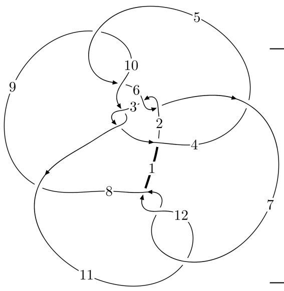
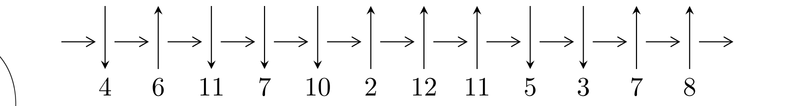
$12n_{0817}$ ($K12n_{0817}$)



A knot diagram[1]

Linearized knot diagam



Solving Sequence

$$7{,}11 \underset{c_{11}}{\rightarrow} 12 \underset{c_7}{\rightarrow} 8 \underset{c_8}{\longrightarrow} 9 \underset{c_{12}}{\rightarrow} 1{,}5 \underset{c_4}{\rightarrow} 4 \underset{c_1}{\longrightarrow} 2 \underset{c_3}{\longrightarrow} 3 \underset{c_6}{\longrightarrow} 6 \underset{c_{10}}{\rightarrow} 10 \twoheadrightarrow c_2, c_5, c_9$$

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

$$I_1^u = \langle -139u^{18} + 1059u^{17} + \cdots + 4b - 764,\ -87u^{18} + 677u^{17} + \cdots + 8a - 508,\ u^{19} - 9u^{18} + \cdots + 12u - 8\rangle$$

$$\begin{aligned} I_2^u = \langle & 2u^{12} + 2u^{11} - 15u^{10} - 12u^9 + 43u^8 + 27u^7 - 53u^6 - 26u^5 + 20u^4 + 10u^3 + 6u^2 + b - 4u - 2, \\ & u^{10} + u^9 - 7u^8 - 6u^7 + 18u^6 + 13u^5 - 18u^4 - 10u^3 + 2u^2 + a + 4, \\ & u^{13} + 2u^{12} - 7u^{11} - 14u^{10} + 19u^9 + 38u^8 - 22u^7 - 46u^6 + 6u^5 + 20u^4 + 7u^3 + u^2 - 5u - 1\rangle \end{aligned}$$

$$I_3^u = \langle 5a^5u^2 - 7a^4u^2 + \cdots - 11a + 26,\ 2a^5u^2 + a^4u^2 + \cdots + 95a + 46,\ u^3 + u^2 - 2u - 1\rangle$$

* 3 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 50 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. $I^u_1 = \langle -139u^{18} + 1059u^{17} + \cdots + 4b - 764,\ -87u^{18} + 677u^{17} + \cdots + 8a - 508,\ u^{19} - 9u^{18} + \cdots + 12u - 8\rangle$

