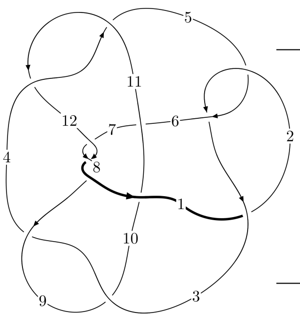
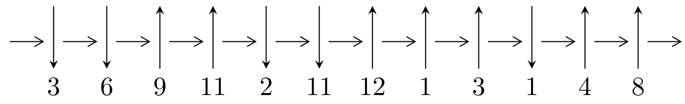
$12n_{0486}$ ($K12n_{0486}$)



A knot diagram[1]

Linearized knot diagam



Solving Sequence

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

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

$$\begin{aligned}
I_1^u = \langle & -29739878226279u^{18} + 120434793497659u^{17} + \cdots + 532958163092980b - 59832203175112, \\
& -9362493576748u^{18} + 40768461372003u^{17} + \cdots + 532958163092980a - 81214256524619, \\
& u^{19} - 5u^{18} + \cdots + 12u - 16\rangle \\
I_2^u = \langle & -u^{10} + 4u^9 - 13u^8 + 29u^7 - 51u^6 + 74u^5 - 84u^4 + 78u^3 - 54u^2 + b + 26u - 6, \\
& -3u^{11} + 12u^{10} - 41u^9 + 96u^8 - 179u^7 + 277u^6 - 338u^5 + 345u^4 - 274u^3 + 163u^2 + a - 67u + 13, \\
& u^{12} - 4u^{11} + 14u^{10} - 33u^9 + 63u^8 - 99u^7 + 124u^6 - 131u^5 + 108u^4 - 70u^3 + 32u^2 - 9u + 1\rangle \\
I_3^u = \langle & 2u^4a^3 - 11u^4a^2 + \cdots + 2a - 17,\ 3u^4a^2 + 9u^4a + \cdots + 19a - 25,\ u^5 - u^4 + 4u^3 - 3u^2 + 3u - 1\rangle
\end{aligned}$$

* 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. $I^u_1 = \langle -2.97\times10^{13}u^{18} + 1.20\times10^{14}u^{17} + \cdots + 5.33\times10^{14}b - 5.98\times10^{13},\ -9.36\times10^{12}u^{18} + 4.08\times10^{13}u^{17} + \cdots + 5.33\times10^{14}a - 8.12\times10^{13},\ u^{19} - 5u^{18} + \cdots + 12u - 16\rangle$

