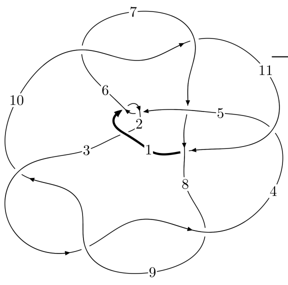
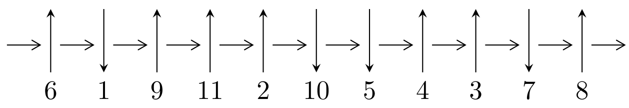
$11a_{169}$ ($K11a_{169}$)



A knot diagram[1]

Linearized knot diagam



Solving Sequence

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

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

$$\begin{aligned}
I_1^u = \langle & -4.96166 \times 10^{185} u^{73} + 1.25507 \times 10^{186} u^{72} + \cdots + 1.38036 \times 10^{187} b - 2.21942 \times 10^{187}, \\
& 5.60840 \times 10^{187} u^{73} - 1.03180 \times 10^{188} u^{72} + \cdots + 5.10733 \times 10^{188} a + 2.81879 \times 10^{189},\ u^{74} - u^{73} + \cdots + 36u \\
I_2^u = \langle & 4u^{13} + 7u^{12} - 21u^{11} - 33u^{10} + 49u^9 + 71u^8 - 56u^7 - 90u^6 + 36u^5 + 66u^4 - 4u^3 - 26u^2 + b - 3u + 4, \\
& 6u^{13} + 10u^{12} + \cdots + a + 10, \\
& u^{14} + 2u^{13} - 5u^{12} - 10u^{11} + 11u^{10} + 23u^9 - 11u^8 - 31u^7 + 4u^6 + 25u^5 + 4u^4 - 11u^3 - 4u^2 + 2u + 1 \rangle
\end{aligned}$$

* 2 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 88 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. $I_1^u = \langle -4.96\times 10^{185}u^{73} + 1.26\times 10^{186}u^{72} + \cdots + 1.38\times 10^{187}b - 2.22\times 10^{187},\ 5.61\times 10^{187}u^{73} - 1.03\times 10^{188}u^{72} + \cdots + 5.11\times 10^{188}a + 2.82\times 10^{189},\ u^{74} - u^{73} + \cdots + 36u + 37\rangle$

