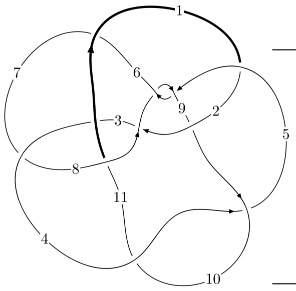
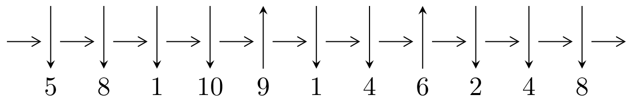
$11n_{175}$ ($K11n_{175}$)



A knot diagram[1]

Linearized knot diagam



Solving Sequence

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

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

$$
\begin{aligned}
I_1^u &= \langle 3u^{17} - 27u^{16} + \cdots + 2b - 4,\ -u^{17} + 6u^{16} + \cdots + 2a - 35,\ u^{18} - 9u^{17} + \cdots - 50u + 4 \rangle \\
I_2^u &= \langle -43u^5a^3 + 57u^5a^2 + \cdots + 93a + 11,\ -u^5a^3 - 3u^5a + \cdots - 8a + 28,\ u^6 + u^5 + 3u^4 + 2u^3 + 2u^2 + u - 1 \rangle \\
I_3^u &= \langle -u^8 - u^7 - 3u^6 - 2u^5 - 4u^4 - 3u^3 - 3u^2 + b - 2u - 1, \\
&\quad u^9 + 2u^8 + 3u^7 + 5u^6 + 4u^5 + 8u^4 + 3u^3 + 5u^2 + 3a + u + 1, \\
&\quad u^{10} + 2u^9 + 6u^8 + 8u^7 + 13u^6 + 14u^5 + 15u^4 + 14u^3 + 10u^2 + 7u + 3 \rangle
\end{aligned}
$$

* 3 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 52 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. $I^u_1 =$
$\langle 3u^{17}-27u^{16}+\cdots+2b-4,\ -u^{17}+6u^{16}+\cdots+2a-35,\ u^{18}-9u^{17}+\cdots-50u+4\rangle$

