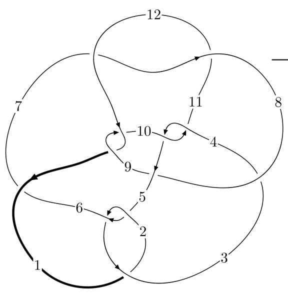
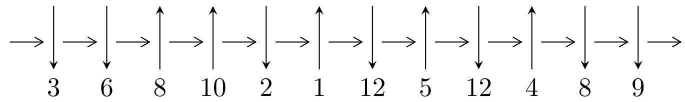
$12n_{0390}$ ($K12n_{0390}$)



A knot diagram[1]

Linearized knot diagam



Solving Sequence

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

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

$$I_1^u = \langle 2.46294 \times 10^{29} u^{46} + 7.95784 \times 10^{29} u^{45} + \cdots + 2.37042 \times 10^{29} b - 6.34182 \times 10^{30},$$
$$1.94482 \times 10^{31} u^{46} + 4.33728 \times 10^{31} u^{45} + \cdots + 2.60747 \times 10^{30} a - 2.49401 \times 10^{32},\ u^{47} + 3u^{46} + \cdots - 40u -$$
$$I_2^u = \langle -u^{15} - u^{14} + 4u^{13} + 4u^{12} - 9u^{11} - 8u^{10} + 12u^9 + 6u^8 - 11u^7 + 2u^6 + 6u^5 - 7u^4 - 2u^3 + 3u^2 + b,$$
$$-2u^{17} - 3u^{16} + \cdots + a + 2,\ u^{18} - 5u^{16} + \cdots - u + 1\rangle$$

* 2 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 65 representations.

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[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. $I_1^u =$
$$\langle 2.46\times10^{29}u^{46}+7.96\times10^{29}u^{45}+\cdots+2.37\times10^{29}b-6.34\times10^{30},\ 1.94\times10^{31}u^{46}+4.34\times10^{31}u^{45}+\cdots+2.61\times10^{30}a-2.49\times10^{32},\ u^{47}+3u^{46}+\cdots-40u-11\rangle$$