(i) Arc colorings

$$a_2 = \begin{pmatrix}1\\0\end{pmatrix}$$
$$a_3 = \begin{pmatrix}0\\u\end{pmatrix}$$
$$a_1 = \begin{pmatrix}1\\-u^2\end{pmatrix}$$
$$a_{10} = \begin{pmatrix}0.0175670u^{18} - 0.0764947u^{17} + \cdots + 4.43978u + 0.152384\\0.0558015u^{18} - 0.225974u^{17} + \cdots + 0.918202u + 0.112264\end{pmatrix}$$
$$a_{11} = \begin{pmatrix}-0.00459523u^{18} + 0.0200061u^{17} + \cdots + 3.37659u - 0.141328\\0.00804171u^{18} - 0.0413187u^{17} + \cdots + 1.10107u + 0.341233\end{pmatrix}$$
$$a_9 = \begin{pmatrix}0.0175670u^{18} - 0.0764947u^{17} + \cdots + 4.43978u + 0.152384\\0.0221623u^{18} - 0.0965008u^{17} + \cdots + 1.06319u + 0.293712\end{pmatrix}$$
$$a_4 = \begin{pmatrix}0.0168589u^{18} - 0.0901711u^{17} + \cdots - 2.65099u + 0.926294\\0.0247508u^{18} - 0.110253u^{17} + \cdots - 0.106730u + 0.303577\end{pmatrix}$$
$$a_5 = \begin{pmatrix}0.00896711u^{18} - 0.0700889u^{17} + \cdots - 4.19525u + 1.54901\\0.0662912u^{18} - 0.290418u^{17} + \cdots - 1.31972u + 0.917186\end{pmatrix}$$
$$a_6 = \begin{pmatrix}-0.0573241u^{18} + 0.220329u^{17} + \cdots - 2.87554u + 0.631826\\0.0662912u^{18} - 0.290418u^{17} + \cdots - 1.31972u + 0.917186\end{pmatrix}$$
$$a_7 = \begin{pmatrix}-0.0618479u^{18} + 0.231160u^{17} + \cdots - 1.58362u + 0.249407\\0.0729756u^{18} - 0.306781u^{17} + \cdots - 0.884238u + 0.609177\end{pmatrix}$$
$$a_8 = \begin{pmatrix}0.0290440u^{18} - 0.109467u^{17} + \cdots + 3.23161u - 0.322776\\-0.0303669u^{18} + 0.123682u^{17} + \cdots + 1.17250u - 0.0968854\end{pmatrix}$$
$$a_{12} = \begin{pmatrix}-0.0146657u^{18} + 0.0593565u^{17} + \cdots + 1.94146u + 0.302400\\0.0190316u^{18} - 0.0849051u^{17} + \cdots + 0.645986u + 0.311849\end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes
$= -\frac{51647443263187}{133239540773245}u^{18} + \frac{248046807631858}{133239540773245}u^{17} + \cdots - \frac{45855187936601}{7837620045485}u - \frac{9980369352966}{26647908154649}$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{19} + 5u^{18} + \cdots + 12u + 16$
c_2, c_5	$u^{19} + 5u^{18} + \cdots + 6u + 4$
c_3, c_4, c_9 c_{11}	$u^{19} - 4u^{17} + \cdots + u - 1$
c_6, c_{10}	$u^{19} - 2u^{18} + \cdots + 17u + 1$
c_7, c_8, c_{12}	$u^{19} + 9u^{18} + \cdots + 96u + 32$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{19} + 19y^{18} + \cdots - 2960y - 256$
c_2, c_5	$y^{19} - 5y^{18} + \cdots + 12y - 16$
c_3, c_4, c_9 c_{11}	$y^{19} - 8y^{18} + \cdots + 3y - 1$
c_6, c_{10}	$y^{19} + 48y^{18} + \cdots + 103y - 1$
c_7, c_8, c_{12}	$y^{19} - 19y^{18} + \cdots + 1536y - 1024$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.722196 + 0.657529I$ $a = 0.102214 - 0.799363I$ $b = -1.17960 - 0.94405I$	$-0.82235 - 3.78512I$	$1.21860 + 9.00060I$
$u = 0.722196 - 0.657529I$ $a = 0.102214 + 0.799363I$ $b = -1.17960 + 0.94405I$	$-0.82235 + 3.78512I$	$1.21860 - 9.00060I$
$u = -0.746643 + 0.730089I$ $a = -0.462703 - 1.042820I$ $b = 0.810875 - 1.125140I$	$7.60259 + 2.70738I$	$8.67277 - 2.95502I$
$u = -0.746643 - 0.730089I$ $a = -0.462703 + 1.042820I$ $b = 0.810875 + 1.125140I$	$7.60259 - 2.70738I$	$8.67277 + 2.95502I$
$u = 0.693820 + 0.494332I$ $a = 0.456624 + 0.344671I$ $b = -0.060397 - 0.381407I$	$-1.48005 - 1.04351I$	$-2.45665 + 0.14135I$
$u = 0.693820 - 0.494332I$ $a = 0.456624 - 0.344671I$ $b = -0.060397 + 0.381407I$	$-1.48005 + 1.04351I$	$-2.45665 - 0.14135I$
$u = -0.04060 + 1.46804I$ $a = -0.307074 + 0.628614I$ $b = -0.45900 + 3.71191I$	$6.95938 + 1.17078I$	$6.09940 - 4.23132I$
$u = -0.04060 - 1.46804I$ $a = -0.307074 - 0.628614I$ $b = -0.45900 - 3.71191I$	$6.95938 - 1.17078I$	$6.09940 + 4.23132I$
$u = 0.89865 + 1.22513I$ $a = 0.029251 + 0.797483I$ $b = 2.06454 + 1.29373I$	$5.18478 - 8.09242I$	$3.53036 + 7.90230I$
$u = 0.89865 - 1.22513I$ $a = 0.029251 - 0.797483I$ $b = 2.06454 - 1.29373I$	$5.18478 + 8.09242I$	$3.53036 - 7.90230I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.24994 + 1.58443I$ $a = -0.240884 - 0.605481I$ $b = -1.19770 - 3.77858I$	$6.58876 - 7.45308I$	$5.69466 + 9.39888I$
$u = 0.24994 - 1.58443I$ $a = -0.240884 + 0.605481I$ $b = -1.19770 + 3.77858I$	$6.58876 + 7.45308I$	$5.69466 - 9.39888I$
$u = 1.63895$ $a = -0.425083$ $b = 1.00806$	1.14876	15.5300
$u = -0.158529 + 0.292224I$ $a = 0.28403 + 1.88623I$ $b = 0.221614 + 0.650228I$	$1.090730 + 0.511038I$	$7.83780 - 2.24263I$
$u = -0.158529 - 0.292224I$ $a = 0.28403 - 1.88623I$ $b = 0.221614 - 0.650228I$	$1.090730 - 0.511038I$	$7.83780 + 2.24263I$
$u = -0.20388 + 1.65874I$ $a = 0.557769 - 0.904546I$ $b = 2.54312 - 4.44242I$	$15.7917 + 6.1961I$	$6.23161 - 1.95293I$
$u = -0.20388 - 1.65874I$ $a = 0.557769 + 0.904546I$ $b = 2.54312 + 4.44242I$	$15.7917 - 6.1961I$	$6.23161 + 1.95293I$
$u = 0.26558 + 1.78867I$ $a = 0.543309 + 0.825825I$ $b = 3.25252 + 4.45796I$	$15.2603 - 12.9682I$	$5.40622 + 6.37379I$
$u = 0.26558 - 1.78867I$ $a = 0.543309 - 0.825825I$ $b = 3.25252 - 4.45796I$	$15.2603 + 12.9682I$	$5.40622 - 6.37379I$