(i) Arc colorings

$$a_5 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$
$$a_9 = \begin{pmatrix} 0 \\ u \end{pmatrix}$$
$$a_2 = \begin{pmatrix} \frac{1}{2}u^{17} - 3u^{16} + \cdots - \frac{273}{2}u + \frac{35}{2} \\ -\frac{3}{2}u^{17} + \frac{27}{2}u^{16} + \cdots - \frac{85}{2}u + 2 \end{pmatrix}$$
$$a_6 = \begin{pmatrix} 1 \\ -u^2 \end{pmatrix}$$
$$a_{10} = \begin{pmatrix} \frac{9}{4}u^{17} - \frac{75}{4}u^{16} + \cdots + \frac{731}{4}u - 18 \\ -\frac{3}{2}u^{17} + \frac{25}{2}u^{16} + \cdots - \frac{187}{2}u + 9 \end{pmatrix}$$
$$a_1 = \begin{pmatrix} -u^{17} + \frac{21}{2}u^{16} + \cdots - 179u + \frac{39}{2} \\ -\frac{3}{2}u^{17} + \frac{27}{2}u^{16} + \cdots - \frac{85}{2}u + 2 \end{pmatrix}$$
$$a_4 = \begin{pmatrix} -u^{17} + \frac{19}{2}u^{16} + \cdots - 261u + \frac{55}{2} \\ \frac{1}{2}u^{17} - \frac{7}{2}u^{16} + \cdots + \frac{179}{2}u - 10 \end{pmatrix}$$
$$a_3 = \begin{pmatrix} -\frac{3}{2}u^{17} + 14u^{16} + \cdots - \frac{331}{2}u + \frac{39}{2} \\ -\frac{3}{2}u^{17} + \frac{25}{2}u^{16} + \cdots + \frac{57}{2}u - 4 \end{pmatrix}$$
$$a_8 = \begin{pmatrix} -u \\ u^3 + u \end{pmatrix}$$
$$a_7 = \begin{pmatrix} \frac{5}{4}u^{17} - \frac{43}{4}u^{16} + \cdots + \frac{327}{4}u - 7 \\ -\frac{1}{2}u^{17} + \frac{9}{2}u^{16} + \cdots - \frac{145}{2}u + 7 \end{pmatrix}$$
$$a_{11} = \begin{pmatrix} -u^{17} + \frac{21}{2}u^{16} + \cdots - 198u + \frac{43}{2} \\ -\frac{3}{2}u^{17} + \frac{27}{2}u^{16} + \cdots + 194u^2 - \frac{47}{2}u \end{pmatrix}$$
$$a_{11} = \begin{pmatrix} -u^{17} + \frac{21}{2}u^{16} + \cdots - 198u + \frac{43}{2} \\ -\frac{3}{2}u^{17} + \frac{27}{2}u^{16} + \cdots + 194u^2 - \frac{47}{2}u \end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes
$= -3u^{17} + 27u^{16} - 140u^{15} + 513u^{14} - 1455u^{13} + 3348u^{12} - 6412u^{11} + 10399u^{10} - 14401u^9 + 17095u^8 - 17369u^7 + 14980u^6 - 10819u^5 + 6362u^4 - 2908u^3 + 949u^2 - 170u - 2$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1, c_9	$u^{18} - 2u^{16} + \cdots + 7u^2 - 1$
c_2, c_6	$u^{18} - 7u^{16} + \cdots - 2u - 13$
c_3	$u^{18} - 13u^{17} + \cdots - 62u - 52$
c_4, c_{10}	$u^{18} + 13u^{17} + \cdots + 608u + 64$
c_5, c_8	$u^{18} + 9u^{17} + \cdots + 50u + 4$
c_7, c_{11}	$u^{18} + 2u^{17} + \cdots + u + 1$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_9	$y^{18} - 4y^{17} + \cdots - 14y + 1$
c_2, c_6	$y^{18} - 14y^{17} + \cdots - 1564y + 169$
c_3	$y^{18} - 19y^{17} + \cdots + 6660y + 2704$
c_4, c_{10}	$y^{18} + 9y^{17} + \cdots - 17408y + 4096$
c_5, c_8	$y^{18} + 13y^{17} + \cdots - 364y + 16$
c_7, c_{11}	$y^{18} - 26y^{17} + \cdots - 21y + 1$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 1.082250 + 0.227691I$ $a = 0.552560 - 1.011470I$ $b = -0.828307 + 0.968844I$	$-2.96562 + 8.53890I$	$-6.56006 - 6.26417I$
$u = 1.082250 - 0.227691I$ $a = 0.552560 + 1.011470I$ $b = -0.828307 - 0.968844I$	$-2.96562 - 8.53890I$	$-6.56006 + 6.26417I$
$u = -0.118459 + 1.148360I$ $a = 0.235904 + 0.462260I$ $b = 0.558784 - 0.216142I$	$-1.23970 - 1.97493I$	$-7.15329 + 4.18348I$
$u = -0.118459 - 1.148360I$ $a = 0.235904 - 0.462260I$ $b = 0.558784 + 0.216142I$	$-1.23970 + 1.97493I$	$-7.15329 - 4.18348I$
$u = 0.119333 + 1.157960I$ $a = -0.466244 - 0.909025I$ $b = -0.996978 + 0.648369I$	$-3.72560 + 1.35027I$	$-12.38494 - 1.13112I$
$u = 0.119333 - 1.157960I$ $a = -0.466244 + 0.909025I$ $b = -0.996978 - 0.648369I$	$-3.72560 - 1.35027I$	$-12.38494 + 1.13112I$
$u = 0.200699 + 1.177200I$ $a = 0.746983 + 1.092830I$ $b = 1.13656 - 1.09868I$	$0.82240 + 4.90619I$	$-8.42983 - 0.71625I$
$u = 0.200699 - 1.177200I$ $a = 0.746983 - 1.092830I$ $b = 1.13656 + 1.09868I$	$0.82240 - 4.90619I$	$-8.42983 + 0.71625I$
$u = 1.48738$ $a = -0.407205$ $b = 0.605669$	-6.56717	-21.0980
$u = 0.46203 + 1.43201I$ $a = -0.460365 - 1.018170I$ $b = -1.24533 + 1.12967I$	$-8.1698 + 13.9821I$	$-9.44231 - 6.99967I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.46203 - 1.43201I$ $a = -0.460365 + 1.018170I$ $b = -1.24533 - 1.12967I$	$-8.1698 - 13.9821I$	$-9.44231 + 6.99967I$
$u = 0.446331 + 0.206443I$ $a = -1.97819 - 0.97124I$ $b = 0.682422 + 0.841875I$	$3.74044 - 2.38337I$	$-9.76739 + 4.47048I$
$u = 0.446331 - 0.206443I$ $a = -1.97819 + 0.97124I$ $b = 0.682422 - 0.841875I$	$3.74044 + 2.38337I$	$-9.76739 - 4.47048I$
$u = 0.51935 + 1.48126I$ $a = 0.115710 + 0.783531I$ $b = 1.100520 - 0.578325I$	$-11.82300 + 6.66028I$	$-12.41949 - 4.41908I$
$u = 0.51935 - 1.48126I$ $a = 0.115710 - 0.783531I$ $b = 1.100520 + 0.578325I$	$-11.82300 - 6.66028I$	$-12.41949 + 4.41908I$
$u = 0.93646 + 1.42974I$ $a = 0.302389 - 0.123907I$ $b = -0.460331 - 0.316302I$	$-5.89009 - 1.65718I$	$-15.9057 + 11.0160I$
$u = 0.93646 - 1.42974I$ $a = 0.302389 + 0.123907I$ $b = -0.460331 + 0.316302I$	$-5.89009 + 1.65718I$	$-15.9057 - 11.0160I$
$u = 0.216637$ $a = 2.30970$ $b = -0.500367$	-0.728249	-13.7760

