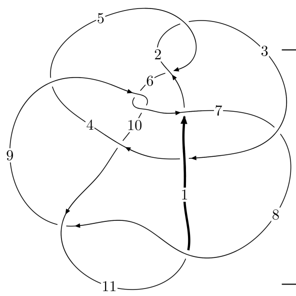
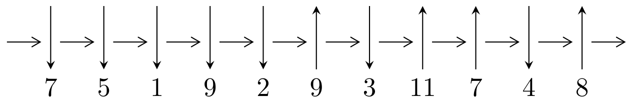
$11n_{168}$ ($K11n_{168}$)



A knot diagram[1]

Linearized knot diagam



Solving Sequence

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

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

$$\begin{aligned}
I_1^u = \langle & 115868u^{24} - 821040u^{23} + \cdots + 306031b - 602429, \\
& 1065901u^{24} - 8567064u^{23} + \cdots + 1224124a + 13420127,\ u^{25} - 8u^{24} + \cdots + 55u - 4\rangle \\
I_2^u = \langle & -u^{11}a - u^{11} + \cdots + b - a,\ u^{10}a + 3u^{11} + \cdots + a - 9, \\
& u^{12} + 3u^{11} + 9u^{10} + 16u^9 + 25u^8 + 30u^7 + 28u^6 + 22u^5 + 10u^4 + 3u^3 - u^2 - 2u + 1\rangle \\
I_3^u = \langle & u^{11} + 4u^{10} + 11u^9 + 22u^8 + 35u^7 + 47u^6 + 52u^5 + 48u^4 + 37u^3 + 22u^2 + b + 10u + 2, \\
& 3u^{11} + 15u^{10} + 43u^9 + 91u^8 + 151u^7 + 210u^6 + 247u^5 + 242u^4 + 199u^3 + 133u^2 + 5a + 66u + 20, \\
& u^{12} + 5u^{11} + 16u^{10} + 37u^9 + 67u^8 + 100u^7 + 124u^6 + 129u^5 + 113u^4 + 81u^3 + 47u^2 + 20u + 5\rangle
\end{aligned}$$

* 3 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 61 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. $\boldsymbol{I_1^u = \langle 1.16 \times 10^5 u^{24} - 8.21 \times 10^5 u^{23} + \cdots + 3.06 \times 10^5 b - 6.02 \times 10^5,\ 1.07 \times 10^6 u^{24} - 8.57 \times 10^6 u^{23} + \cdots + 1.22 \times 10^6 a + 1.34 \times 10^7,\ u^{25} - 8u^{24} + \cdots + 55u - 4\rangle}$