(i) Arc colorings

$$a_2 = \begin{pmatrix}0\\ u\end{pmatrix}$$
$$a_5 = \begin{pmatrix}1\\ 0\end{pmatrix}$$
$$a_6 = \begin{pmatrix}1\\ u^2\end{pmatrix}$$
$$a_3 = \begin{pmatrix}-u\\ -u^3+u\end{pmatrix}$$
$$a_1 = \begin{pmatrix}u^3\\ u^5-u^3+u\end{pmatrix}$$
$$a_9 = \begin{pmatrix}-7.45865u^{46}-16.6341u^{45}+\cdots+241.132u+95.6487\\ -1.03903u^{46}-3.35714u^{45}+\cdots+53.4137u+26.7540\end{pmatrix}$$
$$a_8 = \begin{pmatrix}-6.41962u^{46}-13.2769u^{45}+\cdots+187.719u+68.8947\\ -1.03903u^{46}-3.35714u^{45}+\cdots+53.4137u+26.7540\end{pmatrix}$$
$$a_{12} = \begin{pmatrix}3.75435u^{46}+6.70383u^{45}+\cdots-90.9031u-26.3287\\ 1.22903u^{46}+2.91014u^{45}+\cdots-45.7371u-18.6251\end{pmatrix}$$
$$a_{10} = \begin{pmatrix}-0.627376u^{46}-1.39884u^{45}+\cdots+11.2034u+1.46172\\ -0.522819u^{46}-0.806804u^{45}+\cdots+8.68459u+0.958907\end{pmatrix}$$
$$a_4 = \begin{pmatrix}-1.35192u^{46}-2.82554u^{45}+\cdots+39.1629u+16.1387\\ 4.70290u^{46}+9.69022u^{45}+\cdots-140.178u-52.4053\end{pmatrix}$$
$$a_7 = \begin{pmatrix}u^6-u^4+1\\ u^8-2u^6+2u^4\end{pmatrix}$$
$$a_{11} = \begin{pmatrix}4.56620u^{46}+7.93732u^{45}+\cdots-108.368u-32.1734\\ 3.91576u^{46}+9.28160u^{45}+\cdots-146.560u-60.9527\end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= -3.50908u^{46}-6.53790u^{45}+\cdots+87.7874u+16.6803$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{47} + 27u^{46} + \cdots + 1050u + 121$
c_2, c_5	$u^{47} + 3u^{46} + \cdots - 40u - 11$
c_3	$u^{47} + u^{46} + \cdots + 721u - 77$
c_4, c_{10}	$u^{47} + 2u^{46} + \cdots + 880u + 259$
c_6	$u^{47} + 9u^{46} + \cdots - 2486u - 605$
c_7, c_{11}	$u^{47} + 2u^{46} + \cdots + 7139507u + 4293137$
c_8	$u^{47} - 3u^{46} + \cdots + 1235u + 319$
c_9, c_{12}	$u^{47} - 7u^{46} + \cdots - 68u + 7$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{47} - 3y^{46} + \cdots + 22454y - 14641$
c_2, c_5	$y^{47} - 27y^{46} + \cdots + 1050y - 121$
c_3	$y^{47} + 89y^{46} + \cdots + 1443379y - 5929$
c_4, c_{10}	$y^{47} + 70y^{46} + \cdots + 827236y - 67081$
c_6	$y^{47} + 39y^{46} + \cdots + 7716896y - 366025$
c_7, c_{11}	$y^{47} - 90y^{46} + \cdots + 10351799467819y - 18431025300769$
c_8	$y^{47} + y^{46} + \cdots - 1880419y - 101761$
c_9, c_{12}	$y^{47} + 3y^{46} + \cdots + 396y - 49$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.876077 + 0.495153I$ $a = 0.05861 - 1.54742I$ $b = 1.253340 - 0.133813I$	$2.96047 - 4.00527I$	$1.41913 + 7.02290I$
$u = 0.876077 - 0.495153I$ $a = 0.05861 + 1.54742I$ $b = 1.253340 + 0.133813I$	$2.96047 + 4.00527I$	$1.41913 - 7.02290I$
$u = -0.219784 + 0.989162I$ $a = -0.362101 - 0.066122I$ $b = 1.17874 - 1.23600I$	$-10.92830 - 8.41421I$	$-3.04374 + 3.89039I$
$u = -0.219784 - 0.989162I$ $a = -0.362101 + 0.066122I$ $b = 1.17874 + 1.23600I$	$-10.92830 + 8.41421I$	$-3.04374 - 3.89039I$
$u = -0.924941 + 0.211030I$ $a = -0.229367 - 0.697298I$ $b = -1.54763 + 0.11397I$	$0.99929 + 2.61967I$	$-5.19015 - 2.74150I$
$u = -0.924941 - 0.211030I$ $a = -0.229367 + 0.697298I$ $b = -1.54763 - 0.11397I$	$0.99929 - 2.61967I$	$-5.19015 + 2.74150I$
$u = -0.824634 + 0.426276I$ $a = -1.76007 - 2.37447I$ $b = 0.251649 + 0.584600I$	$-7.70591 + 1.80987I$	$-3.91459 - 3.48681I$
$u = -0.824634 - 0.426276I$ $a = -1.76007 + 2.37447I$ $b = 0.251649 - 0.584600I$	$-7.70591 - 1.80987I$	$-3.91459 + 3.48681I$
$u = 0.846874 + 0.360689I$ $a = -0.17435 + 2.83942I$ $b = 0.17024 + 1.41188I$	$-8.15375 - 1.57774I$	$-0.80255 + 4.89499I$
$u = 0.846874 - 0.360689I$ $a = -0.17435 - 2.83942I$ $b = 0.17024 - 1.41188I$	$-8.15375 + 1.57774I$	$-0.80255 - 4.89499I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.701499+0.543812I$ $a = 0.491865+0.673634I$ $b = -1.254340+0.037496I$	$3.47616-0.21144I$	$3.37728+0.59281I$
$u = 0.701499-0.543812I$ $a = 0.491865-0.673634I$ $b = -1.254340-0.037496I$	$3.47616+0.21144I$	$3.37728-0.59281I$
$u = -0.004113+0.880495I$ $a = 0.347513+0.070964I$ $b = 0.170930+0.679428I$	$-0.64377+2.79416I$	$-3.76375-4.12382I$
$u = -0.004113-0.880495I$ $a = 0.347513-0.070964I$ $b = 0.170930-0.679428I$	$-0.64377-2.79416I$	$-3.76375+4.12382I$
$u = -0.849942+0.204435I$ $a = 0.85944+2.33236I$ $b = 1.175050+0.465651I$	$1.244440-0.641998I$	$-5.98611-0.69680I$
$u = -0.849942-0.204435I$ $a = 0.85944-2.33236I$ $b = 1.175050-0.465651I$	$1.244440+0.641998I$	$-5.98611+0.69680I$
$u = 0.859362$ $a = -1.25271$ $b = 0.546195$	-2.89515	3.43320
$u = -0.027994+0.837881I$ $a = -1.018770-0.136305I$ $b = 1.20991-1.22321I$	$-10.84070-0.60465I$	$-3.14085-0.02993I$
$u = -0.027994-0.837881I$ $a = -1.018770+0.136305I$ $b = 1.20991+1.22321I$	$-10.84070+0.60465I$	$-3.14085+0.02993I$
$u = 1.141860+0.328010I$ $a = 0.41789+1.96075I$ $b = -0.288127+0.987319I$	$-5.30017-0.97973I$	$-8.08906+2.35012I$