II. $\boldsymbol{I_2^u = \langle -43u^5a^3 + 57u^5a^2 + \cdots + 93a + 11,\ -u^5a^3 - 3u^5a + \cdots - 8a + 28,\ u^6 + u^5 + 3u^4 + 2u^3 + 2u^2 + u - 1\rangle}$

(i) Arc colorings

$$a_5 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$

$$a_9 = \begin{pmatrix} 0 \\ u \end{pmatrix}$$

$$a_2 = \begin{pmatrix} a \\ 0.394495a^3u^5 - 0.522936a^2u^5 + \cdots - 0.853211a - 0.100917 \end{pmatrix}$$

$$a_6 = \begin{pmatrix} 1 \\ -u^2 \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} -a^2u \\ 0.385321a^3u^5 - 0.394495a^2u^5 + \cdots + 0.724771a - 0.935780 \end{pmatrix}$$

$$a_1 = \begin{pmatrix} 0.394495a^3u^5 - 0.522936a^2u^5 + \cdots + 0.146789a - 0.100917 \\ 0.394495a^3u^5 - 0.522936a^2u^5 + \cdots - 0.853211a - 0.100917 \end{pmatrix}$$

$$a_4 = \begin{pmatrix} 0.321101a^3u^5 - 0.495413a^2u^5 + \cdots - 0.229358a + 0.220183 \\ 0.385321a^3u^5 - 0.394495a^2u^5 + \cdots + 0.724771a + 0.0642202 \end{pmatrix}$$

$$a_3 = \begin{pmatrix} 0.798165a^3u^5 - 1.17431a^2u^5 + \cdots + 0.715596a - 0.366972 \\ 0.862385a^3u^5 - 1.07339a^2u^5 + \cdots + 0.669725a - 0.522936 \end{pmatrix}$$