(i) Arc colorings

$$a_8 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$
$$a_{11} = \begin{pmatrix} 0 \\ u \end{pmatrix}$$
$$a_9 = \begin{pmatrix} 1 \\ -u^2 \end{pmatrix}$$
$$a_1 = \begin{pmatrix} u \\ u \end{pmatrix}$$
$$a_3 = \begin{pmatrix} -0.870746u^{24} + 6.99853u^{23} + \cdots + 87.0860u - 10.9630 \\ -0.378615u^{24} + 2.68287u^{23} + \cdots - 14.1356u + 1.96852 \end{pmatrix}$$
$$a_4 = \begin{pmatrix} -0.524689u^{24} + 3.93260u^{23} + \cdots + 64.2937u - 9.44858 \\ -0.0325588u^{24} - 0.383056u^{23} + \cdots - 36.9280u + 3.48298 \end{pmatrix}$$
$$a_5 = \begin{pmatrix} -0.768694u^{24} + 5.93994u^{23} + \cdots + 88.7503u - 11.8719 \\ -0.398251u^{24} + 1.85942u^{23} + \cdots - 32.9107u + 3.26180 \end{pmatrix}$$
$$a_2 = \begin{pmatrix} -1.38249u^{24} + 10.8931u^{23} + \cdots + 95.0899u - 8.66735 \\ -0.943676u^{24} + 6.44578u^{23} + \cdots - 15.9909u + 1.92923 \end{pmatrix}$$
$$a_6 = \begin{pmatrix} -0.221379u^{24} + 2.09877u^{23} + \cdots + 51.1671u - 7.44194 \\ -0.205861u^{24} + 1.51059u^{23} + \cdots + 6.56495u - 0.0489787 \end{pmatrix}$$
$$a_7 = \begin{pmatrix} 0.308644u^{24} - 2.51950u^{23} + \cdots - 38.8206u + 6.17994 \\ 0.0434891u^{24} - 0.354768u^{23} + \cdots + 8.34298u - 1.06062 \end{pmatrix}$$
$$a_{10} = \begin{pmatrix} 0.125366u^{24} - 0.975163u^{23} + \cdots - 16.9600u + 3.39492 \\ -0.190134u^{24} + 1.63610u^{23} + \cdots + 19.4081u - 1.61106 \end{pmatrix}$$
$$a_{10} = \begin{pmatrix} 0.125366u^{24} - 0.975163u^{23} + \cdots - 16.9600u + 3.39492 \\ -0.190134u^{24} + 1.63610u^{23} + \cdots + 19.4081u - 1.61106 \end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= \frac{23011}{27821}u^{24} - \frac{191892}{27821}u^{23} + \cdots - \frac{108563}{27821}u - \frac{344142}{27821}$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{25} + 22u^{24} + \cdots + 40960u + 4096$
c_2, c_5	$u^{25} - 8u^{24} + \cdots - 3u + 2$
c_3, c_7	$u^{25} - 7u^{23} + \cdots - 8u + 1$
c_4	$u^{25} - u^{24} + \cdots - 80u + 85$
c_6, c_9	$u^{25} + 15u^{23} + \cdots - u + 1$
c_8, c_{11}	$u^{25} + 8u^{24} + \cdots + 55u + 4$
c_{10}	$u^{25} - 8u^{23} + \cdots - 18u + 28$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{25} - 4y^{24} + \cdots + 92274688y - 16777216$
c_2, c_5	$y^{25} + 8y^{24} + \cdots - 51y - 4$
c_3, c_7	$y^{25} - 14y^{24} + \cdots + 22y - 1$
c_4	$y^{25} - 23y^{24} + \cdots + 73550y - 7225$
c_6, c_9	$y^{25} + 30y^{24} + \cdots + 3y - 1$
c_8, c_{11}	$y^{25} + 16y^{24} + \cdots + 753y - 16$
c_{10}	$y^{25} - 16y^{24} + \cdots + 4188y - 784$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 1.000760 + 0.214781I$ $a = 0.181546 + 0.179308I$ $b = 1.019350 - 0.663007I$	$-4.81720 + 2.41116I$	$-4.79174 - 2.48268I$
$u = 1.000760 - 0.214781I$ $a = 0.181546 - 0.179308I$ $b = 1.019350 + 0.663007I$	$-4.81720 - 2.41116I$	$-4.79174 + 2.48268I$
$u = -1.012850 + 0.261202I$ $a = -0.316874 + 0.202205I$ $b = -0.149236 + 0.123502I$	$1.91022 - 0.92265I$	$6.06720 + 6.51070I$
$u = -1.012850 - 0.261202I$ $a = -0.316874 - 0.202205I$ $b = -0.149236 - 0.123502I$	$1.91022 + 0.92265I$	$6.06720 - 6.51070I$
$u = 0.041993 + 0.934875I$ $a = 1.48887 + 0.80671I$ $b = 1.113720 - 0.401444I$	$-3.12369 + 0.06362I$	$-5.51965 + 0.12740I$
$u = 0.041993 - 0.934875I$ $a = 1.48887 - 0.80671I$ $b = 1.113720 + 0.401444I$	$-3.12369 - 0.06362I$	$-5.51965 - 0.12740I$
$u = 0.011472 + 1.113580I$ $a = 1.64705 + 0.28486I$ $b = 1.055800 - 0.669349I$	$-3.62398 + 0.55768I$	$-7.12692 - 1.89809I$
$u = 0.011472 - 1.113580I$ $a = 1.64705 - 0.28486I$ $b = 1.055800 + 0.669349I$	$-3.62398 - 0.55768I$	$-7.12692 + 1.89809I$
$u = 0.247489 + 1.108210I$ $a = -1.82938 - 0.09919I$ $b = -1.12346 + 1.07222I$	$1.38725 + 4.87941I$	$-6.34329 + 0.12140I$
$u = 0.247489 - 1.108210I$ $a = -1.82938 + 0.09919I$ $b = -1.12346 - 1.07222I$	$1.38725 - 4.87941I$	$-6.34329 - 0.12140I$

