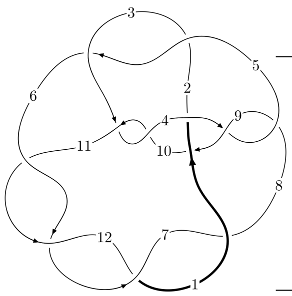
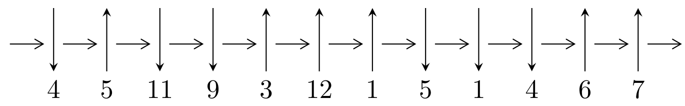
$12n_{0792}$ $(K12n_{0792})$



A knot diagram[1]

Linearized knot diagam



Solving Sequence

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

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

$$I_1^u = \langle 3.07628 \times 10^{46} u^{52} - 1.00351 \times 10^{47} u^{51} + \cdots + 3.48741 \times 10^{47} b + 1.73101 \times 10^{48},$$
$$- 1.34583 \times 10^{48} u^{52} + 5.85153 \times 10^{47} u^{51} + \cdots + 6.62608 \times 10^{48} a - 2.02004 \times 10^{48},\ u^{53} + u^{52} + \cdots + 2u +$$
$$I_2^u = \langle u^{10} - 7u^8 + u^7 + 17u^6 - 5u^5 - 16u^4 + 7u^3 + 4u^2 + b - 2u,$$
$$- u^{10} + 7u^8 - u^7 - 17u^6 + 5u^5 + 16u^4 - 7u^3 - 5u^2 + a + 2u + 2,$$
$$u^{14} - 10u^{12} + u^{11} + 39u^{10} - 8u^9 - 74u^8 + 23u^7 + 69u^6 - 28u^5 - 28u^4 + 13u^3 + 4u^2 - 2u + 1\rangle$$

* 2 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 67 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.
$\boldsymbol{I_1^u = \langle 3.08\times 10^{46}u^{52} - 1.00\times 10^{47}u^{51} + \cdots + 3.49\times 10^{47}b + 1.73\times 10^{48},\ -1.35\times 10^{48}u^{52} + 5.85\times 10^{47}u^{51} + \cdots + 6.63\times 10^{48}a - 2.02\times 10^{48},\ u^{53} + u^{52} + \cdots + 2u + 19\rangle}$

(i) Arc colorings

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

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

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

$$a_7 = \begin{pmatrix} u \\ -u^3 + u \end{pmatrix}$$

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

$$a_4 = \begin{pmatrix} 0.203111u^{52} - 0.0883105u^{51} + \cdots - 9.46298u + 0.304862 \\ -0.0882110u^{52} + 0.287753u^{51} + \cdots - 1.72583u - 4.96359 \end{pmatrix}$$

$$a_3 = \begin{pmatrix} 0.114900u^{52} + 0.199442u^{51} + \cdots - 11.1888u - 4.65873 \\ -0.0882110u^{52} + 0.287753u^{51} + \cdots - 1.72583u - 4.96359 \end{pmatrix}$$

$$a_5 = \begin{pmatrix} 0.0908917u^{52} + 0.0768978u^{51} + \cdots - 7.10988u - 3.08929 \\ 0.0260187u^{52} + 0.0838960u^{51} + \cdots - 5.33771u - 3.10420 \end{pmatrix}$$

$$a_2 = \begin{pmatrix} 0.0279811u^{52} + 0.0401943u^{51} + \cdots + 3.61598u + 4.82383 \\ -0.0143374u^{52} - 0.198875u^{51} + \cdots + 4.54528u + 3.00459 \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} -0.109349u^{52} + 0.187204u^{51} + \cdots - 5.22764u - 4.01238 \\ 0.272728u^{52} + 0.00219298u^{51} + \cdots - 4.61603u - 0.998578 \end{pmatrix}$$

$$a_9 = \begin{pmatrix} 0.0602843u^{52} + 0.218936u^{51} + \cdots - 9.13144u - 3.51075 \\ 0.120808u^{52} - 0.0288635u^{51} + \cdots - 1.02731u - 0.112491 \end{pmatrix}$$