II. $I_2^u =$
$\langle -u^{10}+4u^9+\cdots+b-6,\ -3u^{11}+12u^{10}+\cdots+a+13,\ u^{12}-4u^{11}+\cdots-9u+1\rangle$

(i) Arc colorings

$$a_2 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$

$$a_3 = \begin{pmatrix} 0 \\ u \end{pmatrix}$$

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

$$a_{10} = \begin{pmatrix} 3u^{11} - 12u^{10} + \cdots + 67u - 13 \\ u^{10} - 4u^9 + \cdots - 26u + 6 \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} 4u^{11} - 16u^{10} + \cdots + 96u - 19 \\ u^{10} - 4u^9 + \cdots - 25u + 6 \end{pmatrix}$$

$$a_9 = \begin{pmatrix} 3u^{11} - 12u^{10} + \cdots + 67u - 13 \\ -u^{11} + 4u^{10} + \cdots - 29u + 6 \end{pmatrix}$$

$$a_4 = \begin{pmatrix} -5u^{11} + 18u^{10} + \cdots - 78u + 13 \\ 2u^{11} - 7u^{10} + \cdots + 27u - 5 \end{pmatrix}$$

$$a_5 = \begin{pmatrix} 2u^{11} - 7u^{10} + \cdots + 26u - 5 \\ -u^{11} + 4u^{10} + \cdots - 19u + 3 \end{pmatrix}$$

$$a_6 = \begin{pmatrix} 3u^{11} - 11u^{10} + \cdots + 45u - 8 \\ -u^{11} + 4u^{10} + \cdots - 19u + 3 \end{pmatrix}$$

$$a_7 = \begin{pmatrix} -5u^{11} + 18u^{10} + \cdots - 94u + 21 \\ 3u^{11} - 11u^{10} + \cdots + 48u - 10 \end{pmatrix}$$

$$a_8 = \begin{pmatrix} 5u^{11} - 19u^{10} + \cdots + 99u - 19 \\ -u^{11} + 5u^{10} + \cdots - 36u + 7 \end{pmatrix}$$

$$a_{12} = \begin{pmatrix} 4u^{11} - 15u^{10} + \cdots + 88u - 20 \\ -2u^{11} + 7u^{10} + \cdots - 34u + 8 \end{pmatrix}$$

(ii) Obstruction class $= 1$

(iii) Cusp Shapes $= -13u^{11} + 47u^{10} - 166u^9 + 372u^8 - 699u^7 + 1066u^6 - 1282u^5 + 1319u^4 - 1003u^3 + 610u^2 - 225u + 43$