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 1.168910 + 0.049676I$ $a = -0.170031 + 0.065726I$ $b = -0.991209 + 0.696352I$	$-4.29953 + 9.06645I$	$-3.72304 - 7.02542I$
$u = 1.168910 - 0.049676I$ $a = -0.170031 - 0.065726I$ $b = -0.991209 - 0.696352I$	$-4.29953 - 9.06645I$	$-3.72304 + 7.02542I$
$u = -0.159099 + 1.201110I$ $a = -1.015220 - 0.149383I$ $b = -0.657268 + 0.350420I$	$-1.98209 - 2.65903I$	$-3.09005 + 4.34714I$
$u = -0.159099 - 1.201110I$ $a = -1.015220 + 0.149383I$ $b = -0.657268 - 0.350420I$	$-1.98209 + 2.65903I$	$-3.09005 - 4.34714I$
$u = 0.442257 + 0.365564I$ $a = 1.133650 - 0.436737I$ $b = -0.647135 - 0.820882I$	$3.61375 - 2.05944I$	$-4.90254 + 7.19693I$
$u = 0.442257 - 0.365564I$ $a = 1.133650 + 0.436737I$ $b = -0.647135 + 0.820882I$	$3.61375 + 2.05944I$	$-4.90254 - 7.19693I$
$u = 0.42788 + 1.38215I$ $a = 1.70744 + 0.14723I$ $b = 1.36183 - 0.94506I$	$-9.79096 + 7.40216I$	$-7.26136 - 3.90619I$
$u = 0.42788 - 1.38215I$ $a = 1.70744 - 0.14723I$ $b = 1.36183 + 0.94506I$	$-9.79096 - 7.40216I$	$-7.26136 + 3.90619I$
$u = 0.53216 + 1.39760I$ $a = -1.63900 - 0.14616I$ $b = -1.38003 + 0.93988I$	$-8.8717 + 15.0132I$	$-5.71790 - 7.82964I$
$u = 0.53216 - 1.39760I$ $a = -1.63900 + 0.14616I$ $b = -1.38003 - 0.93988I$	$-8.8717 - 15.0132I$	$-5.71790 + 7.82964I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.68747 + 1.33439I$ $a = 0.628461 + 0.691868I$ $b = 1.015420 + 0.130266I$	$-7.96688 + 3.80546I$	$-9.00823 - 2.72232I$
$u = 0.68747 - 1.33439I$ $a = 0.628461 - 0.691868I$ $b = 1.015420 - 0.130266I$	$-7.96688 - 3.80546I$	$-9.00823 + 2.72232I$
$u = 0.54107 + 1.49661I$ $a = -0.679365 - 0.581046I$ $b = -0.907003 - 0.057306I$	$-8.86649 - 2.64359I$	$-10.06958 + 2.50086I$
$u = 0.54107 - 1.49661I$ $a = -0.679365 + 0.581046I$ $b = -0.907003 + 0.057306I$	$-8.86649 + 2.64359I$	$-10.06958 - 2.50086I$
$u = 0.140989$ $a = -3.52430$ $b = 0.578442$	-0.898624	-11.0260

II.

