	$3.24077 + 4.14481I$	0
$u = 1.281700 + 0.464275I$ $a = 1.66046 - 0.06858I$ $b = -1.54861 + 0.02461I$	$11.85000 + 1.49284I$	0
$u = 1.281700 - 0.464275I$ $a = 1.66046 + 0.06858I$ $b = -1.54861 - 0.02461I$	$11.85000 - 1.49284I$	0
$u = -0.784798 + 1.129230I$ $a = -1.46411 - 1.43292I$ $b = 1.61931 - 0.29900I$	$12.1505 - 15.6778I$	0
$u = -0.784798 - 1.129230I$ $a = -1.46411 + 1.43292I$ $b = 1.61931 + 0.29900I$	$12.1505 + 15.6778I$	0
$u = 0.035097 + 0.578937I$ $a = 2.16601 - 0.21856I$ $b = 0.030110 + 0.376253I$	$0.96062 - 1.38974I$	$4.85505 + 5.15507I$
$u = 0.035097 - 0.578937I$ $a = 2.16601 + 0.21856I$ $b = 0.030110 - 0.376253I$	$0.96062 + 1.38974I$	$4.85505 - 5.15507I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.22199 + 1.44135I$ $a = -0.308371 + 0.423417I$ $b = 1.49524 + 0.11629I$	$4.95386 + 6.63333I$	0
$u = 0.22199 - 1.44135I$ $a = -0.308371 - 0.423417I$ $b = 1.49524 - 0.11629I$	$4.95386 - 6.63333I$	0
$u = 0.91649 + 1.24644I$ $a = -1.34038 + 1.01266I$ $b = 1.49909 + 0.12802I$	$9.50152 + 6.18867I$	0
$u = 0.91649 - 1.24644I$ $a = -1.34038 - 1.01266I$ $b = 1.49909 - 0.12802I$	$9.50152 - 6.18867I$	0
$u = -0.422490$ $a = 1.36125$ $b = -0.753301$	1.14898	8.76770
$u = -0.041792 + 0.289775I$ $a = 4.68550 + 1.04734I$ $b = 1.215190 - 0.166969I$	$4.61196 - 3.48976I$	$13.3589 + 6.7779I$
$u = -0.041792 - 0.289775I$ $a = 4.68550 - 1.04734I$ $b = 1.215190 + 0.166969I$	$4.61196 + 3.48976I$	$13.3589 - 6.7779I$
$u = -0.0980352$ $a = 3.51954$ $b = 1.66282$	10.1505	-0.505670

II.

$\boldsymbol{I_2^u = \langle u^{12}+3u^{10}+\cdots+b+2,\ u^{13}+3u^{12}+\cdots+a+3,\ u^{14}+u^{13}+\cdots+u+1\rangle}$

(i) Arc colorings

$$a_2 = \begin{pmatrix} 0 \\ u \end{pmatrix}$$
$$a_5 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$
$$a_6 = \begin{pmatrix} 1 \\ -u^2 \end{pmatrix}$$
$$a_9 = \begin{pmatrix} -u^{13}-3u^{12}+\cdots-4u-3 \\ -u^{12}-3u^{10}-7u^8-9u^6-u^5-8u^4-2u^3-4u^2-u-2 \end{pmatrix}$$
$$a_{10} = \begin{pmatrix} -u^{13}-4u^{12}+\cdots-5u-5 \\ -u^{12}-3u^{10}-7u^8-9u^6-u^5-8u^4-2u^3-4u^2-u-2 \end{pmatrix}$$
$$a_7 = \begin{pmatrix} 2u^{13}+2u^{12}+\cdots+u+2 \\ u^{13}+2u^{12}+\cdots+2u+1 \end{pmatrix}$$
$$a_1 = \begin{pmatrix} -u \\ u^3+u \end{pmatrix}$$
$$a_3 = \begin{pmatrix} -u^3 \\ u^5+u^3+u \end{pmatrix}$$
$$a_4 = \begin{pmatrix} u^{13}+4u^{12}+\cdots+2u+4 \\ u^{13}+u^{12}+\cdots+3u+2 \end{pmatrix}$$
$$a_8 = \begin{pmatrix} u^{13}+u^{12}+2u^{11}+u^{10}+3u^9+2u^8+2u^7+u^6+u^5+u^4-u^2+2 \\ u^{13}+2u^{12}+\cdots+2u+1 \end{pmatrix}$$
$$a_{11} = \begin{pmatrix} u^{13}-2u^{12}+\cdots+3u-2 \\ -u^{12}-u^{11}+\cdots-u-2 \end{pmatrix}$$
$$a_{11} = \begin{pmatrix} u^{13}-2u^{12}+\cdots+3u-2 \\ -u^{12}-u^{11}+\cdots-u-2 \end{pmatrix}$$

