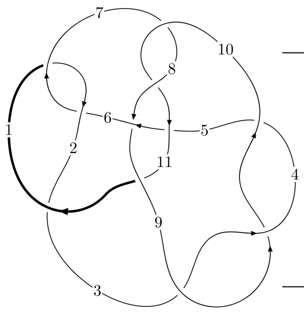
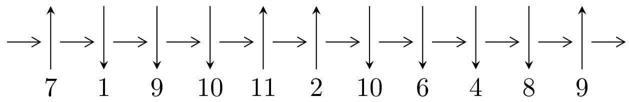
$11n_{125}$ ($K11n_{125}$)



A knot diagram[1]

Linearized knot diagam



Solving Sequence

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

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

$$I_1^u = \langle 3705u^{16} - 598u^{15} + \cdots + 73291b - 17911,\ 6307u^{16} + 8497u^{15} + \cdots + 73291a - 25307,$$
$$u^{17} - u^{16} + 8u^{13} - 7u^{12} + u^{11} + u^{10} + 15u^9 - 14u^8 - u^7 + 2u^6 + 3u^5 + u^4 - 2u^3 - 2u^2 + 1\rangle$$
$$I_2^u = \langle -1.62758 \times 10^{19}u^{23} - 2.19259 \times 10^{19}u^{22} + \cdots + 4.09578 \times 10^{18}b + 4.17547 \times 10^{19},$$
$$1.02456 \times 10^{19}u^{23} + 1.20636 \times 10^{19}u^{22} + \cdots + 1.10459 \times 10^{18}a - 5.53806 \times 10^{19},\ u^{24} + u^{23} + \cdots - 12u + 1$$
$$I_3^u = \langle -u^8 - u^7 + 3u^6 + 3u^5 - u^4 - 2u^3 - 2u^2 + b,\ u^8 + u^7 - 4u^6 - 4u^5 + 4u^4 + 5u^3 + u^2 + a - 2u - 1,$$
$$u^{10} + u^9 - 4u^8 - 4u^7 + 4u^6 + 5u^5 + u^4 - 2u^3 - 2u^2 + 1\rangle$$

* 3 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 51 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. $I^u_1 = \langle 3705u^{16} - 598u^{15} + \cdots + 73291b - 17911,\ 6307u^{16} + 8497u^{15} + \cdots + 73291a - 25307,\ u^{17} - u^{16} + \cdots - 2u^2 + 1\rangle$

(i) Arc colorings

$$a_6 = \begin{pmatrix} 0 \\ u \end{pmatrix}$$

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

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

$$a_{11} = \begin{pmatrix} -0.0860542u^{16} - 0.115935u^{15} + \cdots - 0.529669u + 0.345295 \\ -0.0505519u^{16} + 0.00815926u^{15} + \cdots + 0.136606u + 0.244382 \end{pmatrix}$$

$$a_1 = \begin{pmatrix} -0.0233589u^{16} - 0.00324733u^{15} + \cdots - 0.479117u + 0.387687 \\ 0.198278u^{16} - 0.0425291u^{15} + \cdots + 0.0739108u + 0.0689989 \end{pmatrix}$$

$$a_5 = \begin{pmatrix} 0.654705u^{16} - 0.740759u^{15} + \cdots - 0.188099u - 0.529669 \\ -0.201989u^{16} + 0.0887421u^{15} + \cdots + 0.345295u + 0.0860542 \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} -0.136606u^{16} - 0.107776u^{15} + \cdots - 0.393063u + 0.589677 \\ -0.0505519u^{16} + 0.00815926u^{15} + \cdots + 0.136606u + 0.244382 \end{pmatrix}$$

$$a_4 = \begin{pmatrix} 0.410323u^{16} - 0.546929u^{15} + \cdots + 0.401577u - 0.393063 \\ -0.244382u^{16} + 0.193830u^{15} + \cdots + 0.589677u + 0.136606 \end{pmatrix}$$

$$a_3 = \begin{pmatrix} 0.410323u^{16} - 0.546929u^{15} + \cdots + 1.40158u - 0.393063 \\ -0.244382u^{16} + 0.193830u^{15} + \cdots + 0.589677u + 0.136606 \end{pmatrix}$$

$$a_7 = \begin{pmatrix} -0.968809u^{16} + 0.0160183u^{15} + \cdots + 0.388588u + 1.25569 \\ -0.882755u^{16} + 0.131953u^{15} + \cdots + 0.918257u + 0.910398 \end{pmatrix}$$