$\boldsymbol{I_2^u = \langle -u^{11}a - u^{11} + \cdots + b - a,\ u^{10}a + 3u^{11} + \cdots + a - 9,\ u^{12} + 3u^{11} + \cdots - 2u + 1\rangle}$

(i) Arc colorings

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

$$a_{11} = \begin{pmatrix} 0 \\ u \end{pmatrix}$$

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

$$a_1 = \begin{pmatrix} u \\ u \end{pmatrix}$$

$$a_3 = \begin{pmatrix} a \\ u^{11}a + u^{11} + \cdots - 2au + a \end{pmatrix}$$

$$a_4 = \begin{pmatrix} -u^{11}a - 2u^{10}a + \cdots + 3au + u \\ u^{11} + 4u^{10} + \cdots + au + u \end{pmatrix}$$

$$a_5 = \begin{pmatrix} u^{10} + 2u^9 + \cdots + a + 1 \\ -u^{11}a + u^{11} + \cdots - a + u \end{pmatrix}$$

$$a_2 = \begin{pmatrix} u^9a - u^{10} + \cdots + a - 2 \\ -u^{11} - 4u^{10} + \cdots + a + 2u \end{pmatrix}$$

$$a_6 = \begin{pmatrix} u^{11}a + 2u^{10}a + \cdots - u + 3 \\ u^{11} + 4u^{10} + \cdots - 2a - u \end{pmatrix}$$

$$a_7 = \begin{pmatrix} u^9a - u^{10} + \cdots + a - 2 \\ -u^{11} - 4u^{10} + \cdots + a + u \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} -2u^{11}a - 6u^{10}a + \cdots - a + 2 \\ -u^{11}a + u^{11} + \cdots - a + 5u \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} -2u^{11}a - 6u^{10}a + \cdots - a + 2 \\ -u^{11}a + u^{11} + \cdots - a + 5u \end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes

$= 4u^{11} + 4u^{10} + 12u^9 - 4u^7 - 20u^6 - 28u^5 - 12u^4 - 8u^3 + 12u^2 + 8u - 6$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$(u-1)^{24}$
c_2, c_5	$(u^{12}+5u^{11}+\cdots+3u^2+1)^2$
c_3, c_7	$u^{24}-u^{23}+\cdots-4u+1$
c_4	$u^{24}+u^{23}+\cdots+162u+27$
c_6, c_9	$u^{24}+3u^{23}+\cdots+400u+109$
c_8, c_{11}	$(u^{12}-3u^{11}+\cdots+2u+1)^2$
c_{10}	$u^{24}+u^{23}+\cdots-774u+135$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$(y-1)^{24}$
c_2, c_5	$(y^{12}+y^{11}+\cdots+6y+1)^2$
c_3, c_7	$y^{24}+3y^{23}+\cdots-8y+1$
c_4	$y^{24}-21y^{23}+\cdots+93636y+729$
c_6, c_9	$y^{24}+15y^{23}+\cdots-39228y+11881$
c_8, c_{11}	$(y^{12}+9y^{11}+\cdots-6y+1)^2$
c_{10}	$y^{24}-17y^{23}+\cdots-49896y+18225$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -1.002830 + 0.154838I$ $a = -0.348206 + 0.268306I$ $b = -0.387233 - 0.109050I$	$1.93604 - 0.91968I$	$3.53074 + 7.18196I$
$u = -1.002830 + 0.154838I$ $a = -0.263185 + 0.207938I$ $b = 0.097566 + 0.372381I$	$1.93604 - 0.91968I$	$3.53074 + 7.18196I$
$u = -1.002830 - 0.154838I$ $a = -0.348206 - 0.268306I$ $b = -0.387233 + 0.109050I$	$1.93604 + 0.91968I$	$3.53074 - 7.18196I$
$u = -1.002830 - 0.154838I$ $a = -0.263185 - 0.207938I$ $b = 0.097566 - 0.372381I$	$1.93604 + 0.91968I$	$3.53074 - 7.18196I$
$u = 0.170454 + 1.138930I$ $a = -0.96275 - 1.64559I$ $b = -1.07597 - 2.21108I$	$-6.29691 + 5.40399I$	$-10.52298 - 8.56336I$
$u = 0.170454 + 1.138930I$ $a = 2.66189 - 0.86518I$ $b = 0.624755 - 0.225337I$	$-6.29691 + 5.40399I$	$-10.52298 - 8.56336I$
$u = 0.170454 - 1.138930I$ $a = -0.96275 + 1.64559I$ $b = -1.07597 + 2.21108I$	$-6.29691 - 5.40399I$	$-10.52298 + 8.56336I$
$u = 0.170454 - 1.138930I$ $a = 2.66189 + 0.86518I$ $b = 0.624755 + 0.225337I$	$-6.29691 - 5.40399I$	$-10.52298 + 8.56336I$
$u = 0.001213 + 1.239870I$ $a = 1.67353 + 1.23840I$ $b = 1.63727 + 1.77021I$	$-7.81112 - 2.53747I$	$-14.4387 + 1.7127I$
$u = 0.001213 + 1.239870I$ $a = -2.08845 + 1.27481I$ $b = -0.659423 - 0.044313I$	$-7.81112 - 2.53747I$	$-14.4387 + 1.7127I$