(i) Arc colorings

$$a_7 = \begin{pmatrix} 0 \\ u \end{pmatrix}$$
$$a_{11} = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$
$$a_{12} = \begin{pmatrix} 1 \\ -u^2 \end{pmatrix}$$
$$a_8 = \begin{pmatrix} u \\ -u^3 + u \end{pmatrix}$$
$$a_9 = \begin{pmatrix} -u^3 + 2u \\ -u^3 + u \end{pmatrix}$$
$$a_1 = \begin{pmatrix} -u^2 + 1 \\ u^4 - 2u^2 \end{pmatrix}$$
$$a_5 = \begin{pmatrix} 10.8750u^{18} - 84.6250u^{17} + \cdots - 51.7500u + 63.5000 \\ \frac{139}{4}u^{18} - \frac{1059}{4}u^{17} + \cdots - 159u + 191 \end{pmatrix}$$
$$a_4 = \begin{pmatrix} 10.8750u^{18} - 84.6250u^{17} + \cdots - 51.7500u + 63.5000 \\ \frac{87}{4}u^{18} - \frac{611}{4}u^{17} + \cdots - 87u + 85 \end{pmatrix}$$
$$a_2 = \begin{pmatrix} -\frac{63}{8}u^{18} + \frac{465}{8}u^{17} + \cdots + \frac{135}{4}u - 38 \\ -\frac{1}{4}u^{18} + \frac{7}{4}u^{17} + \cdots + \frac{1}{2}u - 1 \end{pmatrix}$$
$$a_3 = \begin{pmatrix} 32.6250u^{18} - 237.375u^{17} + \cdots - 138.750u + 148.500 \\ \frac{87}{4}u^{18} - \frac{611}{4}u^{17} + \cdots - 87u + 85 \end{pmatrix}$$
$$a_6 = \begin{pmatrix} \frac{169}{8}u^{18} - \frac{1229}{8}u^{17} + \cdots - \frac{181}{2}u + 96 \\ 6u^{18} - \frac{85}{2}u^{17} + \cdots - \frac{47}{2}u + 25 \end{pmatrix}$$
$$a_{10} = \begin{pmatrix} \frac{1}{8}u^{18} - \frac{7}{8}u^{17} + \cdots + \frac{3}{4}u + 1 \\ \frac{1}{4}u^{18} - \frac{7}{4}u^{17} + \cdots - \frac{1}{2}u + 1 \end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes
$= -25u^{18} + 174u^{17} - 365u^{16} - 25u^{15} + 771u^{14} + 163u^{13} - 1928u^{12} + 630u^{11} + 1143u^{10} + 293u^9 - 304u^8 - 532u^7 - 1600u^6 + 1277u^5 + 1032u^4 - 324u^3 - 389u^2 + 90u - 94$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1, c_4	$u^{19} + u^{18} + \cdots + 12u + 1$
c_2, c_6	$u^{19} - 8u^{18} + \cdots - 52u + 8$
c_3, c_5, c_9 c_{10}	$u^{19} - u^{18} + \cdots - 2u - 1$
c_7, c_{11}, c_{12}	$u^{19} - 9u^{18} + \cdots + 12u - 8$
c_8	$u^{19} + 27u^{18} + \cdots + 27116u + 3512$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_4	$y^{19} + 35y^{18} + \cdots + 42y - 1$
c_2, c_6	$y^{19} + 16y^{18} + \cdots - 48y - 64$
c_3, c_5, c_9 c_{10}	$y^{19} - 11y^{18} + \cdots + 10y - 1$
c_7, c_{11}, c_{12}	$y^{19} - 23y^{18} + \cdots - 432y - 64$
c_8	$y^{19} - 43y^{18} + \cdots + 4640976y - 12334144$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = -0.091188 + 0.966333I$ $a = 0.733877 - 0.319784I$ $b = 0.211486 - 0.489342I$	$-6.48169 + 2.66282I$	$-2.52143 - 2.56509I$
$u = -0.091188 - 0.966333I$ $a = 0.733877 + 0.319784I$ $b = 0.211486 + 0.489342I$	$-6.48169 - 2.66282I$	$-2.52143 + 2.56509I$
$u = -0.904144 + 0.517931I$ $a = 0.706601 - 1.068440I$ $b = 0.218968 - 0.639966I$	$2.53064 - 4.01875I$	$1.69485 + 6.55873I$
$u = -0.904144 - 0.517931I$ $a = 0.706601 + 1.068440I$ $b = 0.218968 + 0.639966I$	$2.53064 + 4.01875I$	$1.69485 - 6.55873I$
$u = 1.19835$ $a = 0.103232$ $b = 0.623676$	2.53576	4.52770
$u = -0.634175 + 0.351711I$ $a = -1.29575 + 1.15797I$ $b = -0.392189 + 0.643839I$	$0.91268 + 1.32361I$	$-5.06829 + 3.42198I$
$u = -0.634175 - 0.351711I$ $a = -1.29575 - 1.15797I$ $b = -0.392189 - 0.643839I$	$0.91268 - 1.32361I$	$-5.06829 - 3.42198I$
$u = -1.060850 + 0.713165I$ $a = -0.549004 + 0.898836I$ $b = -0.176307 + 0.591660I$	$-3.53037 - 8.31890I$	$-1.40883 + 6.39242I$
$u = -1.060850 - 0.713165I$ $a = -0.549004 - 0.898836I$ $b = -0.176307 - 0.591660I$	$-3.53037 + 8.31890I$	$-1.40883 - 6.39242I$
$u = 1.289480 + 0.424662I$ $a = 0.114699 - 0.319331I$ $b = -0.272999 - 0.853707I$	$-2.23583 + 2.25035I$	$-0.46692 - 2.77886I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 1.289480 - 0.424662I$ $a = 0.114699 + 0.319331I$ $b = -0.272999 + 0.853707I$	$-2.23583 - 2.25035I$	$-0.46692 + 2.77886I$
$u = 0.103961 + 0.369644I$ $a = -0.936993 - 0.305312I$ $b = -0.163488 + 0.354518I$	$-0.056986 + 0.926042I$	$-1.11794 - 7.21094I$
$u = 0.103961 - 0.369644I$ $a = -0.936993 + 0.305312I$ $b = -0.163488 - 0.354518I$	$-0.056986 - 0.926042I$	$-1.11794 + 7.21094I$
$u = 1.67359 + 0.17987I$ $a = 0.094930 + 1.113270I$ $b = 0.63844 + 2.62086I$	$9.08712 + 1.06966I$	$-0.590577 - 0.693151I$
$u = 1.67359 - 0.17987I$ $a = 0.094930 - 1.113270I$ $b = 0.63844 - 2.62086I$	$9.08712 - 1.06966I$	$-0.590577 + 0.693151I$
$u = 1.73838 + 0.18173I$ $a = 0.101477 - 1.233980I$ $b = -0.15677 - 2.84161I$	$11.82410 + 7.02626I$	$2.32832 - 4.17154I$
$u = 1.73838 - 0.18173I$ $a = 0.101477 + 1.233980I$ $b = -0.15677 + 2.84161I$	$11.82410 - 7.02626I$	$2.32832 + 4.17154I$
$u = 1.78576 + 0.20016I$ $a = -0.271457 + 1.238060I$ $b = -0.21898 + 2.80030I$	$6.42171 + 12.16180I$	$-0.61302 - 5.43087I$
$u = 1.78576 - 0.20016I$ $a = -0.271457 - 1.238060I$ $b = -0.21898 - 2.80030I$	$6.42171 - 12.16180I$	$-0.61302 + 5.43087I$