$$a_2 = \begin{pmatrix} 1.43914u^{16} - 0.141054u^{15} + \cdots - 4.14755u - 2.06759 \\ 2.34525u^{16} - 0.269760u^{15} + \cdots - 4.58669u - 3.36568 \end{pmatrix}$$

$$a_2 = \begin{pmatrix} 1.43914u^{16} - 0.141054u^{15} + \cdots - 4.14755u - 2.06759 \\ 2.34525u^{16} - 0.269760u^{15} + \cdots - 4.58669u - 3.36568 \end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= \frac{112951}{73291}u^{16} + \frac{78462}{73291}u^{15} + \cdots - \frac{754923}{73291}u - \frac{768857}{73291}$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1, c_6	$u^{17} + 6u^{16} + \cdots + 32u + 8$
c_2	$u^{17} + 6u^{16} + \cdots + 32u - 64$
c_3, c_4, c_8 c_9	$u^{17} - u^{16} + \cdots - 2u^2 + 1$
c_5	$u^{17} + u^{16} + \cdots - 22u^2 + 1$
c_7, c_{10}	$u^{17} - 7u^{16} + \cdots - 80u + 16$
c_{11}	$u^{17} + 3u^{16} + \cdots + 4u + 1$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_6	$y^{17} + 6y^{16} + \cdots + 32y - 64$
c_2	$y^{17} + 10y^{16} + \cdots + 33280y - 4096$
c_3, c_4, c_8 c_9	$y^{17} - y^{16} + \cdots + 4y - 1$
c_5	$y^{17} - 13y^{16} + \cdots + 44y - 1$
c_7, c_{10}	$y^{17} - 7y^{16} + \cdots - 128y - 256$
c_{11}	$y^{17} - 27y^{16} + \cdots - 24y - 1$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.724405 + 0.548318I$ $a = -0.75306 + 1.73640I$ $b = -1.210220 - 0.484731I$	$-4.29085 - 6.01779I$	$-7.18678 + 9.97359I$
$u = 0.724405 - 0.548318I$ $a = -0.75306 - 1.73640I$ $b = -1.210220 + 0.484731I$	$-4.29085 + 6.01779I$	$-7.18678 - 9.97359I$
$u = -0.126925 + 0.721173I$ $a = 0.84923 - 1.76296I$ $b = -0.778224 + 0.460398I$	$1.34232 + 1.94872I$	$2.56083 - 3.14210I$
$u = -0.126925 - 0.721173I$ $a = 0.84923 + 1.76296I$ $b = -0.778224 - 0.460398I$	$1.34232 - 1.94872I$	$2.56083 + 3.14210I$
$u = 0.725128 + 0.055021I$ $a = 0.394130 - 0.065047I$ $b = 1.46996 + 0.40764I$	$-4.56765 - 3.93288I$	$-12.22005 + 0.69203I$
$u = 0.725128 - 0.055021I$ $a = 0.394130 + 0.065047I$ $b = 1.46996 - 0.40764I$	$-4.56765 + 3.93288I$	$-12.22005 - 0.69203I$
$u = 0.746984 + 1.046150I$ $a = 0.322934 - 0.862372I$ $b = -0.619169 + 1.016980I$	$6.33629 - 0.97017I$	$-0.559057 + 0.284542I$
$u = 0.746984 - 1.046150I$ $a = 0.322934 + 0.862372I$ $b = -0.619169 - 1.016980I$	$6.33629 + 0.97017I$	$-0.559057 - 0.284542I$
$u = -0.909916 + 0.943922I$ $a = 0.275853 + 0.793772I$ $b = -0.609367 - 1.124050I$	$5.27663 + 7.20759I$	$-2.52796 - 5.51575I$
$u = -0.909916 - 0.943922I$ $a = 0.275853 - 0.793772I$ $b = -0.609367 + 1.124050I$	$5.27663 - 7.20759I$	$-2.52796 + 5.51575I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.512854+0.417660I$ $a=\ \ 0.640794+0.460951I$ $b=\ \ 0.028408-0.739779I$	$-0.81159+1.48098I$	$-4.11600-4.97481I$
$u=-0.512854-0.417660I$ $a=\ \ 0.640794-0.460951I$ $b=\ \ 0.028408+0.739779I$	$-0.81159-1.48098I$	$-4.11600+4.97481I$
$u=-0.641391$ $a=\ \ 0.489889$ $b=\ \ 1.04128$	-1.52652	-7.18720
$u=-1.05004+1.03914I$ $a=-0.221763-1.275910I$ $b=-1.132230+0.760774I$	$4.69624+7.43319I$	$-2.80359-4.35460I$
$u=-1.05004-1.03914I$ $a=-0.221763+1.275910I$ $b=-1.132230-0.760774I$	$4.69624-7.43319I$	$-2.80359+4.35460I$
$u=\ \ 1.22392+0.97901I$ $a=-0.253054+1.194280I$ $b=-1.16979-0.80134I$	$3.4739-14.0835I$	$-4.55379+8.21992I$
$u=\ \ 1.22392-0.97901I$ $a=-0.253054-1.194280I$ $b=-1.16979+0.80134I$	$3.4739+14.0835I$	$-4.55379-8.21992I$