(i) Arc colorings

$$a_6 = \begin{pmatrix}1\\0\end{pmatrix}$$
$$a_{10} = \begin{pmatrix}0\\u\end{pmatrix}$$
$$a_7 = \begin{pmatrix}1\\u^2\end{pmatrix}$$
$$a_2 = \begin{pmatrix}-0.109811u^{73} + 0.202024u^{72} + \cdots - 3.01507u - 5.51912\\0.0359447u^{73} - 0.0909234u^{72} + \cdots - 0.656044u + 1.60786\end{pmatrix}$$
$$a_{11} = \begin{pmatrix}-u\\-u^3 + u\end{pmatrix}$$
$$a_1 = \begin{pmatrix}-0.145756u^{73} + 0.292948u^{72} + \cdots - 2.35903u - 7.12697\\0.0359447u^{73} - 0.0909234u^{72} + \cdots - 0.656044u + 1.60786\end{pmatrix}$$
$$a_3 = \begin{pmatrix}0.107346u^{73} - 0.195541u^{72} + \cdots - 2.58294u + 3.70574\\-0.318159u^{73} + 0.662604u^{72} + \cdots - 2.83612u - 10.4308\end{pmatrix}$$
$$a_5 = \begin{pmatrix}-0.187310u^{73} + 0.380215u^{72} + \cdots - 4.71712u - 5.98298\\0.0710115u^{73} - 0.143579u^{72} + \cdots - 2.35575u + 2.65479\end{pmatrix}$$
$$a_8 = \begin{pmatrix}-0.168216u^{73} + 0.379034u^{72} + \cdots + 3.07123u - 4.69178\\-0.0865870u^{73} + 0.159014u^{72} + \cdots + 1.12473u - 4.45130\end{pmatrix}$$
$$a_4 = \begin{pmatrix}-0.284387u^{73} + 0.587033u^{72} + \cdots - 4.79088u - 9.08039\\0.0463239u^{73} - 0.104793u^{72} + \cdots - 2.64081u + 1.69178\end{pmatrix}$$
$$a_9 = \begin{pmatrix}0.0959357u^{73} - 0.265994u^{72} + \cdots + 1.34312u + 0.825831\\-0.160387u^{73} + 0.335587u^{72} + \cdots + 1.38132u - 5.82341\end{pmatrix}$$
$$a_9 = \begin{pmatrix}0.0959357u^{73} - 0.265994u^{72} + \cdots + 1.34312u + 0.825831\\-0.160387u^{73} + 0.335587u^{72} + \cdots + 1.38132u - 5.82341\end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= -0.581332u^{73} + 1.19718u^{72} + \cdots + 15.2381u - 18.9875$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1, c_5	$u^{74} + 18u^{72} + \cdots + 5u + 1$
c_2	$u^{74} + 36u^{73} + \cdots - 17u + 1$
c_3, c_8, c_9	$u^{74} - u^{73} + \cdots + 22u + 1$
c_4	$u^{74} - 3u^{73} + \cdots - 176u + 1003$
c_6, c_{10}	$u^{74} - u^{73} + \cdots + 36u + 37$
c_7	$u^{74} - 5u^{73} + \cdots - 20u + 1$
c_{11}	$u^{74} - 5u^{73} + \cdots + 300u + 125$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_5	$y^{74} + 36y^{73} + \cdots - 17y + 1$
c_2	$y^{74} + 12y^{73} + \cdots - 77y + 1$
c_3, c_8, c_9	$y^{74} + 77y^{73} + \cdots - 58y + 1$
c_4	$y^{74} + 29y^{73} + \cdots + 34287672y + 1006009$
c_6, c_{10}	$y^{74} - 57y^{73} + \cdots - 4034y + 1369$
c_7	$y^{74} - 9y^{73} + \cdots + 14y + 1$
c_{11}	$y^{74} + 15y^{73} + \cdots + 308750y + 15625$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.041401 + 1.026520I$ $a = 0.661998 - 0.676360I$ $b = -0.590855 - 0.983471I$	$1.11109 + 6.26090I$	0
$u = -0.041401 - 1.026520I$ $a = 0.661998 + 0.676360I$ $b = -0.590855 + 0.983471I$	$1.11109 - 6.26090I$	0
$u = -0.986532 + 0.392792I$ $a = 0.390575 - 0.412307I$ $b = -0.201955 - 0.077354I$	$-1.70214 + 1.37634I$	0
$u = -0.986532 - 0.392792I$ $a = 0.390575 + 0.412307I$ $b = -0.201955 + 0.077354I$	$-1.70214 - 1.37634I$	0
$u = -1.064540 + 0.083077I$ $a = -0.038681 - 0.719869I$ $b = -1.066260 - 0.903808I$	$-3.93189 + 3.73813I$	0