II.

$$\boldsymbol{I_2^u = \langle 2u^{12} + 2u^{11} + \cdots + b - 2,\ u^{10} + u^9 + \cdots + a + 4,\ u^{13} + 2u^{12} + \cdots - 5u - 1\rangle}$$

(i) Arc colorings

$$a_7 = \begin{pmatrix} 0 \\ u \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$

$$a_{12} = \begin{pmatrix} 1 \\ -u^2 \end{pmatrix}$$

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

$$a_9 = \begin{pmatrix} -u^3 + 2u \\ -u^3 + u \end{pmatrix}$$

$$a_1 = \begin{pmatrix} -u^2 + 1 \\ u^4 - 2u^2 \end{pmatrix}$$

$$a_5 = \begin{pmatrix} -u^{10} - u^9 + 7u^8 + 6u^7 - 18u^6 - 13u^5 + 18u^4 + 10u^3 - 2u^2 - 4 \\ -2u^{12} - 2u^{11} + \cdots + 4u + 2 \end{pmatrix}$$

$$a_4 = \begin{pmatrix} -u^{10} - u^9 + 7u^8 + 6u^7 - 18u^6 - 13u^5 + 18u^4 + 10u^3 - 2u^2 - 4 \\ -u^{12} - u^{11} + \cdots + 4u + 2 \end{pmatrix}$$

$$a_2 = \begin{pmatrix} -u^{10} - u^9 + 7u^8 + 6u^7 - 18u^6 - 14u^5 + 18u^4 + 14u^3 - 3u^2 - 4u - 3 \\ u^4 - 3u^2 + 1 \end{pmatrix}$$

$$a_3 = \begin{pmatrix} -u^{12} - u^{11} + 7u^{10} + 5u^9 - 18u^8 - 8u^7 + 17u^6 + 3u^5 - 4u^2 + 4u - 2 \\ -u^{12} - u^{11} + \cdots + 4u + 2 \end{pmatrix}$$

$$a_6 = \begin{pmatrix} -u^{11} - u^{10} + 7u^9 + 5u^8 - 18u^7 - 8u^6 + 17u^5 + 2u^4 + 4u^2 - 5u \\ u^7 - 5u^5 + 7u^3 + u^2 - 2u - 1 \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} -u^{12} - 2u^{11} + \cdots + 2u + 5 \\ -u^3 + 2u - 1 \end{pmatrix}$$