$$a_8 = \begin{pmatrix} u^3 - 2u \\ -u^5 + 3u^3 - u \end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= 0.0556426u^{52} + 0.289899u^{51} + \cdots + 16.8530u + 6.93721$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{53} - 8u^{52} + \cdots - 25u + 1$
c_2, c_5	$u^{53} - 18u^{51} + \cdots - u + 683$
c_3, c_{10}	$u^{53} - u^{52} + \cdots + 996u - 745$
c_4, c_8	$u^{53} + 2u^{52} + \cdots - 13u - 1$
c_6, c_7, c_{11} c_{12}	$u^{53} - u^{52} + \cdots + 2u - 19$
c_9	$u^{53} + 3u^{52} + \cdots + 26u - 1$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{53} - 36y^{52} + \cdots + 47y - 1$
c_2, c_5	$y^{53} - 36y^{52} + \cdots + 10124793y - 466489$
c_3, c_{10}	$y^{53} + 31y^{52} + \cdots - 10501844y - 555025$
c_4, c_8	$y^{53} + 22y^{52} + \cdots + 167y - 1$
c_6, c_7, c_{11} c_{12}	$y^{53} - 65y^{52} + \cdots + 5324y - 361$
c_9	$y^{53} - 33y^{52} + \cdots + 392y - 1$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = \ \ 0.976765 + 0.204315I$ $a = -0.695066 - 1.196400I$ $b = -0.341850 + 0.765716I$	$3.70234 + 2.85475I$	$7.56242 - 7.71874I$
$u = \ \ 0.976765 - 0.204315I$ $a = -0.695066 + 1.196400I$ $b = -0.341850 - 0.765716I$	$3.70234 - 2.85475I$	$7.56242 + 7.71874I$
$u = \ \ 0.830103 + 0.663239I$ $a = \ \ 0.622792 + 0.940843I$ $b = \ \ 0.68077 - 1.27126I$	$1.17909 + 10.63840I$	$4.37034 - 8.18411I$
$u = \ \ 0.830103 - 0.663239I$ $a = \ \ 0.622792 - 0.940843I$ $b = \ \ 0.68077 + 1.27126I$	$1.17909 - 10.63840I$	$4.37034 + 8.18411I$
$u = -0.672364 + 0.631114I$ $a = \ \ 0.755869 - 0.889133I$ $b = \ \ 0.567716 + 1.241920I$	$-0.25800 - 4.19233I$	$2.11175 + 4.57513I$
$u = -0.672364 - 0.631114I$ $a = \ \ 0.755869 + 0.889133I$ $b = \ \ 0.567716 - 1.241920I$	$-0.25800 + 4.19233I$	$2.11175 - 4.57513I$
$u = \ \ 0.161033 + 0.868640I$ $a = \ \ 0.204873 - 0.301193I$ $b = -0.433829 - 1.023470I$	$-0.84645 - 5.58131I$	$2.80981 + 5.18997I$
$u = \ \ 0.161033 - 0.868640I$ $a = \ \ 0.204873 + 0.301193I$ $b = -0.433829 + 1.023470I$	$-0.84645 + 5.58131I$	$2.80981 - 5.18997I$
$u = -0.583775 + 0.645996I$ $a = -0.843622 - 0.123449I$ $b = -0.267716 - 0.980072I$	$5.12894 - 2.24975I$	$9.33045 + 6.74363I$
$u = -0.583775 - 0.645996I$ $a = -0.843622 + 0.123449I$ $b = -0.267716 + 0.980072I$	$5.12894 + 2.24975I$	$9.33045 - 6.74363I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -1.15898$ $a = 0.0546397$ $b = -0.526356$	2.43214	4.06270
