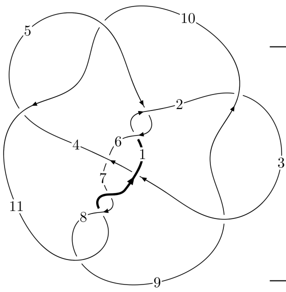
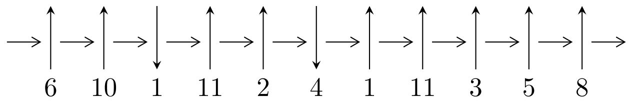
$11n_{170}$ ($K11n_{170}$)



A knot diagram[1]

Linearized knot diagam



Solving Sequence

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

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

$$\begin{aligned}
I_1^u &= \langle -25u^{16} - 25u^{15} + \cdots + 18b + 137,\ a - 1,\ u^{17} + 6u^{15} + \cdots - u - 1\rangle \\
I_2^u &= \langle -5.20249 \times 10^{17}u^{23} + 5.01695 \times 10^{18}u^{22} + \cdots + 1.95146 \times 10^{19}b + 5.92561 \times 10^{20}, \\
&\quad - 1.39688 \times 10^{24}u^{23} + 6.26259 \times 10^{24}u^{22} + \cdots + 1.95641 \times 10^{25}a + 5.44584 \times 10^{26}, \\
&\quad u^{24} - u^{23} + \cdots + 224u + 173\rangle \\
I_3^u &= \langle u^9 - u^8 + 5u^7 - 3u^6 + 12u^5 - 2u^4 + 10u^3 + u^2 + 3b + u - 2,\ a + 1, \\
&\quad u^{10} + 4u^8 - u^7 + 6u^6 - 2u^5 + 2u^4 - u^3 - u^2 - u + 1\rangle
\end{aligned}$$

* 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. $\boldsymbol{I_1^u = \langle -25u^{16} - 25u^{15} + \cdots + 18b + 137,\ a - 1,\ u^{17} + 6u^{15} + \cdots - u - 1\rangle}$