(ii) Obstruction class $= 1$

(iii) Cusp Shapes
$= -3u^{11} - 7u^{10} + 17u^9 + 43u^8 - 33u^7 - 95u^6 + 13u^5 + 73u^4 + 23u^3 + 6u^2 - 14u - 14$

(iv) u-Polynomials at the component

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

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_4	$y^{13} + 5y^{12} + \cdots + 6y - 1$
c_2, c_6	$y^{13} + 13y^{12} + \cdots + 18y - 1$
c_3, c_5, c_9 c_{10}	$y^{13} - 9y^{12} + \cdots - 14y - 1$
c_7, c_{11}, c_{12}	$y^{13} - 18y^{12} + \cdots + 27y - 1$
c_8	$y^{13} - 26y^{12} + \cdots + 43y - 1$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_2^u	$\sqrt{-1}(\text{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.820152 + 0.104400I$ $a = 0.753200 + 1.119880I$ $b = 0.305571 + 0.530288I$	$1.34031 - 1.84544I$	$2.80039 + 5.64574I$
$u = 0.820152 - 0.104400I$ $a = 0.753200 - 1.119880I$ $b = 0.305571 - 0.530288I$	$1.34031 + 1.84544I$	$2.80039 - 5.64574I$
$u = -1.26705$ $a = -0.390134$ $b = -1.85106$	-0.232440	0.645970
$u = -1.300200 + 0.250560I$ $a = 0.343272 - 0.374017I$ $b = 1.63014 - 0.54583I$	$-4.74439 - 5.27325I$	$-1.78132 + 3.84852I$
$u = -1.300200 - 0.250560I$ $a = 0.343272 + 0.374017I$ $b = 1.63014 + 0.54583I$	$-4.74439 + 5.27325I$	$-1.78132 - 3.84852I$
$u = 1.35503$ $a = 0.699592$ $b = 0.402528$	1.54960	-4.46630
$u = -0.162080 + 0.555123I$ $a = -0.32922 + 1.58092I$ $b = -0.924848 + 0.088801I$	$-8.52981 + 2.40351I$	$-9.03747 - 0.70595I$
$u = -0.162080 - 0.555123I$ $a = -0.32922 - 1.58092I$ $b = -0.924848 - 0.088801I$	$-8.52981 - 2.40351I$	$-9.03747 + 0.70595I$
$u = 1.48038 + 0.34329I$ $a = -0.744111 + 0.018385I$ $b = -0.450757 - 0.029628I$	$-2.98672 + 1.03297I$	$-3.12657 + 1.51158I$
$u = 1.48038 - 0.34329I$ $a = -0.744111 - 0.018385I$ $b = -0.450757 + 0.029628I$	$-2.98672 - 1.03297I$	$-3.12657 - 1.51158I$

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -1.78337 + 0.04448I$ $a = -0.115269 + 1.138540I$ $b = -0.34421 + 2.57894I$	$11.19350 + 0.95284I$	$1.091372 - 0.413941I$
$u = -1.78337 - 0.04448I$ $a = -0.115269 - 1.138540I$ $b = -0.34421 - 2.57894I$	$11.19350 - 0.95284I$	$1.091372 + 0.413941I$
$u = -0.197734$ $a = -4.12519$ $b = 1.01673$	-3.73260	-11.0720

III. $I^u_3 =$ $\langle 5a^5u^2-7a^4u^2+\cdots-11a+26,\ 2a^5u^2+a^4u^2+\cdots+95a+46,\ u^3+u^2-2u-1\rangle$

(i) Arc colorings

$$a_7 = \begin{pmatrix}0\\u\end{pmatrix}$$

$$a_{11} = \begin{pmatrix}1\\0\end{pmatrix}$$

$$a_{12} = \begin{pmatrix}1\\-u^2\end{pmatrix}$$

$$a_8 = \begin{pmatrix}u\\u^2-u-1\end{pmatrix}$$

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

$$a_1 = \begin{pmatrix}-u^2+1\\u^2-u-1\end{pmatrix}$$

$$a_5 = \begin{pmatrix}a\\-0.178571a^5u^2+0.250000a^4u^2+\cdots+0.392857a-0.928571\end{pmatrix}$$

$$a_4 = \begin{pmatrix}a\\-0.178571a^5u^2+0.250000a^4u^2+\cdots+0.392857a-0.928571\end{pmatrix}$$