(iv) u-Polynomials at the component

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

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{12} + 12y^{11} + \cdots - 17y + 1$
c_2, c_5	$y^{12} - 4y^{11} + \cdots - 9y + 1$
c_3, c_4, c_9 c_{11}	$y^{12} + 8y^{11} + \cdots - 5y + 1$
c_6, c_{10}	$y^{12} - 6y^{10} + \cdots - 57y + 9$
c_7, c_8, c_{12}	$y^{12} - 16y^{11} + \cdots + 15y + 1$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.357661 + 0.853277I$ $a = -1.006500 - 0.552011I$ $b = -1.98533 + 0.33152I$	$-3.18626 - 2.11191I$	$-5.03654 + 3.50140I$
$u = 0.357661 - 0.853277I$ $a = -1.006500 + 0.552011I$ $b = -1.98533 - 0.33152I$	$-3.18626 + 2.11191I$	$-5.03654 - 3.50140I$
$u = 1.33890$ $a = 0.378165$ $b = -0.0994654$	0.752387	-5.56660
$u = -0.118312 + 1.364600I$ $a = -0.194015 + 0.582314I$ $b = 0.39097 + 2.54203I$	$7.47820 - 0.09552I$	$9.05586 + 0.80110I$
$u = -0.118312 - 1.364600I$ $a = -0.194015 - 0.582314I$ $b = 0.39097 - 2.54203I$	$7.47820 + 0.09552I$	$9.05586 - 0.80110I$
$u = 0.482446 + 0.323250I$ $a = 1.43003 + 1.83498I$ $b = -0.028669 - 1.102010I$	$-4.70811 - 0.91881I$	$-1.33372 + 7.78233I$
$u = 0.482446 - 0.323250I$ $a = 1.43003 - 1.83498I$ $b = -0.028669 + 1.102010I$	$-4.70811 + 0.91881I$	$-1.33372 - 7.78233I$
$u = 0.13668 + 1.47421I$ $a = 1.038380 + 0.082127I$ $b = 3.16343 - 0.41871I$	$1.25726 - 3.06264I$	$4.57080 + 2.71896I$
$u = 0.13668 - 1.47421I$ $a = 1.038380 - 0.082127I$ $b = 3.16343 + 0.41871I$	$1.25726 + 3.06264I$	$4.57080 - 2.71896I$
$u = 0.35564 + 1.60476I$ $a = -0.157731 - 0.476658I$ $b = -0.53686 - 2.57354I$	$6.83685 - 6.10895I$	$7.44385 + 4.40804I$

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.35564 - 1.60476I$ $a = -0.157731 + 0.476658I$ $b = -0.53686 + 2.57354I$	$6.83685 + 6.10895I$	$7.44385 - 4.40804I$
$u = 0.232856$ $a = -3.59850$ $b = 2.09237$	3.63095	14.1660

III. $I_3^u = \langle 2u^4a^3 - 11u^4a^2 + \cdots + 2a - 17,\ 3u^4a^2 + 9u^4a + \cdots + 19a - 25,\ u^5 - u^4 + 4u^3 - 3u^2 + 3u - 1\rangle$

(i) Arc colorings

$$a_2 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$

$$a_3 = \begin{pmatrix} 0 \\ u \end{pmatrix}$$

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

$$a_{10} = \begin{pmatrix} a \\ -0.0952381a^3u^4 + 0.523810a^2u^4 + \cdots - 0.0952381a + 0.809524 \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} 0.0952381a^3u^4 - 0.523810a^2u^4 + \cdots + 1.09524a - 0.809524 \\ -0.619048a^3u^4 - 0.0952381a^2u^4 + \cdots + 0.380952a + 1.76190 \end{pmatrix}$$

$$a_9 = \begin{pmatrix} a \\ -0.0952381a^3u^4 + 0.523810a^2u^4 + \cdots - 0.0952381a + 0.809524 \end{pmatrix}$$

$$a_4 = \begin{pmatrix} a^2u \\ 0.476190a^3u^4 + 0.380952a^2u^4 + \cdots - 0.523810a - 1.04762 \end{pmatrix}$$

$$a_5 = \begin{pmatrix} u^3 + 2u \\ -u^4 + u^3 - 3u^2 + 2u - 1 \end{pmatrix}$$

$$a_6 = \begin{pmatrix} u^4 + 3u^2 + 1 \\ -u^4 + u^3 - 3u^2 + 2u - 1 \end{pmatrix}$$

$$a_7 = \begin{pmatrix} 0.619048a^3u^4 + 0.0952381a^2u^4 + \cdots + 0.619048a - 0.761905 \\ a^2u^2 + 2u^2 + 2 \end{pmatrix}$$