(i) Arc colorings

$$a_2 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$
$$a_{10} = \begin{pmatrix} 0 \\ u \end{pmatrix}$$
$$a_3 = \begin{pmatrix} 1 \\ -u^2 \end{pmatrix}$$
$$a_5 = \begin{pmatrix} 1 \\ 1.38889u^{16} + 1.38889u^{15} + \cdots + 4.77778u - 7.61111 \end{pmatrix}$$
$$a_6 = \begin{pmatrix} 1.38889u^{16} + 1.38889u^{15} + \cdots + 4.77778u - 6.61111 \\ 1.38889u^{16} + 1.38889u^{15} + \cdots + 4.77778u - 7.61111 \end{pmatrix}$$
$$a_{11} = \begin{pmatrix} u \\ 1.38889u^{16} - 1.61111u^{15} + \cdots - 5.22222u + 1.38889 \end{pmatrix}$$
$$a_1 = \begin{pmatrix} -0.277778u^{16} + 1.05556u^{15} + \cdots + 3.44444u - 2.61111 \\ -\frac{5}{3}u^{16} - \frac{1}{3}u^{15} + \cdots - \frac{4}{3}u + 4 \end{pmatrix}$$
$$a_4 = \begin{pmatrix} u^2 + 1 \\ -\frac{2}{9}u^{16} + \frac{25}{9}u^{15} + \cdots + \frac{68}{9}u - \frac{56}{9} \end{pmatrix}$$
$$a_7 = \begin{pmatrix} \frac{1}{6}u^{16} + \frac{1}{2}u^{15} + \cdots + \frac{7}{3}u - \frac{7}{6} \\ \frac{55}{9}u^{16} - \frac{23}{9}u^{15} + \cdots - \frac{43}{9}u - \frac{83}{9} \end{pmatrix}$$
$$a_9 = \begin{pmatrix} -u \\ u^3 + u \end{pmatrix}$$
$$a_8 = \begin{pmatrix} -1.38889u^{16} + 0.611111u^{15} + \cdots - 0.777778u + 1.61111 \\ -\frac{26}{9}u^{16} + \frac{7}{9}u^{15} + \cdots + \frac{2}{9}u + \frac{40}{9} \end{pmatrix}$$
$$a_8 = \begin{pmatrix} -1.38889u^{16} + 0.611111u^{15} + \cdots - 0.777778u + 1.61111 \\ -\frac{26}{9}u^{16} + \frac{7}{9}u^{15} + \cdots + \frac{2}{9}u + \frac{40}{9} \end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= \frac{103}{9}u^{16} - \frac{2}{9}u^{15} + \frac{601}{9}u^{14} + \frac{122}{9}u^{13} + \frac{1927}{9}u^{12} + \frac{542}{9}u^{11} + \frac{3436}{9}u^{10} + \frac{1481}{9}u^9 + \frac{3799}{9}u^8 + \frac{2359}{9}u^7 + \frac{2344}{9}u^6 + 257u^5 + 88u^4 + \frac{862}{9}u^3 + \frac{40}{3}u^2 + \frac{35}{9}u - \frac{170}{9}$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1, c_5	$u^{17} - 9u^{16} + \cdots + 144u - 16$
c_2, c_4, c_9 c_{10}	$u^{17} + 6u^{15} + \cdots - u - 1$
c_3, c_6	$u^{17} + 9u^{15} + \cdots + 3u^2 - 1$