$$a_2 = \begin{pmatrix}-0.214286a^5u^2-0.250000a^4u^2+\cdots+0.0714286a+1.28571\\\frac{15}{28}a^5u^2+\frac{1}{2}a^4u^2+\cdots+\frac{1}{14}a+\frac{2}{7}\end{pmatrix}$$

$$a_3 = \begin{pmatrix}-0.178571a^5u^2+0.250000a^4u^2+\cdots+1.39286a-0.928571\\-0.178571a^5u^2+0.250000a^4u^2+\cdots+0.392857a-0.928571\end{pmatrix}$$

$$a_6 = \begin{pmatrix}-0.0357143a^5u^2-0.500000a^4u^2+\cdots-1.32143a+0.214286\\\frac{1}{14}a^5u^2-\frac{1}{4}a^4u^2+\cdots-\frac{5}{14}a+\frac{4}{7}\end{pmatrix}$$

$$a_{10} = \begin{pmatrix}\frac{3}{14}a^5u^2+\frac{1}{4}a^4u^2+\cdots-\frac{1}{14}a-\frac{9}{7}\\0.535714a^5u^2+0.500000a^4u^2+\cdots+0.0714286a-1.71429\end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= -\frac{10}{7}a^5u^2-\frac{16}{7}a^5u+a^4u^2-\frac{5}{7}a^5+3a^4u-\frac{3}{7}a^3u^2+a^4+\frac{33}{7}a^3u-\frac{11}{7}a^2u^2+\frac{16}{7}a^3-\frac{5}{7}a^2u-\frac{5}{7}u^2a+\frac{5}{7}a^2+\frac{13}{7}au-\frac{6}{7}u^2-\frac{13}{7}a+\frac{10}{7}u+\frac{32}{7}$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1, c_4	$u^{18} - u^{17} + \cdots - 16u - 8$
c_2, c_6	$(u^3 + u^2 + 2u + 1)^6$
c_3, c_5, c_9 c_{10}	$u^{18} - u^{17} + \cdots + 64u - 8$
c_7, c_{11}, c_{12}	$(u^3 + u^2 - 2u - 1)^6$
c_8	$(u^3 - 3u^2 - 4u - 1)^6$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_4	$y^{18} + 19y^{17} + \cdots - 3424y + 64$
c_2, c_6	$(y^3 + 3y^2 + 2y - 1)^6$
c_3, c_5, c_9 c_{10}	$y^{18} - 5y^{17} + \cdots - 2784y + 64$
c_7, c_{11}, c_{12}	$(y^3 - 5y^2 + 6y - 1)^6$
c_8	$(y^3 - 17y^2 + 10y - 1)^6$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_3^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 1.24698$ $a = -0.922052 + 0.388981I$ $b = -1.215350 - 0.381464I$	$-1.61418 + 2.82812I$	$-1.50976 - 2.97945I$
$u = 1.24698$ $a = -0.922052 - 0.388981I$ $b = -1.215350 + 0.381464I$	$-1.61418 - 2.82812I$	$-1.50976 + 2.97945I$
$u = 1.24698$ $a = 0.608898 + 0.654820I$ $b = -0.365738 + 0.960730I$	$-1.61418 - 2.82812I$	$-1.50976 + 2.97945I$
$u = 1.24698$ $a = 0.608898 - 0.654820I$ $b = -0.365738 - 0.960730I$	$-1.61418 + 2.82812I$	$-1.50976 - 2.97945I$
$u = 1.24698$ $a = 0.445706$ $b = 0.852713$	2.52340	5.01950
$u = 1.24698$ $a = -0.176294$ $b = 0.507529$	2.52340	5.01950
$u = -0.445042$ $a = -0.405582$ $b = -1.37094$	-3.11638	5.01950
$u = -0.445042$ $a = 0.43074 + 1.96960I$ $b = 1.62616 + 0.09419I$	$-7.25396 + 2.82812I$	$-1.50976 - 2.97945I$
$u = -0.445042$ $a = 0.43074 - 1.96960I$ $b = 1.62616 - 0.09419I$	$-7.25396 - 2.82812I$	$-1.50976 + 2.97945I$
$u = -0.445042$ $a = -2.65086$ $b = 0.429626$	-3.11638	5.01950