(ii) Obstruction class $= 1$

(iii) Cusp Shapes
$= -4u^{13}-6u^{12}-15u^{11}-18u^{10}-31u^9-36u^8-41u^7-48u^6-37u^5-43u^4-25u^3-22u^2-8u+3$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{14} - u^{13} + \cdots - u + 1$
c_2	$u^{14} + 7u^{13} + \cdots + 7u + 1$
c_3	$u^{14} - 2u^{12} + 3u^{10} + u^8 - 6u^7 + 2u^6 + 6u^5 - 6u^4 + u^3 + 3u^2 - 3u + 1$
c_4	$u^{14} - 8u^{12} + \cdots - 2u^2 + 1$
c_5	$u^{14} + u^{13} + \cdots + u + 1$
c_6	$u^{14} - 2u^{13} + \cdots - 2u + 1$
c_7	$u^{14} + 2u^{12} + 2u^{11} + 4u^{10} + 3u^9 + 8u^8 + u^7 + 9u^6 + 3u^5 + 2u^4 + 5u^3 + 1$
c_8, c_9	$u^{14} - 8u^{12} + \cdots - 2u^2 + 1$
c_{10}	$u^{14} + 2u^{13} + \cdots + 2u + 1$
c_{11}	$u^{14} + 2u^{12} + 3u^{11} + 3u^{10} + 4u^9 + 5u^8 + 6u^7 + 5u^6 + 2u^5 + u^4 - 2u^3 + 1$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_5	$y^{14} + 7y^{13} + \cdots + 7y + 1$
c_2	$y^{14} + 7y^{13} + \cdots + 3y + 1$
c_3	$y^{14} - 4y^{13} + \cdots - 3y + 1$
c_4, c_8, c_9	$y^{14} - 16y^{13} + \cdots - 4y + 1$
c_6, c_{10}	$y^{14} - 14y^{13} + \cdots - 10y + 1$
c_7	$y^{14} + 4y^{13} + \cdots + 4y^2 + 1$
c_{11}	$y^{14} + 4y^{13} + \cdots + 2y^2 + 1$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.734849 + 0.838959I$ $a = -0.333800 + 0.436998I$ $b = -0.139966 + 0.587557I$	$3.61664 + 2.81352I$	$9.64591 - 2.83616I$
$u = 0.734849 - 0.838959I$ $a = -0.333800 - 0.436998I$ $b = -0.139966 - 0.587557I$	$3.61664 - 2.81352I$	$9.64591 + 2.83616I$
$u = 0.418839 + 1.066630I$ $a = 0.150053 + 0.914839I$ $b = 0.560131 - 0.227043I$	$-0.01874 + 3.80056I$	$10.63694 - 6.25439I$
$u = 0.418839 - 1.066630I$ $a = 0.150053 - 0.914839I$ $b = 0.560131 + 0.227043I$	$-0.01874 - 3.80056I$	$10.63694 + 6.25439I$
$u = -0.316820 + 1.106540I$ $a = -0.741155 - 0.065388I$ $b = 1.252080 - 0.108337I$	$2.59324 - 5.04325I$	$8.06202 + 6.26470I$
$u = -0.316820 - 1.106540I$ $a = -0.741155 + 0.065388I$ $b = 1.252080 + 0.108337I$	$2.59324 + 5.04325I$	$8.06202 - 6.26470I$
$u = -0.675866 + 0.491616I$ $a = -1.82024 + 0.02181I$ $b = 1.62719 + 0.06521I$	$10.70220 - 0.32675I$	$11.36618 + 5.14991I$
$u = -0.675866 - 0.491616I$ $a = -1.82024 - 0.02181I$ $b = 1.62719 - 0.06521I$	$10.70220 + 0.32675I$	$11.36618 - 5.14991I$
$u = -0.201031 + 0.762183I$ $a = -1.75035 + 0.68281I$ $b = -1.248670 - 0.185999I$	$4.04298 + 2.85458I$	$6.73494 - 0.49707I$
$u = -0.201031 - 0.762183I$ $a = -1.75035 - 0.68281I$ $b = -1.248670 + 0.185999I$	$4.04298 - 2.85458I$	$6.73494 + 0.49707I$