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.001213 - 1.239870I$ $a = 1.67353 - 1.23840I$ $b = 1.63727 - 1.77021I$	$-7.81112 + 2.53747I$	$-14.4387 - 1.7127I$
$u = 0.001213 - 1.239870I$ $a = -2.08845 - 1.27481I$ $b = -0.659423 + 0.044313I$	$-7.81112 + 2.53747I$	$-14.4387 - 1.7127I$
$u = -0.521704 + 1.146910I$ $a = 0.562645 - 0.435117I$ $b = 0.625850 + 0.653229I$	$-1.08693 - 4.46082I$	$-0.35199 + 4.72827I$
$u = -0.521704 + 1.146910I$ $a = -1.54745 + 0.17149I$ $b = -1.281210 - 0.495305I$	$-1.08693 - 4.46082I$	$-0.35199 + 4.72827I$
$u = -0.521704 - 1.146910I$ $a = 0.562645 + 0.435117I$ $b = 0.625850 - 0.653229I$	$-1.08693 + 4.46082I$	$-0.35199 - 4.72827I$
$u = -0.521704 - 1.146910I$ $a = -1.54745 - 0.17149I$ $b = -1.281210 + 0.495305I$	$-1.08693 + 4.46082I$	$-0.35199 - 4.72827I$
$u = -0.47799 + 1.39365I$ $a = 1.107670 + 0.201975I$ $b = 1.007830 + 0.931272I$	$-2.89796 - 6.22910I$	$-8.04009 + 11.28166I$
$u = -0.47799 + 1.39365I$ $a = -1.344630 + 0.364358I$ $b = -0.968657 - 0.487749I$	$-2.89796 - 6.22910I$	$-8.04009 + 11.28166I$
$u = -0.47799 - 1.39365I$ $a = 1.107670 - 0.201975I$ $b = 1.007830 - 0.931272I$	$-2.89796 + 6.22910I$	$-8.04009 - 11.28166I$
$u = -0.47799 - 1.39365I$ $a = -1.344630 - 0.364358I$ $b = -0.968657 + 0.487749I$	$-2.89796 + 6.22910I$	$-8.04009 - 11.28166I$