$u = -0.339714 + 0.732403I$ $a = 0.493441 + 0.206248I$ $b = -0.444967 + 0.968163I$	$-1.276670 - 0.383611I$	$1.90948 + 0.44922I$
$u = -0.339714 - 0.732403I$ $a = 0.493441 - 0.206248I$ $b = -0.444967 - 0.968163I$	$-1.276670 + 0.383611I$	$1.90948 - 0.44922I$
$u = -1.24740$ $a = 0.350546$ $b = -0.846371$	2.39687	0
$u = -1.155310 + 0.491746I$ $a = -0.678424 + 0.467706I$ $b = -0.016892 - 0.866092I$	$3.21605 + 0.86609I$	0
$u = -1.155310 - 0.491746I$ $a = -0.678424 - 0.467706I$ $b = -0.016892 + 0.866092I$	$3.21605 - 0.86609I$	0
$u = 0.605946 + 0.390778I$ $a = 0.00427 - 2.23076I$ $b = -0.582765 + 0.683402I$	$-2.25202 + 4.47982I$	$2.34770 - 7.54811I$
$u = 0.605946 - 0.390778I$ $a = 0.00427 + 2.23076I$ $b = -0.582765 - 0.683402I$	$-2.25202 - 4.47982I$	$2.34770 + 7.54811I$
$u = -0.586170 + 0.296342I$ $a = 0.123031 + 0.435024I$ $b = 1.287910 - 0.486685I$	$-1.61768 - 3.77662I$	$4.85409 + 6.48122I$
$u = -0.586170 - 0.296342I$ $a = 0.123031 - 0.435024I$ $b = 1.287910 + 0.486685I$	$-1.61768 + 3.77662I$	$4.85409 - 6.48122I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.554932 + 0.317475I$ $a = 1.47164 + 1.23287I$ $b = 0.06112 - 1.65085I$	$7.37545 + 1.13740I$	$0.82605 - 7.31172I$
$u = 0.554932 - 0.317475I$ $a = 1.47164 - 1.23287I$ $b = 0.06112 + 1.65085I$	$7.37545 - 1.13740I$	$0.82605 + 7.31172I$
$u = 0.575786 + 0.115234I$ $a = -2.26792 - 0.59441I$ $b = -0.322176 + 0.846567I$	$4.61254 + 0.39900I$	$8.15479 + 2.26046I$
$u = 0.575786 - 0.115234I$ $a = -2.26792 + 0.59441I$ $b = -0.322176 - 0.846567I$	$4.61254 - 0.39900I$	$8.15479 - 2.26046I$
$u = 1.41745 + 0.25332I$ $a = -0.761883 - 0.551649I$ $b = 0.350041 + 0.716405I$	$4.28909 + 3.91504I$	0
$u = 1.41745 - 0.25332I$ $a = -0.761883 + 0.551649I$ $b = 0.350041 - 0.716405I$	$4.28909 - 3.91504I$	0
$u = 0.339035 + 0.441644I$ $a = 0.355817 - 0.338282I$ $b = 1.014180 + 0.427589I$	$-3.02796 - 1.52327I$	$-0.96904 - 2.19439I$
$u = 0.339035 - 0.441644I$ $a = 0.355817 + 0.338282I$ $b = 1.014180 - 0.427589I$	$-3.02796 + 1.52327I$	$-0.96904 + 2.19439I$
$u = -1.44940$ $a = 0.732573$ $b = -1.34519$	2.55697	0
$u = -0.437530 + 0.311081I$ $a = 0.50768 + 2.81489I$ $b = -0.600329 - 0.687466I$	$-2.04690 + 1.54353I$	$2.73867 + 2.39570I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.437530 - 0.311081I$ $a = 0.50768 - 2.81489I$ $b = -0.600329 + 0.687466I$	$-2.04690 - 1.54353I$	$2.73867 - 2.39570I$