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.330549 + 0.694071I$ $a = 2.11814 - 0.09358I$ $b = -0.549066 - 0.437412I$	$1.43631 - 0.60321I$	$11.13684 - 2.07841I$
$u = 0.330549 - 0.694071I$ $a = 2.11814 + 0.09358I$ $b = -0.549066 + 0.437412I$	$1.43631 + 0.60321I$	$11.13684 + 2.07841I$
$u = -0.790520 + 1.084840I$ $a = 1.37736 + 1.39149I$ $b = -1.50170 + 0.16073I$	$8.88116 - 5.55392I$	$8.91716 + 2.29843I$
$u = -0.790520 - 1.084840I$ $a = 1.37736 - 1.39149I$ $b = -1.50170 - 0.16073I$	$8.88116 + 5.55392I$	$8.91716 - 2.29843I$

III. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1	$(u^{14} - u^{13} + \cdots - u + 1)(u^{68} + 12u^{66} + \cdots - 14u + 1)$
c_2	$(u^{14} + 7u^{13} + \cdots + 7u + 1)(u^{68} + 24u^{67} + \cdots - 66u + 1)$
c_3	$(u^{14} - 2u^{12} + 3u^{10} + u^8 - 6u^7 + 2u^6 + 6u^5 - 6u^4 + u^3 + 3u^2 - 3u + 1)$ $\cdot (u^{68} + 5u^{67} + \cdots + 1376u + 161)$
c_4	$(u^{14} - 8u^{12} + \cdots - 2u^2 + 1)(u^{68} + u^{67} + \cdots - 13u - 19)$
c_5	$(u^{14} + u^{13} + \cdots + u + 1)(u^{68} + 12u^{66} + \cdots - 14u + 1)$
c_6	$(u^{14} - 2u^{13} + \cdots - 2u + 1)(u^{68} + u^{67} + \cdots + 99u - 13)$
c_7	$(u^{14} + 2u^{12} + 2u^{11} + 4u^{10} + 3u^9 + 8u^8 + u^7 + 9u^6 + 3u^5 + 2u^4 + 5u^3 + 1)$ $\cdot (u^{68} - u^{67} + \cdots - 83u - 123)$
c_8, c_9	$(u^{14} - 8u^{12} + \cdots - 2u^2 + 1)(u^{68} + u^{67} + \cdots - 13u - 19)$
c_{10}	$(u^{14} + 2u^{13} + \cdots + 2u + 1)(u^{68} + u^{67} + \cdots + 99u - 13)$
c_{11}	$(u^{14} + 2u^{12} + 3u^{11} + 3u^{10} + 4u^9 + 5u^8 + 6u^7 + 5u^6 + 2u^5 + u^4 - 2u^3 + 1)$ $\cdot (u^{68} + 5u^{67} + \cdots - 131u - 179)$

IV. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1, c_5	$(y^{14}+7y^{13}+\cdots+7y+1)(y^{68}+24y^{67}+\cdots-66y+1)$
c_2	$(y^{14}+7y^{13}+\cdots+3y+1)(y^{68}+48y^{67}+\cdots-11082y+1)$
c_3	$(y^{14}-4y^{13}+\cdots-3y+1)(y^{68}-23y^{67}+\cdots-1710480y+25921)$
c_4, c_8, c_9	$(y^{14}-16y^{13}+\cdots-4y+1)(y^{68}-75y^{67}+\cdots-1537y+361)$
c_6, c_{10}	$(y^{14}-14y^{13}+\cdots-10y+1)(y^{68}-61y^{67}+\cdots+17369y+169)$
c_7	$(y^{14}+4y^{13}+\cdots+4y^2+1)(y^{68}+17y^{67}+\cdots+422135y+15129)$
c_{11}	$(y^{14}+4y^{13}+\cdots+2y^2+1)(y^{68}+21y^{67}+\cdots+1105527y+32041)$