II.
$\boldsymbol{I_2^u = \langle -1.63\times 10^{19}u^{23} - 2.19\times 10^{19}u^{22} + \cdots + 4.10\times 10^{18}b + 4.18\times 10^{19},\ 1.02\times 10^{19}u^{23} + 1.21\times 10^{19}u^{22} + \cdots + 1.10\times 10^{18}a - 5.54\times 10^{19},\ u^{24} + u^{23} + \cdots - 12u + 1\rangle}$

(i) Arc colorings

$$a_6 = \begin{pmatrix} 0 \\ u \end{pmatrix}$$
$$a_8 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$
$$a_9 = \begin{pmatrix} 1 \\ u^2 \end{pmatrix}$$
$$a_{11} = \begin{pmatrix} -9.27552u^{23} - 10.9214u^{22} + \cdots - 365.606u + 50.1368 \\ 3.97380u^{23} + 5.35329u^{22} + \cdots + 100.403u - 10.1946 \end{pmatrix}$$
$$a_1 = \begin{pmatrix} -4.82541u^{23} - 4.75510u^{22} + \cdots - 254.728u + 38.2964 \\ 4.74826u^{23} + 6.65968u^{22} + \cdots + 116.547u - 11.9107 \end{pmatrix}$$
$$a_5 = \begin{pmatrix} 11.3054u^{23} + 12.3377u^{22} + \cdots + 440.071u - 45.2263 \\ 6.36090u^{23} + 7.80155u^{22} + \cdots + 204.414u - 23.9970 \end{pmatrix}$$
$$a_{10} = \begin{pmatrix} -5.30172u^{23} - 5.56808u^{22} + \cdots - 265.203u + 39.9422 \\ 3.97380u^{23} + 5.35329u^{22} + \cdots + 100.403u - 10.1946 \end{pmatrix}$$
$$a_4 = \begin{pmatrix} 14.7955u^{23} + 17.5151u^{22} + \cdots + 528.748u - 61.5891 \\ -0.682634u^{23} - 1.19757u^{22} + \cdots - 4.09647u - 0.631997 \end{pmatrix}$$
$$a_3 = \begin{pmatrix} 13.8574u^{23} + 16.1229u^{22} + \cdots + 506.811u - 59.5014 \\ -0.936526u^{23} - 1.63331u^{22} + \cdots - 8.60722u - 0.177923 \end{pmatrix}$$
$$a_7 = \begin{pmatrix} 17.3035u^{23} + 22.0294u^{22} + \cdots + 507.574u - 57.5598 \\ -6.69344u^{23} - 8.32845u^{22} + \cdots - 216.360u + 25.9901 \end{pmatrix}$$
$$a_2 = \begin{pmatrix} -7.27158u^{23} - 9.66160u^{22} + \cdots - 203.491u + 24.3547 \\ 2.43276u^{23} + 3.92231u^{22} + \cdots + 34.3850u - 0.488514 \end{pmatrix}$$
$$a_2 = \begin{pmatrix} -7.27158u^{23} - 9.66160u^{22} + \cdots - 203.491u + 24.3547 \\ 2.43276u^{23} + 3.92231u^{22} + \cdots + 34.3850u - 0.488514 \end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= -\frac{5816969908025562256904}{462822645525235397669}u^{23} - \frac{6619395108009854597496}{462822645525235397669}u^{22} + \cdots - \frac{1226028853076832315078 4}{27224861501484435157}u + \frac{2199433835033053439946 6}{462822645525235397669}$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1, c_6	$(u^4 - u^3 + u^2 + 1)^6$
c_2	$(u^4 + u^3 + 3u^2 + 2u + 1)^6$
c_3, c_4, c_8 c_9	$u^{24} + u^{23} + \cdots - 12u + 1$
c_5	$u^{24} + 3u^{23} + \cdots + 54u + 107$
c_7, c_{10}	$(u^3 + u^2 - 1)^8$
c_{11}	$u^{24} + 3u^{23} + \cdots + 846u + 347$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_6	$(y^4+y^3+3y^2+2y+1)^6$
c_2	$(y^4+5y^3+7y^2+2y+1)^6$
c_3, c_4, c_8 c_9	$y^{24}-9y^{23}+\cdots-40y+1$
c_5	$y^{24}+3y^{23}+\cdots+23192y+11449$
c_7, c_{10}	$(y^3-y^2+2y-1)^8$
c_{11}	$y^{24}-9y^{23}+\cdots+602884y+120409$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 1.008370 + 0.230741I$ $a = 0.324592 - 1.318030I$ $b = 0.877439 + 0.744862I$	$-2.12168 - 4.24323I$	$-6.31698 + 7.88819I$
$u = 1.008370 - 0.230741I$ $a = 0.324592 + 1.318030I$ $b = 0.877439 - 0.744862I$	$-2.12168 + 4.24323I$	$-6.31698 - 7.88819I$
$u = -0.430835 + 0.856235I$ $a = -0.577262 + 0.850887I$ $b = 0.877439 - 0.744862I$	$-2.12168 + 4.24323I$	$-6.31698 - 7.88819I$
$u = -0.430835 - 0.856235I$ $a = -0.577262 - 0.850887I$ $b = 0.877439 + 0.744862I$	$-2.12168 - 4.24323I$	$-6.31698 + 7.88819I$
$u = -0.324811 + 1.039220I$ $a = 1.271110 - 0.441707I$ $b = -0.754878$	$0.74248 + 3.16396I$	$-9.19277 - 2.56480I$
$u = -0.324811 - 1.039220I$ $a = 1.271110 + 0.441707I$ $b = -0.754878$	$0.74248 - 3.16396I$	$-9.19277 + 2.56480I$
$u = -1.003940 + 0.452899I$ $a = 0.012479 + 0.854104I$ $b = 0.877439 - 0.744862I$	$-2.12168 + 1.41302I$	$-6.31698 + 1.92930I$
$u = -1.003940 - 0.452899I$ $a = 0.012479 - 0.854104I$ $b = 0.877439 + 0.744862I$	$-2.12168 - 1.41302I$	$-6.31698 - 1.92930I$
$u = 1.382990 + 0.000366I$ $a = -0.948443 - 0.485387I$ $b = -0.754878$	$-6.25926 - 1.41510I$	$-12.84625 + 4.90874I$
$u = 1.382990 - 0.000366I$ $a = -0.948443 + 0.485387I$ $b = -0.754878$	$-6.25926 + 1.41510I$	$-12.84625 - 4.90874I$