$u = 1.53217 + 0.05661I$ $a = -0.47460 + 2.01391I$ $b = 0.137826 - 1.140700I$	$4.62893 - 0.36463I$	0
$u = 1.53217 - 0.05661I$ $a = -0.47460 - 2.01391I$ $b = 0.137826 + 1.140700I$	$4.62893 + 0.36463I$	0
$u = -1.58165 + 0.08978I$ $a = -0.45673 + 2.22859I$ $b = -0.21483 - 1.85848I$	$14.7556 - 2.6131I$	0
$u = -1.58165 - 0.08978I$ $a = -0.45673 - 2.22859I$ $b = -0.21483 + 1.85848I$	$14.7556 + 2.6131I$	0
$u = -1.58814 + 0.03812I$ $a = 0.298490 - 1.206380I$ $b = 0.771676 + 1.000330I$	$12.15160 - 0.98530I$	0
$u = -1.58814 - 0.03812I$ $a = 0.298490 + 1.206380I$ $b = 0.771676 - 1.000330I$	$12.15160 + 0.98530I$	0
$u = -0.186420 + 0.366698I$ $a = 0.872470 - 0.246646I$ $b = 0.207209 + 0.429467I$	$0.043197 - 0.918878I$	$0.91856 + 7.38780I$
$u = -0.186420 - 0.366698I$ $a = 0.872470 + 0.246646I$ $b = 0.207209 - 0.429467I$	$0.043197 + 0.918878I$	$0.91856 - 7.38780I$
$u = 1.59148 + 0.08142I$ $a = 1.024970 + 0.427099I$ $b = -1.73010 - 0.47903I$	$5.91981 + 5.13315I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 1.59148 - 0.08142I$ $a = 1.024970 - 0.427099I$ $b = -1.73010 + 0.47903I$	$5.91981 - 5.13315I$	0
$u = -1.59036 + 0.10324I$ $a = -0.30768 - 2.00866I$ $b = 0.244184 + 1.036970I$	$5.27677 - 6.23867I$	0
$u = -1.59036 - 0.10324I$ $a = -0.30768 + 2.00866I$ $b = 0.244184 - 1.036970I$	$5.27677 + 6.23867I$	0
$u = 1.58933 + 0.17527I$ $a = 0.218478 + 1.130000I$ $b = 0.758755 - 1.104590I$	$12.49110 + 5.20174I$	0
$u = 1.58933 - 0.17527I$ $a = 0.218478 - 1.130000I$ $b = 0.758755 + 1.104590I$	$12.49110 - 5.20174I$	0
$u = 1.59648 + 0.19044I$ $a = -0.24628 - 1.91486I$ $b = -0.64701 + 1.53101I$	$7.34850 + 7.24137I$	0
$u = 1.59648 - 0.19044I$ $a = -0.24628 + 1.91486I$ $b = -0.64701 - 1.53101I$	$7.34850 - 7.24137I$	0
$u = -1.65850 + 0.20486I$ $a = -0.11064 + 1.82637I$ $b = -0.83022 - 1.52276I$	$9.5991 - 13.9965I$	0
$u = -1.65850 - 0.20486I$ $a = -0.11064 - 1.82637I$ $b = -0.83022 + 1.52276I$	$9.5991 + 13.9965I$	0
$u = -1.70641 + 0.05300I$ $a = 0.16970 - 1.44726I$ $b = 0.601076 + 0.977119I$	$13.21480 - 3.88400I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = -1.70641 - 0.05300I$ $a = 0.16970 + 1.44726I$ $b = 0.601076 - 0.977119I$	$13.21480 + 3.88400I$	0
$u = 1.74373 + 0.08356I$ $a = -0.007459 + 1.240060I$ $b = 0.609167 - 1.102060I$	$13.60250 + 1.24707I$	0
$u = 1.74373 - 0.08356I$ $a = -0.007459 - 1.240060I$ $b = 0.609167 + 1.102060I$	$13.60250 - 1.24707I$	0