$u = -1.064540 - 0.083077I$ $a = -0.038681 + 0.719869I$ $b = -1.066260 + 0.903808I$	$-3.93189 - 3.73813I$	0
$u = -0.054647 + 1.089920I$ $a = -0.798538 + 0.520307I$ $b = 0.662690 + 0.358460I$	$-3.49876 - 4.45579I$	0
$u = -0.054647 - 1.089920I$ $a = -0.798538 - 0.520307I$ $b = 0.662690 - 0.358460I$	$-3.49876 + 4.45579I$	0
$u = 1.008160 + 0.419741I$ $a = -1.13208 - 2.49760I$ $b = 0.086823 - 0.942517I$	$-5.90718 - 3.61297I$	0
$u = 1.008160 - 0.419741I$ $a = -1.13208 + 2.49760I$ $b = 0.086823 + 0.942517I$	$-5.90718 + 3.61297I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.164060 + 0.892569I$ $a = 0.610647 + 0.324648I$ $b = -0.635278 + 0.581899I$	$2.28203 + 1.45434I$	$7.07609 - 2.82697I$
$u = 0.164060 - 0.892569I$ $a = 0.610647 - 0.324648I$ $b = -0.635278 - 0.581899I$	$2.28203 - 1.45434I$	$7.07609 + 2.82697I$
$u = -1.020520 + 0.447604I$ $a = 0.90579 - 1.99644I$ $b = -0.56045 - 1.35749I$	$-7.03134 + 7.38518I$	0
$u = -1.020520 - 0.447604I$ $a = 0.90579 + 1.99644I$ $b = -0.56045 + 1.35749I$	$-7.03134 - 7.38518I$	0
$u = -0.706637 + 0.528963I$ $a = 0.715385 + 0.015552I$ $b = -0.111730 + 0.682639I$	$-1.94267 + 1.36984I$	$-1.20938 - 5.61656I$
$u = -0.706637 - 0.528963I$ $a = 0.715385 - 0.015552I$ $b = -0.111730 - 0.682639I$	$-1.94267 - 1.36984I$	$-1.20938 + 5.61656I$
$u = -1.118000 + 0.053349I$ $a = -1.16980 + 2.42638I$ $b = 0.427319 + 1.057150I$	$-3.93201 + 1.54935I$	0
$u = -1.118000 - 0.053349I$ $a = -1.16980 - 2.42638I$ $b = 0.427319 - 1.057150I$	$-3.93201 - 1.54935I$	0
$u = 1.094100 + 0.269644I$ $a = -0.50567 - 2.00641I$ $b = 0.561390 - 1.183450I$	$-1.87663 - 4.80358I$	0
$u = 1.094100 - 0.269644I$ $a = -0.50567 + 2.00641I$ $b = 0.561390 + 1.183450I$	$-1.87663 + 4.80358I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = -0.716202 + 0.466840I$ $a = -0.082574 - 0.910018I$ $b = -0.902862 - 0.142948I$	$-2.54067 + 2.00646I$	$4.56819 - 2.62899I$
$u = -0.716202 - 0.466840I$ $a = -0.082574 + 0.910018I$ $b = -0.902862 + 0.142948I$	$-2.54067 - 2.00646I$	$4.56819 + 2.62899I$
$u = -0.453990 + 0.701764I$ $a = -0.330021 + 0.379368I$ $b = -0.539990 + 1.146080I$	$-5.37822 - 3.01874I$	$-1.04024 + 2.49965I$
$u = -0.453990 - 0.701764I$ $a = -0.330021 - 0.379368I$ $b = -0.539990 - 1.146080I$	$-5.37822 + 3.01874I$	$-1.04024 - 2.49965I$
$u = 1.150740 + 0.216584I$ $a = -0.08189 - 2.43504I$ $b = -0.150667 - 1.122100I$	$-6.13754 - 3.74072I$	0
$u = 1.150740 - 0.216584I$ $a = -0.08189 + 2.43504I$ $b = -0.150667 + 1.122100I$	$-6.13754 + 3.74072I$	0
$u = -1.109710 + 0.388330I$ $a = 0.698876 - 0.299047I$ $b = 0.340968 - 0.383433I$	$-1.55302 + 1.40337I$	0
$u = -1.109710 - 0.388330I$ $a = 0.698876 + 0.299047I$ $b = 0.340968 + 0.383433I$	$-1.55302 - 1.40337I$	0
$u = 1.191070 + 0.010518I$ $a = -0.022094 + 0.440729I$ $b = -0.772060 - 0.401516I$	$-7.86764 - 1.80141I$	0
$u = 1.191070 - 0.010518I$ $a = -0.022094 - 0.440729I$ $b = -0.772060 + 0.401516I$	$-7.86764 + 1.80141I$	0