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-1.043140+0.911052I$ $a=\ 0.738284+1.097470I$ $b=\ 0.877439-0.744862I$	$4.88007-0.33584I$	$-2.66351-0.41465I$
$u=-1.043140-0.911052I$ $a=\ 0.738284-1.097470I$ $b=\ 0.877439+0.744862I$	$4.88007+0.33584I$	$-2.66351+0.41465I$
$u=\ 1.19721+0.83587I$ $a=\ 0.694157-1.132290I$ $b=\ 0.877439+0.744862I$	$4.88007-5.99209I$	$-2.66351+5.54425I$
$u=\ 1.19721-0.83587I$ $a=\ 0.694157+1.132290I$ $b=\ 0.877439-0.744862I$	$4.88007+5.99209I$	$-2.66351-5.54425I$
$u=-1.00875+1.10787I$ $a=-0.390615-0.422077I$ $b=\ 0.877439+0.744862I$	$4.88007+0.33584I$	$-2.66351+0.41465I$
$u=-1.00875-1.10787I$ $a=-0.390615+0.422077I$ $b=\ 0.877439-0.744862I$	$4.88007-0.33584I$	$-2.66351-0.41465I$
$u=\ 0.80956+1.30687I$ $a=-0.428288+0.453956I$ $b=\ 0.877439-0.744862I$	$4.88007+5.99209I$	$-2.66351-5.54425I$
$u=\ 0.80956-1.30687I$ $a=-0.428288-0.453956I$ $b=\ 0.877439+0.744862I$	$4.88007-5.99209I$	$-2.66351+5.54425I$
$u=-1.60815+0.28919I$ $a=-0.181824-0.347739I$ $b=-0.754878$	$-6.25926+1.41510I$	$-12.84625-4.90874I$
$u=-1.60815-0.28919I$ $a=-0.181824+0.347739I$ $b=-0.754878$	$-6.25926-1.41510I$	$-12.84625+4.90874I$