II.

$$\boldsymbol{I_2^u = \langle u^{10}-7u^8+\cdots+b-2u,\ -u^{10}+7u^8+\cdots+a+2,\ u^{14}-10u^{12}+\cdots-2u+1\rangle}$$

(i) Arc colorings

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

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

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

$$a_7 = \begin{pmatrix} u \\ -u^3+u \end{pmatrix}$$

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

$$a_4 = \begin{pmatrix} u^{10}-7u^8+u^7+17u^6-5u^5-16u^4+7u^3+5u^2-2u-2 \\ -u^{10}+7u^8-u^7-17u^6+5u^5+16u^4-7u^3-4u^2+2u \end{pmatrix}$$

$$a_3 = \begin{pmatrix} u^2-2 \\ -u^{10}+7u^8-u^7-17u^6+5u^5+16u^4-7u^3-4u^2+2u \end{pmatrix}$$

$$a_5 = \begin{pmatrix} -u^5+4u^3-4u \\ u^{13}-9u^{11}+\cdots+4u^2+u \end{pmatrix}$$

$$a_2 = \begin{pmatrix} -u^8+6u^6-12u^4+9u^2-2 \\ u^4-3u^2+1 \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} u^{12}-9u^{10}+\cdots+6u+1 \\ u^6-4u^4+u^3+4u^2-2u \end{pmatrix}$$

$$a_9 = \begin{pmatrix} u^{12}-9u^{10}+u^9+31u^8-7u^7-50u^6+17u^5+36u^4-17u^3-8u^2+6u \\ -u^8+6u^6-11u^4+u^3+6u^2-2u \end{pmatrix}$$

$$a_8 = \begin{pmatrix} -u^3+2u \\ u^5-3u^3+u \end{pmatrix}$$

(ii) Obstruction class $= 1$

(iii) Cusp Shapes
$= -u^{12}+2u^{11}+8u^{10}-17u^9-24u^8+51u^7+35u^6-64u^5-28u^4+35u^3+12u^2-14u+6$

(iv) u-Polynomials at the component

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

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{14} - 3y^{13} + \cdots + 29y + 9$
c_2, c_5	$y^{14} - 11y^{13} + \cdots + 3y + 1$
c_3, c_{10}	$y^{14} + 8y^{13} + \cdots - 4y + 1$
c_4, c_8	$y^{14} + 11y^{13} + \cdots + 13y + 1$
c_6, c_7, c_{11} c_{12}	$y^{14} - 20y^{13} + \cdots + 4y + 1$
c_9	$y^{14} - 4y^{13} + \cdots + 8y + 1$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_2^u	$\sqrt{-1}(\text{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.740673 + 0.377978I$ $a = -1.370460 - 0.189280I$ $b = -0.223815 + 0.749196I$	$4.48989 + 1.36379I$	$6.88457 - 3.36739I$
$u = 0.740673 - 0.377978I$ $a = -1.370460 + 0.189280I$ $b = -0.223815 - 0.749196I$	$4.48989 - 1.36379I$	$6.88457 + 3.36739I$
$u = 1.281420 + 0.169138I$ $a = 0.311837 + 0.481666I$ $b = -0.698412 - 0.048193I$	$1.64857 - 0.94774I$	$1.25930 + 3.51308I$
$u = 1.281420 - 0.169138I$ $a = 0.311837 - 0.481666I$ $b = -0.698412 + 0.048193I$	$1.64857 + 0.94774I$	$1.25930 - 3.51308I$
$u = -0.652748 + 0.218469I$ $a = -1.44503 + 1.25753I$ $b = -0.17662 - 1.54274I$	$7.87230 - 0.75737I$	$12.39129 - 1.00527I$
$u = -0.652748 - 0.218469I$ $a = -1.44503 - 1.25753I$ $b = -0.17662 + 1.54274I$	$7.87230 + 0.75737I$	$12.39129 + 1.00527I$
$u = -1.45319 + 0.14529I$ $a = 0.854026 - 0.775035I$ $b = -0.763381 + 0.352765I$	$3.23638 - 4.38255I$	$2.20346 + 3.96328I$
$u = -1.45319 - 0.14529I$ $a = 0.854026 + 0.775035I$ $b = -0.763381 - 0.352765I$	$3.23638 + 4.38255I$	$2.20346 - 3.96328I$
$u = 1.64929 + 0.07227I$ $a = 0.25018 + 1.82900I$ $b = 0.46476 - 1.59062I$	$16.0636 + 1.9139I$	$11.41509 - 0.37585I$
$u = 1.64929 - 0.07227I$ $a = 0.25018 - 1.82900I$ $b = 0.46476 + 1.59062I$	$16.0636 - 1.9139I$	$11.41509 + 0.37585I$