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 1.189310 + 0.229765I$ $a = 1.31840 + 1.49765I$ $b = -0.583679 + 1.119390I$	$-10.02310 - 6.93733I$	0
$u = 1.189310 - 0.229765I$ $a = 1.31840 - 1.49765I$ $b = -0.583679 - 1.119390I$	$-10.02310 + 6.93733I$	0
$u = 0.730409 + 0.234263I$ $a = 0.002848 - 0.948008I$ $b = 0.823183 - 0.768347I$	$0.90646 - 3.01225I$	$11.02233 + 8.12268I$
$u = 0.730409 - 0.234263I$ $a = 0.002848 + 0.948008I$ $b = 0.823183 + 0.768347I$	$0.90646 + 3.01225I$	$11.02233 - 8.12268I$
$u = 0.645449 + 1.130360I$ $a = -0.399107 + 0.201377I$ $b = 0.330428 + 1.061930I$	$-7.17177 - 2.00704I$	0
$u = 0.645449 - 1.130360I$ $a = -0.399107 - 0.201377I$ $b = 0.330428 - 1.061930I$	$-7.17177 + 2.00704I$	0
$u = -0.644097 + 0.246664I$ $a = -1.22405 + 1.11061I$ $b = -0.704733 + 0.577546I$	$-2.89873 - 2.58975I$	$-0.111793 + 1.162954I$
$u = -0.644097 - 0.246664I$ $a = -1.22405 - 1.11061I$ $b = -0.704733 - 0.577546I$	$-2.89873 + 2.58975I$	$-0.111793 - 1.162954I$
$u = 1.229030 + 0.471094I$ $a = -0.391923 + 0.075906I$ $b = -0.820281 - 0.357667I$	$-1.05855 - 6.36832I$	0
$u = 1.229030 - 0.471094I$ $a = -0.391923 - 0.075906I$ $b = -0.820281 + 0.357667I$	$-1.05855 + 6.36832I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -1.315060 + 0.070834I$ $a = 0.10565 + 1.58707I$ $b = -0.461958 + 1.011830I$	$-3.68119 - 1.72060I$	0
$u = -1.315060 - 0.070834I$ $a = 0.10565 - 1.58707I$ $b = -0.461958 - 1.011830I$	$-3.68119 + 1.72060I$	0
$u = -1.353880 + 0.256891I$ $a = -0.30501 + 2.26816I$ $b = 0.478617 + 1.068020I$	$-3.56136 + 5.27681I$	0
$u = -1.353880 - 0.256891I$ $a = -0.30501 - 2.26816I$ $b = 0.478617 - 1.068020I$	$-3.56136 - 5.27681I$	0
$u = 0.563652 + 0.233266I$ $a = 0.719862 - 0.170364I$ $b = 0.648787 + 0.161529I$	$1.084040 + 0.054792I$	$10.18991 + 0.13008I$
$u = 0.563652 - 0.233266I$ $a = 0.719862 + 0.170364I$ $b = 0.648787 - 0.161529I$	$1.084040 - 0.054792I$	$10.18991 - 0.13008I$
$u = -1.40158 + 0.28073I$ $a = 0.07621 - 1.71088I$ $b = 0.15964 - 1.41781I$	$-13.8677 + 6.0588I$	0
$u = -1.40158 - 0.28073I$ $a = 0.07621 + 1.71088I$ $b = 0.15964 + 1.41781I$	$-13.8677 - 6.0588I$	0
$u = -0.179516 + 0.523495I$ $a = -0.414147 - 0.312461I$ $b = 0.614780 + 0.802645I$	$1.20853 + 2.22979I$	$5.58274 - 4.23366I$
$u = -0.179516 - 0.523495I$ $a = -0.414147 + 0.312461I$ $b = 0.614780 - 0.802645I$	$1.20853 - 2.22979I$	$5.58274 + 4.23366I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.03616 + 1.44649I$ $a = -0.485282 - 0.593135I$ $b = 0.540574 - 1.099130I$	$-5.65481 - 9.14282I$	0