c_7, c_8, c_{11}	$u^{17} + 9u^{16} + \cdots - 32u - 8$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_5	$y^{17} + 15y^{16} + \cdots + 1408y - 256$
c_2, c_4, c_9 c_{10}	$y^{17} + 12y^{16} + \cdots - y - 1$
c_3, c_6	$y^{17} + 18y^{16} + \cdots + 6y - 1$
c_7, c_8, c_{11}	$y^{17} + 9y^{16} + \cdots + 160y - 64$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.145212 + 0.987929I$ $a = 1.00000$ $b = -0.861098 + 1.080220I$	$-1.58511 + 1.52682I$	$1.71933 - 1.54413I$
$u = 0.145212 - 0.987929I$ $a = 1.00000$ $b = -0.861098 - 1.080220I$	$-1.58511 - 1.52682I$	$1.71933 + 1.54413I$
$u = 0.594895 + 0.853325I$ $a = 1.00000$ $b = -0.888119 - 0.392484I$	$2.52996 + 1.99554I$	$7.48406 - 3.24951I$
$u = 0.594895 - 0.853325I$ $a = 1.00000$ $b = -0.888119 + 0.392484I$	$2.52996 - 1.99554I$	$7.48406 + 3.24951I$
$u = 0.455681 + 1.021510I$ $a = 1.00000$ $b = -0.09174 - 1.74935I$	$-12.10840 + 1.93472I$	$7.26417 - 4.67402I$
$u = 0.455681 - 1.021510I$ $a = 1.00000$ $b = -0.09174 + 1.74935I$	$-12.10840 - 1.93472I$	$7.26417 + 4.67402I$
$u = -0.504262 + 1.174830I$ $a = 1.00000$ $b = -1.088960 + 0.356976I$	$0.48540 - 8.16941I$	$4.20960 + 6.58024I$
$u = -0.504262 - 1.174830I$ $a = 1.00000$ $b = -1.088960 - 0.356976I$	$0.48540 + 8.16941I$	$4.20960 - 6.58024I$
$u = -0.449425 + 0.466610I$ $a = 1.00000$ $b = -0.570876 - 1.008450I$	$0.75353 + 3.18135I$	$3.49254 + 0.13841I$
$u = -0.449425 - 0.466610I$ $a = 1.00000$ $b = -0.570876 + 1.008450I$	$0.75353 - 3.18135I$	$3.49254 - 0.13841I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.455902+0.433518I$ $a=\ \ 1.00000$ $b=-0.039420+0.886123I$	$-1.82684-1.47458I$	$1.47955+5.16393I$
$u=-0.455902-0.433518I$ $a=\ \ 1.00000$ $b=-0.039420-0.886123I$	$-1.82684+1.47458I$	$1.47955-5.16393I$
$u=-0.71525+1.27905I$ $a=\ \ 1.00000$ $b=-0.35508+1.52708I$	$-3.71302-6.55902I$	$3.96621+4.14123I$
$u=-0.71525-1.27905I$ $a=\ \ 1.00000$ $b=-0.35508-1.52708I$	$-3.71302+6.55902I$	$3.96621-4.14123I$
$u=\ \ 0.478551$ $a=\ \ 1.00000$ $b=-0.344169$	0.721984	13.8930
$u=\ \ 0.68977+1.47618I$ $a=\ \ 1.00000$ $b=-0.43262-1.51053I$	$-5.4582+13.6098I$	$1.93808-7.30834I$
$u=\ \ 0.68977-1.47618I$ $a=\ \ 1.00000$ $b=-0.43262+1.51053I$	$-5.4582-13.6098I$	$1.93808+7.30834I$