$$a_8 = \begin{pmatrix} -u \\ u^3 + u \end{pmatrix}$$

$$a_7 = \begin{pmatrix} 0.522936a^3u^5 - 1.32110a^2u^5 + \cdots + 0.0550459a + 2.58716 \\ 0.146789a^3u^5 - 1.05505a^2u^5 + \cdots + 0.752294a - 0.642202 \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} 0.0642202a^3u^5 + 0.100917a^2u^5 + \cdots + 0.954128a - 0.155963 \\ -0.385321a^3u^5 + 0.394495a^2u^5 + \cdots - 0.724771a - 0.0642202 \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} 0.0642202a^3u^5 + 0.100917a^2u^5 + \cdots + 0.954128a - 0.155963 \\ -0.385321a^3u^5 + 0.394495a^2u^5 + \cdots - 0.724771a - 0.0642202 \end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= -\frac{168}{109}u^5a^3 + \frac{172}{109}u^5a^2 + \cdots - \frac{316}{109}a - \frac{682}{109}$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1, c_9	$u^{24} + 5u^{23} + \cdots - 12u + 3$
c_2, c_6	$u^{24} - u^{23} + \cdots - 1976u + 793$
c_3	$(u^6 + 5u^5 + 7u^4 - 2u^2 + 3u - 1)^4$
c_4, c_{10}	$(u^2 - u + 1)^{12}$
c_5, c_8	$(u^6 - u^5 + 3u^4 - 2u^3 + 2u^2 - u - 1)^4$
c_7, c_{11}	$u^{24} + u^{23} + \cdots + 198u + 93$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_9	$y^{24} + 3y^{23} + \cdots - 156y + 9$
c_2, c_6	$y^{24} - 17y^{23} + \cdots - 2553304y + 628849$
c_3	$(y^6 - 11y^5 + 45y^4 - 60y^3 - 10y^2 - 5y + 1)^4$
c_4, c_{10}	$(y^2 + y + 1)^{12}$
c_5, c_8	$(y^6 + 5y^5 + 9y^4 + 4y^3 - 6y^2 - 5y + 1)^4$
c_7, c_{11}	$y^{24} - 25y^{23} + \cdots + 40776y + 8649$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.873214$ $a=\ \ 0.696693+0.745196I$ $b=-0.424035-0.969980I$	$2.72528-2.02988I$	$-5.73050+3.46410I$
$u=-0.873214$ $a=\ \ 0.696693-0.745196I$ $b=-0.424035+0.969980I$	$2.72528+2.02988I$	$-5.73050-3.46410I$
$u=-0.873214$ $a=-0.485602+1.110820I$ $b=\ \ 0.608362-0.650716I$	$2.72528+2.02988I$	$-5.73050-3.46410I$
$u=-0.873214$ $a=-0.485602-1.110820I$ $b=\ \ 0.608362+0.650716I$	$2.72528-2.02988I$	$-5.73050+3.46410I$
$u=\ \ 0.138835+1.234450I$ $a=\ \ 0.047053-0.843430I$ $b=\ \ 0.49525+2.03273I$	$-7.89505-0.05747I$	$-13.42428-0.22068I$
$u=\ \ 0.138835+1.234450I$ $a=-1.67067+0.21330I$ $b=-1.047700+0.059012I$	$-7.89505-0.05747I$	$-13.42428-0.22068I$
$u=\ \ 0.138835+1.234450I$ $a=\ \ 0.010113+0.251086I$ $b=-1.84383-1.47696I$	$-7.89505+4.00229I$	$-13.4243-7.1489I$
$u=\ \ 0.138835+1.234450I$ $a=\ \ 1.34740-1.34211I$ $b=\ \ 0.308548-0.047344I$	$-7.89505+4.00229I$	$-13.4243-7.1489I$
$u=\ \ 0.138835-1.234450I$ $a=\ \ 0.047053+0.843430I$ $b=\ \ 0.49525-2.03273I$	$-7.89505+0.05747I$	$-13.42428+0.22068I$
$u=\ \ 0.138835-1.234450I$ $a=-1.67067-0.21330I$ $b=-1.047700-0.059012I$	$-7.89505+0.05747I$	$-13.42428+0.22068I$