$$a_8 = \begin{pmatrix} 0.0952381a^3u^4 - 0.523810a^2u^4 + \cdots + 1.09524a - 0.809524 \\ -0.619048a^3u^4 - 0.0952381a^2u^4 + \cdots + 0.380952a + 1.76190 \end{pmatrix}$$

$$a_{12} = \begin{pmatrix} \frac{5}{7}u^4a^3 - \frac{3}{7}u^4a^2 + \cdots + \frac{5}{7}a - \frac{4}{7} \\ -0.523810a^3u^4 - 0.619048a^2u^4 + \cdots + 0.476190a + 2.95238 \end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= -4u^4 + 4u^3 - 16u^2 + 12u - 6$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$(u^5 + u^4 + 4u^3 + 3u^2 + 3u + 1)^4$
c_2, c_5	$(u^5 - u^4 + u^2 + u - 1)^4$
c_3, c_4, c_9 c_{11}	$u^{20} - u^{19} + \cdots - 72u - 29$
c_6, c_{10}	$u^{20} - 3u^{19} + \cdots - 2460u + 649$
c_7, c_8, c_{12}	$(u^2 - u - 1)^{10}$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$(y^5 + 7y^4 + 16y^3 + 13y^2 + 3y - 1)^4$
c_2, c_5	$(y^5 - y^4 + 4y^3 - 3y^2 + 3y - 1)^4$
c_3, c_4, c_9 c_{11}	$y^{20} + 3y^{19} + \cdots - 3444y + 841$
c_6, c_{10}	$y^{20} + 15y^{19} + \cdots - 2679396y + 421201$
c_7, c_8, c_{12}	$(y^2 - 3y + 1)^{10}$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_3^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.233677 + 0.885557I$ $a = -0.690882 - 0.475916I$ $b = -2.02011 - 0.12259I$	$-2.12804 - 2.21397I$	$4.88568 + 4.22289I$
$u = 0.233677 + 0.885557I$ $a = -0.628935 - 1.009350I$ $b = -0.135192 - 0.952263I$	$5.76765 - 2.21397I$	$4.88568 + 4.22289I$
$u = 0.233677 + 0.885557I$ $a = 1.308920 + 0.475916I$ $b = 1.68589 - 0.38898I$	$-2.12804 - 2.21397I$	$4.88568 + 4.22289I$
$u = 0.233677 + 0.885557I$ $a = -0.989099 + 1.009350I$ $b = 1.01021 + 2.29157I$	$5.76765 - 2.21397I$	$4.88568 + 4.22289I$
$u = 0.233677 - 0.885557I$ $a = -0.690882 + 0.475916I$ $b = -2.02011 + 0.12259I$	$-2.12804 + 2.21397I$	$4.88568 - 4.22289I$
$u = 0.233677 - 0.885557I$ $a = -0.628935 + 1.009350I$ $b = -0.135192 + 0.952263I$	$5.76765 + 2.21397I$	$4.88568 - 4.22289I$
$u = 0.233677 - 0.885557I$ $a = 1.308920 - 0.475916I$ $b = 1.68589 + 0.38898I$	$-2.12804 + 2.21397I$	$4.88568 - 4.22289I$
$u = 0.233677 - 0.885557I$ $a = -0.989099 - 1.009350I$ $b = 1.01021 - 2.29157I$	$5.76765 + 2.21397I$	$4.88568 - 4.22289I$
$u = 0.416284$ $a = 0.985681$ $b = 1.27641$	3.06566	-3.60880
$u = 0.416284$ $a = -2.60371$ $b = 2.52044$	3.06566	-3.60880