Solutions to I_3^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.445042$ $a=\quad 3.12194+1.04628I$ $b=-0.532013+0.834636I$	$-7.25396+2.82812I$	$-1.50976-2.97945I$
$u=-0.445042$ $a=\quad 3.12194-1.04628I$ $b=-0.532013-0.834636I$	$-7.25396-2.82812I$	$-1.50976+2.97945I$
$u=-1.80194$ $a=-0.411551+0.882060I$ $b=-0.43781+2.39534I$	$9.66536+2.82812I$	$-1.50976-2.97945I$
$u=-1.80194$ $a=-0.411551-0.882060I$ $b=-0.43781-2.39534I$	$9.66536-2.82812I$	$-1.50976+2.97945I$
$u=-1.80194$ $a=\quad 0.261196+1.163730I$ $b=\quad 0.16798+2.61487I$	13.8029	$5.01951+0.I$
$u=-1.80194$ $a=\quad 0.261196-1.163730I$ $b=\quad 0.16798-2.61487I$	13.8029	$5.01951+0.I$
$u=-1.80194$ $a=-0.195655+1.397520I$ $b=\quad 0.04731+2.72683I$	$9.66536-2.82812I$	$-1.50976+2.97945I$
$u=-1.80194$ $a=-0.195655-1.397520I$ $b=\quad 0.04731-2.72683I$	$9.66536+2.82812I$	$-1.50976-2.97945I$

IV. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1, c_4	$(u^{13}+u^{12}+\cdots+3u^2-1)(u^{18}-u^{17}+\cdots-16u-8)$ $\cdot(u^{19}+u^{18}+\cdots+12u+1)$
c_2	$((u^3+u^2+2u+1)^6)(u^{13}-u^{12}+\cdots+2u+1)$ $\cdot(u^{19}-8u^{18}+\cdots-52u+8)$
c_3, c_9	$(u^{13}+u^{12}-4u^{11}-4u^{10}+6u^9+5u^8-2u^7+4u^6-2u^5-14u^4+7u^2+1)$ $\cdot(u^{18}-u^{17}+\cdots+64u-8)(u^{19}-u^{18}+\cdots-2u-1)$
c_5, c_{10}	$(u^{13}-u^{12}-4u^{11}+4u^{10}+6u^9-5u^8-2u^7-4u^6-2u^5+14u^4-7u^2-1)$ $\cdot(u^{18}-u^{17}+\cdots+64u-8)(u^{19}-u^{18}+\cdots-2u-1)$
c_6	$((u^3+u^2+2u+1)^6)(u^{13}+u^{12}+\cdots+2u-1)$ $\cdot(u^{19}-8u^{18}+\cdots-52u+8)$
c_7	$((u^3+u^2-2u-1)^6)(u^{13}-2u^{12}+\cdots-5u+1)$ $\cdot(u^{19}-9u^{18}+\cdots+12u-8)$
c_8	$((u^3-3u^2-4u-1)^6)(u^{13}+6u^{12}+\cdots+u+1)$ $\cdot(u^{19}+27u^{18}+\cdots+27116u+3512)$
c_{11}, c_{12}	$((u^3+u^2-2u-1)^6)(u^{13}+2u^{12}+\cdots-5u-1)$ $\cdot(u^{19}-9u^{18}+\cdots+12u-8)$

V. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1, c_4	$(y^{13}+5y^{12}+\cdots+6y-1)(y^{18}+19y^{17}+\cdots-3424y+64)$ $\cdot\,(y^{19}+35y^{18}+\cdots+42y-1)$
c_2, c_6	$((y^3+3y^2+2y-1)^6)(y^{13}+13y^{12}+\cdots+18y-1)$ $\cdot\,(y^{19}+16y^{18}+\cdots-48y-64)$
c_3, c_5, c_9 c_{10}	$(y^{13}-9y^{12}+\cdots-14y-1)(y^{18}-5y^{17}+\cdots-2784y+64)$ $\cdot\,(y^{19}-11y^{18}+\cdots+10y-1)$
c_7, c_{11}, c_{12}	$((y^3-5y^2+6y-1)^6)(y^{13}-18y^{12}+\cdots+27y-1)$ $\cdot\,(y^{19}-23y^{18}+\cdots-432y-64)$
c_8	$((y^3-17y^2+10y-1)^6)(y^{13}-26y^{12}+\cdots+43y-1)$ $\cdot\,(y^{19}-43y^{18}+\cdots+4640976y-12334144)$