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.138835 - 1.234450I$ $a = 0.010113 - 0.251086I$ $b = -1.84383 + 1.47696I$	$-7.89505 - 4.00229I$	$-13.4243 + 7.1489I$
$u = 0.138835 - 1.234450I$ $a = 1.34740 + 1.34211I$ $b = 0.308548 + 0.047344I$	$-7.89505 - 4.00229I$	$-13.4243 + 7.1489I$
$u = -0.408802 + 1.276380I$ $a = -0.353289 + 0.834565I$ $b = -1.20721 - 1.28821I$	$-1.23922 - 6.62201I$	$-9.41886 + 6.66892I$
$u = -0.408802 + 1.276380I$ $a = -0.070379 + 0.682688I$ $b = -0.269751 - 0.368903I$	$-1.23922 - 2.56224I$	$-9.41886 - 0.25928I$
$u = -0.408802 + 1.276380I$ $a = 0.640625 - 1.150990I$ $b = 0.920794 + 0.792102I$	$-1.23922 - 6.62201I$	$-9.41886 + 6.66892I$
$u = -0.408802 + 1.276380I$ $a = 0.200742 - 0.275636I$ $b = 0.842596 + 0.368915I$	$-1.23922 - 2.56224I$	$-9.41886 - 0.25928I$
$u = -0.408802 - 1.276380I$ $a = -0.353289 - 0.834565I$ $b = -1.20721 + 1.28821I$	$-1.23922 + 6.62201I$	$-9.41886 - 6.66892I$
$u = -0.408802 - 1.276380I$ $a = -0.070379 - 0.682688I$ $b = -0.269751 + 0.368903I$	$-1.23922 + 2.56224I$	$-9.41886 + 0.25928I$
$u = -0.408802 - 1.276380I$ $a = 0.640625 + 1.150990I$ $b = 0.920794 - 0.792102I$	$-1.23922 + 6.62201I$	$-9.41886 - 6.66892I$
$u = -0.408802 - 1.276380I$ $a = 0.200742 + 0.275636I$ $b = 0.842596 - 0.368915I$	$-1.23922 + 2.56224I$	$-9.41886 + 0.25928I$

Solutions to I_2^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.413150$ $a = -0.71019 + 2.16507I$ $b = -1.176440 - 0.634954I$	$-4.19595 + 2.02988I$	$-4.58322 - 3.46410I$
$u = 0.413150$ $a = -0.71019 - 2.16507I$ $b = -1.176440 + 0.634954I$	$-4.19595 - 2.02988I$	$-4.58322 + 3.46410I$
$u = 0.413150$ $a = 2.84750 + 1.53686I$ $b = 0.293413 - 0.894500I$	$-4.19595 + 2.02988I$	$-4.58322 - 3.46410I$
$u = 0.413150$ $a = 2.84750 - 1.53686I$ $b = 0.293413 + 0.894500I$	$-4.19595 - 2.02988I$	$-4.58322 + 3.46410I$

III.

$\boldsymbol{I_3^u = \langle -u^8 - u^7 + \cdots + b - 1,\ u^9 + 2u^8 + \cdots + 3a + 1,\ u^{10} + 2u^9 + \cdots + 7u + 3 \rangle}$

(i) Arc colorings

$$a_5 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$

$$a_9 = \begin{pmatrix} 0 \\ u \end{pmatrix}$$

$$a_2 = \begin{pmatrix} -\frac{1}{3}u^9 - \frac{2}{3}u^8 + \cdots - \frac{1}{3}u - \frac{1}{3} \\ u^8 + u^7 + 3u^6 + 2u^5 + 4u^4 + 3u^3 + 3u^2 + 2u + 1 \end{pmatrix}$$

$$a_6 = \begin{pmatrix} 1 \\ -u^2 \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} \frac{1}{3}u^9 + \frac{2}{3}u^8 + \cdots - \frac{2}{3}u - \frac{5}{3} \\ -u^8 - u^7 - 4u^6 - 3u^5 - 6u^4 - 4u^3 - 4u^2 - 3u - 1 \end{pmatrix}$$

$$a_1 = \begin{pmatrix} -\frac{1}{3}u^9 + \frac{1}{3}u^8 + \cdots + \frac{5}{3}u + \frac{2}{3} \\ u^8 + u^7 + 3u^6 + 2u^5 + 4u^4 + 3u^3 + 3u^2 + 2u + 1 \end{pmatrix}$$

$$a_4 = \begin{pmatrix} -\frac{2}{3}u^9 - \frac{7}{3}u^8 + \cdots - \frac{23}{3}u - \frac{11}{3} \\ u^7 + u^6 + 3u^5 + 2u^4 + 3u^3 + 2u^2 + u + 2 \end{pmatrix}$$

$$a_3 = \begin{pmatrix} \frac{2}{3}u^9 + \frac{4}{3}u^8 + \cdots + \frac{5}{3}u - \frac{1}{3} \\ u^9 + 2u^8 + 5u^7 + 6u^6 + 8u^5 + 8u^4 + 7u^3 + 6u^2 + 3u + 1 \end{pmatrix}$$

$$a_8 = \begin{pmatrix} -u \\ u^3 + u \end{pmatrix}$$

$$a_7 = \begin{pmatrix} \frac{2}{3}u^9 + \frac{4}{3}u^8 + \cdots + \frac{11}{3}u + \frac{5}{3} \\ -u^5 - u^4 - 2u^3 - 2u^2 - 2u - 2 \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} -\frac{1}{3}u^9 + \frac{1}{3}u^8 + \cdots + \frac{8}{3}u + \frac{2}{3} \\ u^4 + u^3 + 2u^2 + u + 1 \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} -\frac{1}{3}u^9 + \frac{1}{3}u^8 + \cdots + \frac{8}{3}u + \frac{2}{3} \\ u^4 + u^3 + 2u^2 + u + 1 \end{pmatrix}$$