II. $\boldsymbol{I_2^u = \langle -5.20 \times 10^{17} u^{23} + 5.02 \times 10^{18} u^{22} + \cdots + 1.95 \times 10^{19} b + 5.93 \times 10^{20},\ -1.40 \times 10^{24} u^{23} + 6.26 \times 10^{24} u^{22} + \cdots + 1.96 \times 10^{25} a + 5.45 \times 10^{26},\ u^{24} - u^{23} + \cdots + 224u + 173 \rangle}$

(i) Arc colorings

$$a_2 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$
$$a_{10} = \begin{pmatrix} 0 \\ u \end{pmatrix}$$
$$a_3 = \begin{pmatrix} 1 \\ -u^2 \end{pmatrix}$$
$$a_5 = \begin{pmatrix} 0.0714002u^{23} - 0.320106u^{22} + \cdots - 15.5190u - 27.8359 \\ 0.0266595u^{23} - 0.257087u^{22} + \cdots - 18.6780u - 30.3650 \end{pmatrix}$$
$$a_6 = \begin{pmatrix} 0.0980596u^{23} - 0.577193u^{22} + \cdots - 34.1970u - 58.2008 \\ 0.0266595u^{23} - 0.257087u^{22} + \cdots - 18.6780u - 30.3650 \end{pmatrix}$$
$$a_{11} = \begin{pmatrix} 0.470356u^{23} - 0.621434u^{22} + \cdots + 81.7674u + 16.2383 \\ 0.329501u^{23} - 0.686697u^{22} + \cdots + 33.8837u - 21.2874 \end{pmatrix}$$
$$a_1 = \begin{pmatrix} 0.450732u^{23} - 0.314505u^{22} + \cdots + 120.111u + 62.4009 \\ 0.327683u^{23} - 0.520957u^{22} + \cdots + 55.3338u + 0.954331 \end{pmatrix}$$
$$a_4 = \begin{pmatrix} 0.0595221u^{23} + 0.166006u^{22} + \cdots + 28.1599u + 41.7764 \\ 0.497954u^{23} - 0.518732u^{22} + \cdots + 103.014u + 48.4483 \end{pmatrix}$$
$$a_7 = \begin{pmatrix} -0.645948u^{23} + 1.30849u^{22} + \cdots - 66.6364u + 32.6828 \\ 0.142189u^{23} + 0.502228u^{22} + \cdots + 106.073u + 111.052 \end{pmatrix}$$
$$a_9 = \begin{pmatrix} -u \\ u^3 + u \end{pmatrix}$$
$$a_8 = \begin{pmatrix} 0.383897u^{23} - 0.657761u^{22} + \cdots + 57.2698u + 0.530339 \\ -0.0745968u^{23} - 0.255739u^{22} + \cdots - 52.0295u - 57.0282 \end{pmatrix}$$
$$a_8 = \begin{pmatrix} 0.383897u^{23} - 0.657761u^{22} + \cdots + 57.2698u + 0.530339 \\ -0.0745968u^{23} - 0.255739u^{22} + \cdots - 52.0295u - 57.0282 \end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= \frac{5711611969452910512704}{1130872617408691363890350}u^{23} - \frac{19612335432356395236714 4}{1130872617408691363890350}u^{22} + \cdots - \frac{3439775271111635745807 64}{2261745234817382727780 7}u - \frac{16520278039745704687355386}{1130872617408691363890350}$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1, c_5	$(u^3+u^2+2u+1)^8$
c_2, c_4, c_9 c_{10}	$u^{24}-u^{23}+\cdots+224u+173$
c_3, c_6	$u^{24}-3u^{23}+\cdots-14u+19$
c_7, c_8, c_{11}	$(u^4-u^3+u^2+1)^6$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_5	$(y^3 + 3y^2 + 2y - 1)^8$
c_2, c_4, c_9 c_{10}	$y^{24} + 15y^{23} + \cdots + 196176y + 29929$
c_3, c_6	$y^{24} + 7y^{23} + \cdots + 11812y + 361$
c_7, c_8, c_{11}	$(y^4 + y^3 + 3y^2 + 2y + 1)^6$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = -0.296109 + 0.977179I$ $a = -1.273900 + 0.388233I$ $b = 0.569840$	$-4.03235 - 1.41510I$	$5.19277 + 4.90874I$
$u = -0.296109 - 0.977179I$ $a = -1.273900 - 0.388233I$ $b = 0.569840$	$-4.03235 + 1.41510I$	$5.19277 - 4.90874I$
$u = -0.850110 + 0.413706I$ $a = -0.382281 - 1.077960I$ $b = 0.569840$	$2.96939 + 3.16396I$	$8.84625 - 2.56480I$
$u = -0.850110 - 0.413706I$ $a = -0.382281 + 1.077960I$ $b = 0.569840$	$2.96939 - 3.16396I$	$8.84625 + 2.56480I$
$u = -0.338066 + 1.017770I$ $a = -1.64492 + 0.24451I$ $b = 0.215080 - 1.307140I$	$-8.16994 - 1.41302I$	$-1.33649 - 1.92930I$
$u = -0.338066 - 1.017770I$ $a = -1.64492 - 0.24451I$ $b = 0.215080 + 1.307140I$	$-8.16994 + 1.41302I$	$-1.33649 + 1.92930I$
$u = 0.770941 + 0.758235I$ $a = -0.292232 + 0.824041I$ $b = 0.569840$	$2.96939 + 3.16396I$	$8.84625 - 2.56480I$
$u = 0.770941 - 0.758235I$ $a = -0.292232 - 0.824041I$ $b = 0.569840$	$2.96939 - 3.16396I$	$8.84625 + 2.56480I$
$u = 0.105985 + 0.888600I$ $a = 0.45731 + 1.37162I$ $b = 0.215080 + 1.307140I$	$-1.168190 - 0.335841I$	$2.31698 - 0.41465I$
$u = 0.105985 - 0.888600I$ $a = 0.45731 - 1.37162I$ $b = 0.215080 - 1.307140I$	$-1.168190 + 0.335841I$	$2.31698 + 0.41465I$