$u = 0.03616 - 1.44649I$ $a = -0.485282 + 0.593135I$ $b = 0.540574 + 1.099130I$	$-5.65481 + 9.14282I$	0
$u = -1.29046 + 0.66405I$ $a = 0.98402 - 1.42129I$ $b = -0.450482 - 1.038080I$	$-3.68654 + 4.65688I$	0
$u = -1.29046 - 0.66405I$ $a = 0.98402 + 1.42129I$ $b = -0.450482 + 1.038080I$	$-3.68654 - 4.65688I$	0
$u = -1.35471 + 0.52687I$ $a = 0.231505 + 0.110886I$ $b = 1.018660 - 0.327910I$	$-7.66023 + 10.17330I$	0
$u = -1.35471 - 0.52687I$ $a = 0.231505 - 0.110886I$ $b = 1.018660 + 0.327910I$	$-7.66023 - 10.17330I$	0
$u = 1.37570 + 0.47899I$ $a = 0.73388 + 1.86660I$ $b = -0.588470 + 1.135700I$	$-3.38565 - 11.61060I$	0
$u = 1.37570 - 0.47899I$ $a = 0.73388 - 1.86660I$ $b = -0.588470 - 1.135700I$	$-3.38565 + 11.61060I$	0
$u = 1.36071 + 0.58544I$ $a = -0.320853 - 0.015899I$ $b = 0.748042 + 0.449545I$	$-7.59610 - 0.90779I$	0
$u = 1.36071 - 0.58544I$ $a = -0.320853 + 0.015899I$ $b = 0.748042 - 0.449545I$	$-7.59610 + 0.90779I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = -0.440113 + 0.253274I$ $a = 1.56735 + 0.12834I$ $b = 0.086114 + 0.816280I$	$-1.99873 + 1.35242I$	$-1.92328 - 4.74045I$
$u = -0.440113 - 0.253274I$ $a = 1.56735 - 0.12834I$ $b = 0.086114 - 0.816280I$	$-1.99873 - 1.35242I$	$-1.92328 + 4.74045I$
$u = 0.356198 + 0.290587I$ $a = -1.41914 + 2.35526I$ $b = -0.297912 - 1.078840I$	$-7.27061 + 4.64233I$	$-5.17242 - 2.62174I$
$u = 0.356198 - 0.290587I$ $a = -1.41914 - 2.35526I$ $b = -0.297912 + 1.078840I$	$-7.27061 - 4.64233I$	$-5.17242 + 2.62174I$
$u = 1.56557 + 0.07115I$ $a = -0.42153 - 1.61275I$ $b = -0.245943 - 1.066820I$	$-12.38830 + 0.44974I$	0
$u = 1.56557 - 0.07115I$ $a = -0.42153 + 1.61275I$ $b = -0.245943 + 1.066820I$	$-12.38830 - 0.44974I$	0
$u = -1.46364 + 0.61572I$ $a = -0.75390 + 1.56481I$ $b = 0.642261 + 1.218140I$	$-10.4170 + 16.1443I$	0
$u = -1.46364 - 0.61572I$ $a = -0.75390 - 1.56481I$ $b = 0.642261 - 1.218140I$	$-10.4170 - 16.1443I$	0
$u = 1.50472 + 0.85046I$ $a = -0.856898 - 1.096980I$ $b = 0.587862 - 1.094480I$	$-9.53471 - 6.00121I$	0
$u = 1.50472 - 0.85046I$ $a = -0.856898 + 1.096980I$ $b = 0.587862 + 1.094480I$	$-9.53471 + 6.00121I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.086041 + 0.247920I$ $a = -1.29730 - 2.26020I$ $b = 0.664169 - 0.876441I$	$1.04830 - 2.74313I$	$6.44828 + 0.65245I$
$u = 0.086041 - 0.247920I$ $a = -1.29730 + 2.26020I$ $b = 0.664169 + 0.876441I$	$1.04830 + 2.74313I$	$6.44828 - 0.65245I$
$u = 1.96415 + 0.32367I$ $a = -0.137388 + 1.240990I$ $b = 0.263248 + 1.008130I$	$-11.91390 + 0.82740I$	0
$u = 1.96415 - 0.32367I$ $a = -0.137388 - 1.240990I$ $b = 0.263248 - 1.008130I$	$-11.91390 - 0.82740I$	0