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = \ \ 0.265048 + 0.154544I$ $a = -4.33744 - 5.56259I$ $b = -0.754878$	$0.74248 - 3.16396I$	$-9.19277 + 2.56480I$
$u = \ \ 0.265048 - 0.154544I$ $a = -4.33744 + 5.56259I$ $b = -0.754878$	$0.74248 + 3.16396I$	$-9.19277 - 2.56480I$
$u = \ \ 0.256438 + 0.045429I$ $a = -0.67675 - 3.40086I$ $b = \ \ 0.877439 + 0.744862I$	$-2.12168 - 1.41302I$	$-6.31698 - 1.92930I$
$u = \ \ 0.256438 - 0.045429I$ $a = -0.67675 + 3.40086I$ $b = \ \ 0.877439 - 0.744862I$	$-2.12168 + 1.41302I$	$-6.31698 + 1.92930I$

III. $I_3^u = \langle -u^8 - u^7 + 3u^6 + 3u^5 - u^4 - 2u^3 - 2u^2 + b,\ u^8 + u^7 + \cdots + a - 1,\ u^{10} + u^9 + \cdots - 2u^2 + 1\rangle$

(i) Arc colorings

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

$$a_2 = \begin{pmatrix} u^9 + 2u^8 - 3u^7 - 7u^6 + u^5 + 6u^4 + 3u^3 + u^2 - u - 1 \\ u^9 + 3u^8 - 2u^7 - 10u^6 - 2u^5 + 8u^4 + 6u^3 + 2u^2 - 3u - 2 \end{pmatrix}$$

(ii) Obstruction class $= 1$

(iii) Cusp Shapes $= -u^9 + 4u^8 + 10u^7 - 18u^6 - 30u^5 + 17u^4 + 30u^3 + 10u^2 - 8u - 15$

(iv) u-Polynomials at the component

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

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_6	$y^{10} + 5y^9 + \cdots + 6y + 1$
c_2	$y^{10} + 5y^9 + \cdots + 2y + 1$
c_3, c_4, c_8 c_9	$y^{10} - 9y^9 + 32y^8 - 56y^7 + 48y^6 - 15y^5 - 3y^4 + 6y^2 - 4y + 1$
c_5	$y^{10} + 7y^9 + 10y^8 - 9y^7 + 2y^6 - 4y^5 + 3y^3 + 4y^2 - 4y + 1$
c_7, c_{10}	$y^{10} - 6y^9 + \cdots - 9y + 1$
c_{11}	$y^{10} + 5y^9 + \cdots + 4y + 1$

(vi) Complex Volumes and Cusp Shapes

Solutions to I^u_3	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.782055+0.380490I$ $a=-0.184015+1.040230I$ $b=\ \ 0.835101-0.932160I$	$-2.47371+2.31326I$	$-10.56078-6.69278I$
$u=-0.782055-0.380490I$ $a=-0.184015-1.040230I$ $b=\ \ 0.835101+0.932160I$	$-2.47371-2.31326I$	$-10.56078+6.69278I$
$u=-0.231765+0.745305I$ $a=-2.35204+0.93089I$ $b=\ \ 0.632416-0.145483I$	$1.41924+3.41496I$	$4.16112-7.56429I$
$u=-0.231765-0.745305I$ $a=-2.35204-0.93089I$ $b=\ \ 0.632416+0.145483I$	$1.41924-3.41496I$	$4.16112+7.56429I$
$u=\ \ 0.669161+0.228612I$ $a=\ \ 0.581803-1.223630I$ $b=\ \ 1.31693+0.66655I$	$-4.21796-4.66670I$	$-8.97137+7.61170I$
$u=\ \ 0.669161-0.228612I$ $a=\ \ 0.581803+1.223630I$ $b=\ \ 1.31693-0.66655I$	$-4.21796+4.66670I$	$-8.97137-7.61170I$
$u=\ \ 1.363390+0.095887I$ $a=-0.469948-0.074927I$ $b=-1.075150+0.330855I$	$-7.15848+3.23765I$	$-10.59891-4.72266I$
$u=\ \ 1.363390-0.095887I$ $a=-0.469948+0.074927I$ $b=-1.075150-0.330855I$	$-7.15848-3.23765I$	$-10.59891+4.72266I$
$u=-1.51873+0.12956I$ $a=-0.575804+0.072905I$ $b=-0.709299-0.216421I$	$-5.66336+0.80372I$	$-4.03005+2.76686I$
$u=-1.51873-0.12956I$ $a=-0.575804-0.072905I$ $b=-0.709299+0.216421I$	$-5.66336-0.80372I$	$-4.03005-2.76686I$