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.273584+1.104980I$ $a=-0.168598-1.335650I$ $b=\ \ 0.215080-1.307140I$	$-1.16819-5.99209I$	$2.31698+5.54425I$
$u=-0.273584-1.104980I$ $a=-0.168598+1.335650I$ $b=\ \ 0.215080+1.307140I$	$-1.16819+5.99209I$	$2.31698-5.54425I$
$u=-1.170350+0.551735I$ $a=\ \ 0.218758-0.656129I$ $b=\ \ 0.215080+1.307140I$	$-1.168190-0.335841I$	$2.31698-0.41465I$
$u=-1.170350-0.551735I$ $a=\ \ 0.218758+0.656129I$ $b=\ \ 0.215080-1.307140I$	$-1.168190+0.335841I$	$2.31698+0.41465I$
$u=-0.002161+1.359780I$ $a=-0.718280+0.218903I$ $b=\ \ 0.569840$	$-4.03235+1.41510I$	$5.19277-4.90874I$
$u=-0.002161-1.359780I$ $a=-0.718280-0.218903I$ $b=\ \ 0.569840$	$-4.03235-1.41510I$	$5.19277+4.90874I$
$u=-0.23515+1.45919I$ $a=-0.977489-0.499948I$ $b=\ \ 0.215080-1.307140I$	$-8.16994-4.24323I$	$-1.33649+7.88819I$
$u=-0.23515-1.45919I$ $a=-0.977489+0.499948I$ $b=\ \ 0.215080+1.307140I$	$-8.16994+4.24323I$	$-1.33649-7.88819I$
$u=\ \ 1.52200+0.17911I$ $a=-0.093025+0.736956I$ $b=\ \ 0.215080-1.307140I$	$-1.16819-5.99209I$	$2.31698+5.54425I$
$u=\ \ 1.52200-0.17911I$ $a=-0.093025-0.736956I$ $b=\ \ 0.215080+1.307140I$	$-1.16819+5.99209I$	$2.31698-5.54425I$

Solutions to I_2^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.95938 + 1.30878I$ $a = -0.810903 - 0.414746I$ $b = 0.215080 + 1.307140I$	$-8.16994 + 4.24323I$	$-1.33649 - 7.88819I$
$u = 0.95938 - 1.30878I$ $a = -0.810903 + 0.414746I$ $b = 0.215080 - 1.307140I$	$-8.16994 - 4.24323I$	$-1.33649 + 7.88819I$
$u = 0.30723 + 1.75680I$ $a = -0.594791 + 0.088414I$ $b = 0.215080 + 1.307140I$	$-8.16994 + 1.41302I$	$-1.33649 + 1.92930I$
$u = 0.30723 - 1.75680I$ $a = -0.594791 - 0.088414I$ $b = 0.215080 - 1.307140I$	$-8.16994 - 1.41302I$	$-1.33649 - 1.92930I$

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

(i) Arc colorings

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

(ii) Obstruction class $= 1$

(iii) Cusp Shapes $= -\frac{7}{3}u^9 - \frac{11}{3}u^8 - \frac{32}{3}u^7 - 13u^6 - 16u^5 - \frac{52}{3}u^4 - \frac{16}{3}u^3 - \frac{7}{3}u^2 + \frac{5}{3}u + \frac{23}{3}$

(iv) u-Polynomials at the component

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

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_5	$y^{10} + 12y^9 + \cdots + 15y + 4$
c_2, c_4, c_9 c_{10}	$y^{10} + 8y^9 + 28y^8 + 51y^7 + 46y^6 + 12y^5 - 6y^4 + 3y^3 + 3y^2 - 3y + 1$
c_3, c_6	$y^{10} + 2y^9 + 5y^8 + 5y^7 + 8y^6 + 4y^5 - 13y^4 + 6y^3 + 11y^2 - 6y + 1$
c_7, c_8, c_{11}	$y^{10} + 8y^9 + \cdots + 10y + 1$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_3^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.389657 + 1.143630I$ $a = -1.00000$ $b = 0.14100 + 1.67979I$	$-12.68460 + 1.69333I$	$-5.30928 + 0.52333I$
$u = 0.389657 - 1.143630I$ $a = -1.00000$ $b = 0.14100 - 1.67979I$	$-12.68460 - 1.69333I$	$-5.30928 - 0.52333I$
$u = 0.084751 + 1.224150I$ $a = -1.00000$ $b = 0.443974 - 0.385855I$	$-5.08161 + 0.78317I$	$-2.78080 - 0.34402I$
$u = 0.084751 - 1.224150I$ $a = -1.00000$ $b = 0.443974 + 0.385855I$	$-5.08161 - 0.78317I$	$-2.78080 + 0.34402I$
$u = -0.578028 + 0.397630I$ $a = -1.00000$ $b = -0.425241 - 1.086470I$	$0.251695 - 1.343720I$	$7.28435 + 2.33753I$
$u = -0.578028 - 0.397630I$ $a = -1.00000$ $b = -0.425241 + 1.086470I$	$0.251695 + 1.343720I$	$7.28435 - 2.33753I$
$u = 0.606372 + 0.143048I$ $a = -1.00000$ $b = -0.346672 - 0.885333I$	$1.00791 + 4.33704I$	$4.62897 - 5.70101I$
$u = 0.606372 - 0.143048I$ $a = -1.00000$ $b = -0.346672 + 0.885333I$	$1.00791 - 4.33704I$	$4.62897 + 5.70101I$
$u = -0.50275 + 1.45896I$ $a = -1.00000$ $b = 0.186940 - 1.272060I$	$-8.16736 - 3.03930I$	$-1.32324 + 1.14176I$
$u = -0.50275 - 1.45896I$ $a = -1.00000$ $b = 0.186940 + 1.272060I$	$-8.16736 + 3.03930I$	$-1.32324 - 1.14176I$