Solutions to I_3^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.416284$ $a = 0.30902 + 3.20024I$ $b = -0.725134 - 1.109150I$	-4.83002	-3.60880
$u = 0.416284$ $a = 0.30902 - 3.20024I$ $b = -0.725134 + 1.109150I$	-4.83002	-3.60880
$u = 0.05818 + 1.69128I$ $a = -0.799116 - 0.748924I$ $b = -3.24296 - 3.96488I$	$14.9061 - 3.3317I$	$5.91874 + 2.36228I$
$u = 0.05818 + 1.69128I$ $a = -0.818918 + 0.748924I$ $b = -2.76655 + 4.60174I$	$14.9061 - 3.3317I$	$5.91874 + 2.36228I$
$u = 0.05818 + 1.69128I$ $a = 0.342215 + 0.584767I$ $b = 1.56758 + 3.20671I$	$7.01045 - 3.33174I$	$5.91874 + 2.36228I$
$u = 0.05818 + 1.69128I$ $a = 0.275819 - 0.584767I$ $b = 0.72785 - 3.44997I$	$7.01045 - 3.33174I$	$5.91874 + 2.36228I$
$u = 0.05818 - 1.69128I$ $a = -0.799116 + 0.748924I$ $b = -3.24296 + 3.96488I$	$14.9061 + 3.3317I$	$5.91874 - 2.36228I$
$u = 0.05818 - 1.69128I$ $a = -0.818918 - 0.748924I$ $b = -2.76655 - 4.60174I$	$14.9061 + 3.3317I$	$5.91874 - 2.36228I$
$u = 0.05818 - 1.69128I$ $a = 0.342215 - 0.584767I$ $b = 1.56758 - 3.20671I$	$7.01045 + 3.33174I$	$5.91874 - 2.36228I$
$u = 0.05818 - 1.69128I$ $a = 0.275819 + 0.584767I$ $b = 0.72785 + 3.44997I$	$7.01045 + 3.33174I$	$5.91874 - 2.36228I$

IV. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1	$((u^5+u^4+4u^3+3u^2+3u+1)^4)(u^{12}-4u^{11}+\cdots-9u+1)$ $\cdot(u^{19}+5u^{18}+\cdots+12u+16)$
c_2	$(u^5-u^4+u^2+u-1)^4$ $\cdot(u^{12}-2u^{10}-u^9+5u^8+u^7-6u^6-3u^5+6u^4+2u^3-4u^2-u+1)$ $\cdot(u^{19}+5u^{18}+\cdots+6u+4)$
c_3, c_{11}	$(u^{12}+4u^{10}-u^9+3u^8-3u^7-2u^6-u^5+u^4+u^3+2u^2-u-1)$ $\cdot(u^{19}-4u^{17}+\cdots+u-1)(u^{20}-u^{19}+\cdots-72u-29)$
c_4, c_9	$(u^{12}+4u^{10}+u^9+3u^8+3u^7-2u^6+u^5+u^4-u^3+2u^2+u-1)$ $\cdot(u^{19}-4u^{17}+\cdots+u-1)(u^{20}-u^{19}+\cdots-72u-29)$
c_5	$(u^5-u^4+u^2+u-1)^4$ $\cdot(u^{12}-2u^{10}+u^9+5u^8-u^7-6u^6+3u^5+6u^4-2u^3-4u^2+u+1)$ $\cdot(u^{19}+5u^{18}+\cdots+6u+4)$
c_6, c_{10}	$(u^{12}+4u^{11}+\cdots+3u+3)(u^{19}-2u^{18}+\cdots+17u+1)$ $\cdot(u^{20}-3u^{19}+\cdots-2460u+649)$
c_7, c_8	$((u^2-u-1)^{10})(u^{12}+4u^{11}+\cdots-3u+1)(u^{19}+9u^{18}+\cdots+96u+32)$
c_{12}	$((u^2-u-1)^{10})(u^{12}-4u^{11}+\cdots+3u+1)(u^{19}+9u^{18}+\cdots+96u+32)$

V. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1	$((y^5+7y^4+16y^3+13y^2+3y-1)^4)(y^{12}+12y^{11}+\cdots-17y+1)$ $\cdot(y^{19}+19y^{18}+\cdots-2960y-256)$
c_2, c_5	$((y^5-y^4+4y^3-3y^2+3y-1)^4)(y^{12}-4y^{11}+\cdots-9y+1)$ $\cdot(y^{19}-5y^{18}+\cdots+12y-16)$
c_3, c_4, c_9 c_{11}	$(y^{12}+8y^{11}+\cdots-5y+1)(y^{19}-8y^{18}+\cdots+3y-1)$ $\cdot(y^{20}+3y^{19}+\cdots-3444y+841)$
c_6, c_{10}	$(y^{12}-6y^{10}+\cdots-57y+9)(y^{19}+48y^{18}+\cdots+103y-1)$ $\cdot(y^{20}+15y^{19}+\cdots-2679396y+421201)$
c_7, c_8, c_{12}	$((y^2-3y+1)^{10})(y^{12}-16y^{11}+\cdots+15y+1)$ $\cdot(y^{19}-19y^{18}+\cdots+1536y-1024)$