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.330854 + 0.169612I$ $a = 1.68415 - 2.07618I$ $b = 0.708011 + 0.906125I$	$-3.58234 - 3.33657I$	$-2.17703 + 1.92424I$
$u = 0.330854 + 0.169612I$ $a = -3.63521 - 0.47890I$ $b = -0.828793 + 0.821143I$	$-3.58234 - 3.33657I$	$-2.17703 + 1.92424I$
$u = 0.330854 - 0.169612I$ $a = 1.68415 + 2.07618I$ $b = 0.708011 - 0.906125I$	$-3.58234 + 3.33657I$	$-2.17703 - 1.92424I$
$u = 0.330854 - 0.169612I$ $a = -3.63521 + 0.47890I$ $b = -0.828793 - 0.821143I$	$-3.58234 + 3.33657I$	$-2.17703 - 1.92424I$

III. $I_3^u =$
$\langle u^{11}+4u^{10}+\cdots+b+2,\ 3u^{11}+15u^{10}+\cdots+5a+20,\ u^{12}+5u^{11}+\cdots+20u+5\rangle$

(i) Arc colorings

$$a_8 = \begin{pmatrix}1\\0\end{pmatrix}$$
$$a_{11} = \begin{pmatrix}0\\u\end{pmatrix}$$
$$a_9 = \begin{pmatrix}1\\-u^2\end{pmatrix}$$
$$a_1 = \begin{pmatrix}u\\u\end{pmatrix}$$
$$a_3 = \begin{pmatrix}-\frac{3}{5}u^{11}-3u^{10}+\cdots-\frac{66}{5}u-4\\-u^{11}-4u^{10}+\cdots-10u-2\end{pmatrix}$$
$$a_4 = \begin{pmatrix}\frac{2}{5}u^{11}+2u^{10}+\cdots+\frac{24}{5}u+1\\u^{10}+4u^9+\cdots+8u+3\end{pmatrix}$$
$$a_5 = \begin{pmatrix}\frac{2}{5}u^{11}+2u^{10}+\cdots-\frac{6}{5}u-2\\u^{10}+4u^9+\cdots+8u+3\end{pmatrix}$$
$$a_2 = \begin{pmatrix}-\frac{9}{5}u^{11}-9u^{10}+\cdots-\frac{173}{5}u-9\\-u^{11}-5u^{10}+\cdots-10u-1\end{pmatrix}$$
$$a_6 = \begin{pmatrix}\frac{4}{5}u^{11}+4u^{10}+\cdots+\frac{43}{5}u+2\\u^{11}+4u^{10}+\cdots+5u+1\end{pmatrix}$$
$$a_7 = \begin{pmatrix}\frac{4}{5}u^{11}+4u^{10}+\cdots+\frac{48}{5}u+3\\u^{11}+4u^{10}+\cdots+5u+1\end{pmatrix}$$
$$a_{10} = \begin{pmatrix}\frac{1}{5}u^{11}+u^{10}+\cdots+\frac{37}{5}u+2\\-u^2-u-1\end{pmatrix}$$
$$a_{10} = \begin{pmatrix}\frac{1}{5}u^{11}+u^{10}+\cdots+\frac{37}{5}u+2\\-u^2-u-1\end{pmatrix}$$