II.

$\boldsymbol{I_2^u = \langle 4u^{13}+7u^{12}+\cdots+b+4,\ 6u^{13}+10u^{12}+\cdots+a+10,\ u^{14}+2u^{13}+\cdots+2u+1\rangle}$

(i) Arc colorings

$$a_6 = \begin{pmatrix}1\\0\end{pmatrix}$$
$$a_{10} = \begin{pmatrix}0\\u\end{pmatrix}$$
$$a_7 = \begin{pmatrix}1\\u^2\end{pmatrix}$$
$$a_2 = \begin{pmatrix}-6u^{13}-10u^{12}+\cdots-u-10\\-4u^{13}-7u^{12}+\cdots+3u-4\end{pmatrix}$$
$$a_{11} = \begin{pmatrix}-u\\-u^3+u\end{pmatrix}$$
$$a_1 = \begin{pmatrix}-2u^{13}-3u^{12}+\cdots-4u-6\\-4u^{13}-7u^{12}+\cdots+3u-4\end{pmatrix}$$
$$a_3 = \begin{pmatrix}-5u^{13}-6u^{12}+\cdots-7u-10\\-10u^{13}-16u^{12}+\cdots+60u^2-10\end{pmatrix}$$
$$a_5 = \begin{pmatrix}7u^{13}+9u^{12}+\cdots+6u+12\\4u^{13}+4u^{12}+\cdots+10u+10\end{pmatrix}$$
$$a_8 = \begin{pmatrix}-u^{13}-2u^{12}+\cdots+3u-2\\-u^{13}-u^{12}+\cdots-5u-5\end{pmatrix}$$
$$a_4 = \begin{pmatrix}4u^{13}+6u^{12}+\cdots-27u^2+5\\6u^{13}+6u^{12}+\cdots+13u+14\end{pmatrix}$$
$$a_9 = \begin{pmatrix}-u^{13}-2u^{12}+\cdots+4u-3\\-u^{13}-2u^{12}+\cdots+19u^2-6\end{pmatrix}$$

$$a_9 = \begin{pmatrix}-u^{13}-2u^{12}+\cdots+4u-3\\-u^{13}-2u^{12}+\cdots+19u^2-6\end{pmatrix}$$

(ii) Obstruction class $= 1$

(iii) Cusp Shapes $= -15u^{13}-14u^{12}+99u^{11}+61u^{10}-276u^9-131u^8+403u^7+211u^6-375u^5-194u^4+175u^3+127u^2-44u-33$

(iv) u-Polynomials at the component

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

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_5	$y^{14} + 7y^{13} + \cdots + 9y + 1$
c_2	$y^{14} + 7y^{13} + \cdots + 5y + 1$
c_3, c_8, c_9	$y^{14} + 16y^{13} + \cdots + 8y + 1$
c_4	$y^{14} + 8y^{13} + \cdots + 6y + 1$
c_6, c_{10}	$y^{14} - 14y^{13} + \cdots - 12y + 1$
c_7	$y^{14} - 2y^{13} + \cdots - 4y^2 + 1$
c_{11}	$y^{14} + 2y^{13} + \cdots + 2y^2 + 1$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.923995 + 0.558875I$ $a = 1.48872 - 1.47936I$ $b = -0.495691 - 1.193760I$	$-7.49308 + 6.46120I$	$-4.33039 - 4.82668I$
$u = -0.923995 - 0.558875I$ $a = 1.48872 + 1.47936I$ $b = -0.495691 + 1.193760I$	$-7.49308 - 6.46120I$	$-4.33039 + 4.82668I$
$u = 0.973601 + 0.510087I$ $a = 0.180282 - 0.090322I$ $b = 0.312796 + 0.732458I$	$-2.09597 - 0.56119I$	$-3.19183 - 3.82330I$
$u = 0.973601 - 0.510087I$ $a = 0.180282 + 0.090322I$ $b = 0.312796 - 0.732458I$	$-2.09597 + 0.56119I$	$-3.19183 + 3.82330I$
$u = -0.567641 + 0.492408I$ $a = 1.95584 - 1.12949I$ $b = -0.281944 + 0.557057I$	$-4.89766 + 3.00668I$	$0.74586 - 1.41093I$
$u = -0.567641 - 0.492408I$ $a = 1.95584 + 1.12949I$ $b = -0.281944 - 0.557057I$	$-4.89766 - 3.00668I$	$0.74586 + 1.41093I$
$u = 0.727754 + 0.106963I$ $a = -0.255048 - 0.581565I$ $b = 0.760930 - 0.850713I$	$0.39771 - 2.89359I$	$-6.27864 + 3.59976I$
$u = 0.727754 - 0.106963I$ $a = -0.255048 + 0.581565I$ $b = 0.760930 + 0.850713I$	$0.39771 + 2.89359I$	$-6.27864 - 3.59976I$
$u = 1.252450 + 0.359700I$ $a = -0.78037 - 1.99059I$ $b = 0.410511 - 1.042370I$	$-3.33539 - 3.64299I$	$-1.75994 + 2.76575I$
$u = 1.252450 - 0.359700I$ $a = -0.78037 + 1.99059I$ $b = 0.410511 + 1.042370I$	$-3.33539 + 3.64299I$	$-1.75994 - 2.76575I$