IV. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1	$(u^4-u^3+u^2+1)^6(u^{10}+u^9+3u^8+2u^7+5u^6+2u^5+5u^4+3u^2+1)$ $\cdot(u^{17}+6u^{16}+\cdots+32u+8)$
c_2	$((u^4+u^3+3u^2+2u+1)^6)(u^{10}+5u^9+\cdots+6u+1)$ $\cdot(u^{17}+6u^{16}+\cdots+32u-64)$
c_3, c_4, c_8	$(u^{10}+u^9-4u^8-4u^7+4u^6+5u^5+u^4-2u^3-2u^2+1)$ $\cdot(u^{17}-u^{16}+\cdots-2u^2+1)(u^{24}+u^{23}+\cdots-12u+1)$
c_5	$(u^{10}+u^9+\cdots-2u^2+1)(u^{17}+u^{16}+\cdots-22u^2+1)$ $\cdot(u^{24}+3u^{23}+\cdots+54u+107)$
c_6	$(u^4-u^3+u^2+1)^6(u^{10}-u^9+3u^8-2u^7+5u^6-2u^5+5u^4+3u^2+1)$ $\cdot(u^{17}+6u^{16}+\cdots+32u+8)$
c_7	$(u^3+u^2-1)^8$ $\cdot(u^{10}-2u^9-u^8+6u^7-2u^6-7u^5+6u^4+4u^3-4u^2-u+1)$ $\cdot(u^{17}-7u^{16}+\cdots-80u+16)$
c_9	$(u^{10}-u^9-4u^8+4u^7+4u^6-5u^5+u^4+2u^3-2u^2+1)$ $\cdot(u^{17}-u^{16}+\cdots-2u^2+1)(u^{24}+u^{23}+\cdots-12u+1)$
c_{10}	$(u^3+u^2-1)^8$ $\cdot(u^{10}+2u^9-u^8-6u^7-2u^6+7u^5+6u^4-4u^3-4u^2+u+1)$ $\cdot(u^{17}-7u^{16}+\cdots-80u+16)$
c_{11}	$(u^{10}+u^9+3u^8+u^6-2u^5+3u^4+u^3+2u^2+1)$ $\cdot(u^{17}+3u^{16}+\cdots+4u+1)(u^{24}+3u^{23}+\cdots+846u+347)$

V. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1, c_6	$((y^4+y^3+3y^2+2y+1)^6)(y^{10}+5y^9+\cdots+6y+1)$ $\cdot(y^{17}+6y^{16}+\cdots+32y-64)$
c_2	$((y^4+5y^3+7y^2+2y+1)^6)(y^{10}+5y^9+\cdots+2y+1)$ $\cdot(y^{17}+10y^{16}+\cdots+33280y-4096)$
c_3, c_4, c_8 c_9	$(y^{10}-9y^9+32y^8-56y^7+48y^6-15y^5-3y^4+6y^2-4y+1)$ $\cdot(y^{17}-y^{16}+\cdots+4y-1)(y^{24}-9y^{23}+\cdots-40y+1)$
c_5	$(y^{10}+7y^9+10y^8-9y^7+2y^6-4y^5+3y^3+4y^2-4y+1)$ $\cdot(y^{17}-13y^{16}+\cdots+44y-1)(y^{24}+3y^{23}+\cdots+23192y+11449)$
c_7, c_{10}	$((y^3-y^2+2y-1)^8)(y^{10}-6y^9+\cdots-9y+1)$ $\cdot(y^{17}-7y^{16}+\cdots-128y-256)$
c_{11}	$(y^{10}+5y^9+\cdots+4y+1)(y^{17}-27y^{16}+\cdots-24y-1)$ $\cdot(y^{24}-9y^{23}+\cdots+602884y+120409)$