(ii) Obstruction class $= 1$

(iii) Cusp Shapes
$= -4u^{11}-14u^{10}-36u^9-61u^8-79u^7-77u^6-49u^5-8u^4+24u^3+38u^2+30u+14$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{12} - 3u^{11} + \cdots + 2u + 5$
c_2	$u^{12} - 5u^{11} + \cdots - 3u + 1$
c_3, c_7	$u^{12} + u^{10} + 2u^9 + 4u^8 + 3u^7 + 5u^6 + 5u^5 + 6u^4 + 3u^3 + 3u^2 + 3u + 1$
c_4	$u^{12} - u^{11} + \cdots + 11u + 5$
c_5	$u^{12} + 5u^{11} + \cdots + 3u + 1$
c_6	$u^{12} + u^{10} - 3u^8 - u^7 - 2u^6 - 3u^5 + 9u^4 + 2u^3 - 4u^2 + 1$
c_8	$u^{12} + 5u^{11} + \cdots + 20u + 5$
c_9	$u^{12} + u^{10} - 3u^8 + u^7 - 2u^6 + 3u^5 + 9u^4 - 2u^3 - 4u^2 + 1$
c_{10}	$u^{12} - 4u^{10} + u^9 + 9u^8 - u^7 - 10u^6 + u^5 + 7u^4 - 4u^3 + 2u^2 - 2u + 1$
c_{11}	$u^{12} - 5u^{11} + \cdots - 20u + 5$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{12} - 3y^{11} + \cdots - 104y + 25$
c_2, c_5	$y^{12} + 7y^{11} + \cdots + 11y + 1$
c_3, c_7	$y^{12} + 2y^{11} + \cdots - 3y + 1$
c_4	$y^{12} - 7y^{11} + \cdots - 11y + 25$
c_6, c_9	$y^{12} + 2y^{11} + \cdots - 8y + 1$
c_8, c_{11}	$y^{12} + 7y^{11} + \cdots + 70y + 25$
c_{10}	$y^{12} - 8y^{11} + \cdots + 2y^2 + 1$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_3^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.223604 + 0.992901I$ $a = 1.36241 + 0.84935I$ $b = 0.351412 + 0.975594I$	$-5.37548 + 4.45869I$	$-5.23379 - 2.73299I$
$u = 0.223604 - 0.992901I$ $a = 1.36241 - 0.84935I$ $b = 0.351412 - 0.975594I$	$-5.37548 - 4.45869I$	$-5.23379 + 2.73299I$
$u = -0.693815 + 0.478519I$ $a = -0.508326 - 0.424398I$ $b = 0.603205 - 0.775464I$	$4.01613 + 1.54035I$	$3.24789 + 1.08803I$
$u = -0.693815 - 0.478519I$ $a = -0.508326 + 0.424398I$ $b = 0.603205 + 0.775464I$	$4.01613 - 1.54035I$	$3.24789 - 1.08803I$
$u = -0.361271 + 1.125220I$ $a = 1.62540 - 0.03123I$ $b = 1.02625 + 1.07318I$	$1.85485 - 5.48541I$	$0.93921 + 8.00832I$
$u = -0.361271 - 1.125220I$ $a = 1.62540 + 0.03123I$ $b = 1.02625 - 1.07318I$	$1.85485 + 5.48541I$	$0.93921 - 8.00832I$
$u = 0.075522 + 1.207100I$ $a = -1.29960 - 0.56401I$ $b = -0.504389 - 0.932104I$	$-6.48342 - 2.87353I$	$-6.21901 + 3.05514I$
$u = 0.075522 - 1.207100I$ $a = -1.29960 + 0.56401I$ $b = -0.504389 + 0.932104I$	$-6.48342 + 2.87353I$	$-6.21901 - 3.05514I$
$u = -1.199800 + 0.312222I$ $a = -0.079749 + 0.143999I$ $b = -0.522926 + 0.172175I$	$1.62052 - 0.67051I$	$-10.59498 - 6.84644I$
$u = -1.199800 - 0.312222I$ $a = -0.079749 - 0.143999I$ $b = -0.522926 - 0.172175I$	$1.62052 + 0.67051I$	$-10.59498 + 6.84644I$

Solutions to I_3^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.54424 + 1.36667I$ $a = -1.100140 + 0.144255I$ $b = -0.953548 - 0.611838I$	$-2.21233 - 5.51031I$	$-2.13932 + 5.32316I$
$u = -0.54424 - 1.36667I$ $a = -1.100140 - 0.144255I$ $b = -0.953548 + 0.611838I$	$-2.21233 + 5.51031I$	$-2.13932 - 5.32316I$