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.131123 + 0.302892I$ $a = -2.85944 - 0.08111I$ $b = 0.784890 + 0.160547I$	$-2.23411 + 2.69440I$	$1.91591 - 3.21763I$
$u = 0.131123 - 0.302892I$ $a = -2.85944 + 0.08111I$ $b = 0.784890 - 0.160547I$	$-2.23411 - 2.69440I$	$1.91591 + 3.21763I$
$u = -1.69657 + 0.08296I$ $a = 0.258886 - 1.138930I$ $b = 0.612578 + 0.857416I$	$13.33660 - 3.11372I$	$9.93038 - 0.27629I$
$u = -1.69657 - 0.08296I$ $a = 0.258886 + 1.138930I$ $b = 0.612578 - 0.857416I$	$13.33660 + 3.11372I$	$9.93038 + 0.27629I$

III. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1	$(u^{14}-3u^{13}+\cdots+u+3)(u^{53}-8u^{52}+\cdots-25u+1)$
c_2	$(u^{14}+3u^{13}+\cdots+3u+1)(u^{53}-18u^{51}+\cdots-u+683)$
c_3	$(u^{14}+4u^{12}-2u^{11}+4u^{10}-5u^9-u^8+2u^6+2u^5-3u^4+2u^3-2u+1)$ $\cdot(u^{53}-u^{52}+\cdots+996u-745)$
c_4	$(u^{14}+u^{13}+\cdots+u+1)(u^{53}+2u^{52}+\cdots-13u-1)$
c_5	$(u^{14}-3u^{13}+\cdots-3u+1)(u^{53}-18u^{51}+\cdots-u+683)$
c_6, c_7	$(u^{14}-10u^{12}+\cdots+2u+1)(u^{53}-u^{52}+\cdots+2u-19)$
c_8	$(u^{14}-u^{13}+\cdots-u+1)(u^{53}+2u^{52}+\cdots-13u-1)$
c_9	$(u^{14}+2u^{13}-2u^{11}-3u^{10}-2u^9+2u^8-u^6+5u^5+4u^4+2u^3+4u^2+1)$ $\cdot(u^{53}+3u^{52}+\cdots+26u-1)$
c_{10}	$(u^{14}+4u^{12}+2u^{11}+4u^{10}+5u^9-u^8+2u^6-2u^5-3u^4-2u^3+2u+1)$ $\cdot(u^{53}-u^{52}+\cdots+996u-745)$
c_{11}, c_{12}	$(u^{14}-10u^{12}+\cdots-2u+1)(u^{53}-u^{52}+\cdots+2u-19)$

IV. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1	$(y^{14} - 3y^{13} + \cdots + 29y + 9)(y^{53} - 36y^{52} + \cdots + 47y - 1)$
c_2, c_5	$(y^{14} - 11y^{13} + \cdots + 3y + 1)$ $\cdot\,(y^{53} - 36y^{52} + \cdots + 10124793y - 466489)$
c_3, c_{10}	$(y^{14} + 8y^{13} + \cdots - 4y + 1)(y^{53} + 31y^{52} + \cdots - 1.05018 \times 10^7 y - 555025)$
c_4, c_8	$(y^{14} + 11y^{13} + \cdots + 13y + 1)(y^{53} + 22y^{52} + \cdots + 167y - 1)$
c_6, c_7, c_{11} c_{12}	$(y^{14} - 20y^{13} + \cdots + 4y + 1)(y^{53} - 65y^{52} + \cdots + 5324y - 361)$
c_9	$(y^{14} - 4y^{13} + \cdots + 8y + 1)(y^{53} - 33y^{52} + \cdots + 392y - 1)$