(ii) Obstruction class $= 1$

(iii) Cusp Shapes $= 3u^9 + 6u^8 + 16u^7 + 21u^6 + 29u^5 + 34u^4 + 29u^3 + 29u^2 + 16u + 3$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1, c_9	$u^{10} + u^8 - u^7 + 6u^6 - 2u^5 + 4u^4 - 4u^3 + 5u^2 - 2u + 1$
c_2, c_6	$u^{10} - 4u^8 + 3u^7 + 12u^6 + u^5 + 11u^3 + 2u^2 - 2u + 3$
c_3	$u^{10} + 8u^9 + \cdots + 26u + 3$
c_4	$u^{10} + 4u^8 + 8u^6 + 2u^5 + 10u^4 + 3u^3 + 7u^2 + u + 3$
c_5	$u^{10} + 2u^9 + 6u^8 + 8u^7 + 13u^6 + 14u^5 + 15u^4 + 14u^3 + 10u^2 + 7u + 3$
c_7, c_{11}	$u^{10} - 4u^8 + 3u^6 + u^5 + 4u^4 + 4u^2 - u + 1$
c_8	$u^{10} - 2u^9 + 6u^8 - 8u^7 + 13u^6 - 14u^5 + 15u^4 - 14u^3 + 10u^2 - 7u + 3$
c_{10}	$u^{10} + 4u^8 + 8u^6 - 2u^5 + 10u^4 - 3u^3 + 7u^2 - u + 3$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_9	$y^{10} + 2y^9 + \cdots + 6y + 1$
c_2, c_6	$y^{10} - 8y^9 + \cdots + 8y + 9$
c_3	$y^{10} - 8y^9 + \cdots - 178y + 9$
c_4, c_{10}	$y^{10} + 8y^9 + \cdots + 41y + 9$
c_5, c_8	$y^{10} + 8y^9 + \cdots + 11y + 9$
c_7, c_{11}	$y^{10} - 8y^9 + 22y^8 - 16y^7 - 15y^6 - 7y^5 + 32y^4 + 40y^3 + 24y^2 + 7y + 1$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_3^u	$\sqrt{-1}(\text{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.555224 + 0.913312I$ $a = 0.348707 + 0.379158I$ $b = -0.152679 + 0.528996I$	$-5.66496 - 0.94946I$	$-9.80995 - 0.64578I$
$u = 0.555224 - 0.913312I$ $a = 0.348707 - 0.379158I$ $b = -0.152679 - 0.528996I$	$-5.66496 + 0.94946I$	$-9.80995 + 0.64578I$
$u = 0.106413 + 1.166400I$ $a = -0.965103 + 0.714296I$ $b = -0.935856 - 1.049690I$	$-7.32588 + 2.86616I$	$-9.25686 - 0.74854I$
$u = 0.106413 - 1.166400I$ $a = -0.965103 - 0.714296I$ $b = -0.935856 + 1.049690I$	$-7.32588 - 2.86616I$	$-9.25686 + 0.74854I$
$u = -0.757440 + 0.211348I$ $a = -1.029450 + 0.893435I$ $b = 0.590918 - 0.894294I$	$4.48505 + 2.09086I$	$1.20974 - 1.26388I$
$u = -0.757440 - 0.211348I$ $a = -1.029450 - 0.893435I$ $b = 0.590918 + 0.894294I$	$4.48505 - 2.09086I$	$1.20974 + 1.26388I$
$u = -0.333031 + 1.234640I$ $a = 0.641089 - 1.043630I$ $b = 1.07501 + 1.13908I$	$1.20593 - 5.98785I$	$-5.27541 + 6.66552I$
$u = -0.333031 - 1.234640I$ $a = 0.641089 + 1.043630I$ $b = 1.07501 - 1.13908I$	$1.20593 + 5.98785I$	$-5.27541 - 6.66552I$
$u = -0.571165 + 1.251720I$ $a = -0.161914 + 0.535162I$ $b = -0.577394 - 0.508337I$	$-0.92481 - 3.39622I$	$-5.36753 + 9.56684I$
$u = -0.571165 - 1.251720I$ $a = -0.161914 - 0.535162I$ $b = -0.577394 + 0.508337I$	$-0.92481 + 3.39622I$	$-5.36753 - 9.56684I$