IV. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1	$((u-1)^{24})(u^{12}-3u^{11}+\cdots+2u+5)$ $\cdot(u^{25}+22u^{24}+\cdots+40960u+4096)$
c_2	$(u^{12}-5u^{11}+\cdots-3u+1)(u^{12}+5u^{11}+\cdots+3u^2+1)^2$ $\cdot(u^{25}-8u^{24}+\cdots-3u+2)$
c_3, c_7	$(u^{12}+u^{10}+2u^9+4u^8+3u^7+5u^6+5u^5+6u^4+3u^3+3u^2+3u+1)$ $\cdot(u^{24}-u^{23}+\cdots-4u+1)(u^{25}-7u^{23}+\cdots-8u+1)$
c_4	$(u^{12}-u^{11}+\cdots+11u+5)(u^{24}+u^{23}+\cdots+162u+27)$ $\cdot(u^{25}-u^{24}+\cdots-80u+85)$
c_5	$((u^{12}+5u^{11}+\cdots+3u^2+1)^2)(u^{12}+5u^{11}+\cdots+3u+1)$ $\cdot(u^{25}-8u^{24}+\cdots-3u+2)$
c_6	$(u^{12}+u^{10}-3u^8-u^7-2u^6-3u^5+9u^4+2u^3-4u^2+1)$ $\cdot(u^{24}+3u^{23}+\cdots+400u+109)(u^{25}+15u^{23}+\cdots-u+1)$
c_8	$((u^{12}-3u^{11}+\cdots+2u+1)^2)(u^{12}+5u^{11}+\cdots+20u+5)$ $\cdot(u^{25}+8u^{24}+\cdots+55u+4)$
c_9	$(u^{12}+u^{10}-3u^8+u^7-2u^6+3u^5+9u^4-2u^3-4u^2+1)$ $\cdot(u^{24}+3u^{23}+\cdots+400u+109)(u^{25}+15u^{23}+\cdots-u+1)$
c_{10}	$(u^{12}-4u^{10}+u^9+9u^8-u^7-10u^6+u^5+7u^4-4u^3+2u^2-2u+1)$ $\cdot(u^{24}+u^{23}+\cdots-774u+135)(u^{25}-8u^{23}+\cdots-18u+28)$
c_{11}	$(u^{12}-5u^{11}+\cdots-20u+5)(u^{12}-3u^{11}+\cdots+2u+1)^2$ $\cdot(u^{25}+8u^{24}+\cdots+55u+4)$

V. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1	$((y-1)^{24})(y^{12}-3y^{11}+\cdots-104y+25)$ $\cdot(y^{25}-4y^{24}+\cdots+92274688y-16777216)$
c_2, c_5	$((y^{12}+y^{11}+\cdots+6y+1)^2)(y^{12}+7y^{11}+\cdots+11y+1)$ $\cdot(y^{25}+8y^{24}+\cdots-51y-4)$
c_3, c_7	$(y^{12}+2y^{11}+\cdots-3y+1)(y^{24}+3y^{23}+\cdots-8y+1)$ $\cdot(y^{25}-14y^{24}+\cdots+22y-1)$
c_4	$(y^{12}-7y^{11}+\cdots-11y+25)(y^{24}-21y^{23}+\cdots+93636y+729)$ $\cdot(y^{25}-23y^{24}+\cdots+73550y-7225)$
c_6, c_9	$(y^{12}+2y^{11}+\cdots-8y+1)(y^{24}+15y^{23}+\cdots-39228y+11881)$ $\cdot(y^{25}+30y^{24}+\cdots+3y-1)$
c_8, c_{11}	$(y^{12}+7y^{11}+\cdots+70y+25)(y^{12}+9y^{11}+\cdots-6y+1)^2$ $\cdot(y^{25}+16y^{24}+\cdots+753y-16)$
c_{10}	$(y^{12}-8y^{11}+\cdots+2y^2+1)(y^{24}-17y^{23}+\cdots-49896y+18225)$ $\cdot(y^{25}-16y^{24}+\cdots+4188y-784)$