IV. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1	$(u^3+u^2+2u+1)^8$ $\cdot(u^{10}+6u^8+13u^6-2u^5+13u^4-5u^3+6u^2-3u+2)$ $\cdot(u^{17}-9u^{16}+\cdots+144u-16)$
c_2, c_{10}	$(u^{10}+4u^8-u^7+6u^6-2u^5+2u^4-u^3-u^2-u+1)$ $\cdot(u^{17}+6u^{15}+\cdots-u-1)(u^{24}-u^{23}+\cdots+224u+173)$
c_3, c_6	$(u^{10}+u^8-u^7+2u^6+2u^5+u^4+2u^3-u^2-2u+1)$ $\cdot(u^{17}+9u^{15}+\cdots+3u^2-1)(u^{24}-3u^{23}+\cdots-14u+19)$
c_4, c_9	$(u^{10}+4u^8+u^7+6u^6+2u^5+2u^4+u^3-u^2+u+1)$ $\cdot(u^{17}+6u^{15}+\cdots-u-1)(u^{24}-u^{23}+\cdots+224u+173)$
c_5	$(u^3+u^2+2u+1)^8$ $\cdot(u^{10}+6u^8+13u^6+2u^5+13u^4+5u^3+6u^2+3u+2)$ $\cdot(u^{17}-9u^{16}+\cdots+144u-16)$
c_7, c_8	$(u^4-u^3+u^2+1)^6$ $\cdot(u^{10}+2u^9+6u^8+8u^7+13u^6+10u^5+11u^4+5u^3+5u^2+1)$ $\cdot(u^{17}+9u^{16}+\cdots-32u-8)$
c_{11}	$(u^4-u^3+u^2+1)^6$ $\cdot(u^{10}-2u^9+6u^8-8u^7+13u^6-10u^5+11u^4-5u^3+5u^2+1)$ $\cdot(u^{17}+9u^{16}+\cdots-32u-8)$

V. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1, c_5	$((y^3+3y^2+2y-1)^8)(y^{10}+12y^9+\cdots+15y+4)$ $\cdot(y^{17}+15y^{16}+\cdots+1408y-256)$
c_2, c_4, c_9 c_{10}	$(y^{10}+8y^9+28y^8+51y^7+46y^6+12y^5-6y^4+3y^3+3y^2-3y+1)$ $\cdot(y^{17}+12y^{16}+\cdots-y-1)(y^{24}+15y^{23}+\cdots+196176y+29929)$
c_3, c_6	$(y^{10}+2y^9+5y^8+5y^7+8y^6+4y^5-13y^4+6y^3+11y^2-6y+1)$ $\cdot(y^{17}+18y^{16}+\cdots+6y-1)(y^{24}+7y^{23}+\cdots+11812y+361)$
c_7, c_8, c_{11}	$((y^4+y^3+3y^2+2y+1)^6)(y^{10}+8y^9+\cdots+10y+1)$ $\cdot(y^{17}+9y^{16}+\cdots+160y-64)$