Solutions to I_2^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.623201 + 0.116079I$ $a = -1.01609 - 1.68081I$ $b = -0.942798 - 0.813476I$	$-2.43487 + 3.43645I$	$5.05060 - 7.06034I$
$u = -0.623201 - 0.116079I$ $a = -1.01609 + 1.68081I$ $b = -0.942798 + 0.813476I$	$-2.43487 - 3.43645I$	$5.05060 + 7.06034I$
$u = -1.83897 + 0.15178I$ $a = -0.073330 + 1.299140I$ $b = -0.263802 + 0.940835I$	$-11.39450 - 1.08865I$	$1.76433 + 7.16066I$
$u = -1.83897 - 0.15178I$ $a = -0.073330 - 1.299140I$ $b = -0.263802 - 0.940835I$	$-11.39450 + 1.08865I$	$1.76433 - 7.16066I$

III. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1	$(u^{14} - u^{13} + \cdots - u + 1)(u^{74} + 18u^{72} + \cdots + 5u + 1)$
c_2	$(u^{14} + 7u^{13} + \cdots + 9u + 1)(u^{74} + 36u^{73} + \cdots - 17u + 1)$
c_3	$(u^{14} + 8u^{12} + \cdots + 4u^2 + 1)(u^{74} - u^{73} + \cdots + 22u + 1)$
c_4	$(u^{14} + 4u^{12} + \cdots + 3u^2 + 1)(u^{74} - 3u^{73} + \cdots - 176u + 1003)$
c_5	$(u^{14} + u^{13} + \cdots + u + 1)(u^{74} + 18u^{72} + \cdots + 5u + 1)$
c_6	$(u^{14} + 2u^{13} + \cdots + 2u + 1)(u^{74} - u^{73} + \cdots + 36u + 37)$
c_7	$(u^{14} + 2u^{13} + u^{12} - 2u^{11} - 4u^{10} - 2u^9 + 4u^8 + 6u^7 + 2u^6 - 2u^4 - 2u^3 + 1)$ $\cdot (u^{74} - 5u^{73} + \cdots - 20u + 1)$
c_8, c_9	$(u^{14} + 8u^{12} + \cdots + 4u^2 + 1)(u^{74} - u^{73} + \cdots + 22u + 1)$
c_{10}	$(u^{14} - 2u^{13} + \cdots - 2u + 1)(u^{74} - u^{73} + \cdots + 36u + 37)$
c_{11}	$(u^{14} + u^{12} - 3u^{11} - 2u^{10} - 2u^9 + u^8 + 3u^7 + 5u^6 + u^5 + u^4 - 2u^3 + 1)$ $\cdot (u^{74} - 5u^{73} + \cdots + 300u + 125)$

IV. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1, c_5	$(y^{14} + 7y^{13} + \cdots + 9y + 1)(y^{74} + 36y^{73} + \cdots - 17y + 1)$
c_2	$(y^{14} + 7y^{13} + \cdots + 5y + 1)(y^{74} + 12y^{73} + \cdots - 77y + 1)$
c_3, c_8, c_9	$(y^{14} + 16y^{13} + \cdots + 8y + 1)(y^{74} + 77y^{73} + \cdots - 58y + 1)$
c_4	$(y^{14} + 8y^{13} + \cdots + 6y + 1)$ $\cdot (y^{74} + 29y^{73} + \cdots + 34287672y + 1006009)$
c_6, c_{10}	$(y^{14} - 14y^{13} + \cdots - 12y + 1)(y^{74} - 57y^{73} + \cdots - 4034y + 1369)$
c_7	$(y^{14} - 2y^{13} + \cdots - 4y^2 + 1)(y^{74} - 9y^{73} + \cdots + 14y + 1)$
c_{11}	$(y^{14} + 2y^{13} + \cdots + 2y^2 + 1)(y^{74} + 15y^{73} + \cdots + 308750y + 15625)$