IV. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1, c_9	$(u^{10}+u^8-u^7+6u^6-2u^5+4u^4-4u^3+5u^2-2u+1)$ $\cdot(u^{18}-2u^{16}+\cdots+7u^2-1)(u^{24}+5u^{23}+\cdots-12u+3)$
c_2, c_6	$(u^{10}-4u^8+3u^7+12u^6+u^5+11u^3+2u^2-2u+3)$ $\cdot(u^{18}-7u^{16}+\cdots-2u-13)(u^{24}-u^{23}+\cdots-1976u+793)$
c_3	$((u^6+5u^5+7u^4-2u^2+3u-1)^4)(u^{10}+8u^9+\cdots+26u+3)$ $\cdot(u^{18}-13u^{17}+\cdots-62u-52)$
c_4	$(u^2-u+1)^{12}(u^{10}+4u^8+8u^6+2u^5+10u^4+3u^3+7u^2+u+3)$ $\cdot(u^{18}+13u^{17}+\cdots+608u+64)$
c_5	$(u^6-u^5+3u^4-2u^3+2u^2-u-1)^4$ $\cdot(u^{10}+2u^9+6u^8+8u^7+13u^6+14u^5+15u^4+14u^3+10u^2+7u+3)$ $\cdot(u^{18}+9u^{17}+\cdots+50u+4)$
c_7, c_{11}	$(u^{10}-4u^8+\cdots-u+1)(u^{18}+2u^{17}+\cdots+u+1)$ $\cdot(u^{24}+u^{23}+\cdots+198u+93)$
c_8	$(u^6-u^5+3u^4-2u^3+2u^2-u-1)^4$ $\cdot(u^{10}-2u^9+6u^8-8u^7+13u^6-14u^5+15u^4-14u^3+10u^2-7u+3)$ $\cdot(u^{18}+9u^{17}+\cdots+50u+4)$
c_{10}	$(u^2-u+1)^{12}(u^{10}+4u^8+8u^6-2u^5+10u^4-3u^3+7u^2-u+3)$ $\cdot(u^{18}+13u^{17}+\cdots+608u+64)$

V. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1, c_9	$(y^{10} + 2y^9 + \cdots + 6y + 1)(y^{18} - 4y^{17} + \cdots - 14y + 1)$ $\cdot (y^{24} + 3y^{23} + \cdots - 156y + 9)$
c_2, c_6	$(y^{10} - 8y^9 + \cdots + 8y + 9)(y^{18} - 14y^{17} + \cdots - 1564y + 169)$ $\cdot (y^{24} - 17y^{23} + \cdots - 2553304y + 628849)$
c_3	$(y^6 - 11y^5 + 45y^4 - 60y^3 - 10y^2 - 5y + 1)^4$ $\cdot (y^{10} - 8y^9 + \cdots - 178y + 9)(y^{18} - 19y^{17} + \cdots + 6660y + 2704)$
c_4, c_{10}	$((y^2 + y + 1)^{12})(y^{10} + 8y^9 + \cdots + 41y + 9)$ $\cdot (y^{18} + 9y^{17} + \cdots - 17408y + 4096)$
c_5, c_8	$((y^6 + 5y^5 + \cdots - 5y + 1)^4)(y^{10} + 8y^9 + \cdots + 11y + 9)$ $\cdot (y^{18} + 13y^{17} + \cdots - 364y + 16)$
c_7, c_{11}	$(y^{10} - 8y^9 + 22y^8 - 16y^7 - 15y^6 - 7y^5 + 32y^4 + 40y^3 + 24y^2 + 7y + 1)$ $\cdot (y^{18} - 26y^{17} + \cdots - 21y + 1)(y^{24} - 25y^{23} + \cdots + 40776y + 8649)$