Solutions to I^u_1	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 1.141860 - 0.328010I$ $a = 0.41789 - 1.96075I$ $b = -0.288127 - 0.987319I$	$-5.30017 + 0.97973I$	$-8.08906 - 2.35012I$
$u = -1.140420 + 0.352854I$ $a = 0.648125 - 0.840786I$ $b = 0.492371 - 0.744957I$	$-2.56290 + 1.51479I$	$-3.51596 - 1.49247I$
$u = -1.140420 - 0.352854I$ $a = 0.648125 + 0.840786I$ $b = 0.492371 + 0.744957I$	$-2.56290 - 1.51479I$	$-3.51596 + 1.49247I$
$u = 0.272988 + 0.745917I$ $a = 0.438704 - 0.325162I$ $b = -0.907317 - 0.410716I$	$1.43547 + 1.61663I$	$2.81439 + 0.31096I$
$u = 0.272988 - 0.745917I$ $a = 0.438704 + 0.325162I$ $b = -0.907317 + 0.410716I$	$1.43547 - 1.61663I$	$2.81439 - 0.31096I$
$u = -1.123120 + 0.540873I$ $a = -1.11998 + 1.51248I$ $b = 0.158687 + 1.034900I$	$-3.78321 + 6.82193I$	$0. - 6.42288I$
$u = -1.123120 - 0.540873I$ $a = -1.11998 - 1.51248I$ $b = 0.158687 - 1.034900I$	$-3.78321 - 6.82193I$	$0. + 6.42288I$
$u = -0.279697 + 0.684332I$ $a = 0.221829 + 0.627921I$ $b = -0.076193 + 0.836935I$	$-1.37741 - 2.09664I$	$-3.89707 + 2.40716I$
$u = -0.279697 - 0.684332I$ $a = 0.221829 - 0.627921I$ $b = -0.076193 - 0.836935I$	$-1.37741 + 2.09664I$	$-3.89707 - 2.40716I$
$u = 1.144210 + 0.542382I$ $a = -0.25949 - 1.78790I$ $b = 0.996365 - 0.606031I$	$-1.11707 - 6.47946I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 1.144210 - 0.542382I$ $a = -0.25949 + 1.78790I$ $b = 0.996365 + 0.606031I$	$-1.11707 + 6.47946I$	0
$u = 1.237570 + 0.451956I$ $a = -1.43480 - 0.69587I$ $b = -1.27653 - 1.53747I$	$-14.6130 - 3.9696I$	0
$u = 1.237570 - 0.451956I$ $a = -1.43480 + 0.69587I$ $b = -1.27653 + 1.53747I$	$-14.6130 + 3.9696I$	0
$u = -1.231500 + 0.478844I$ $a = 0.44079 - 2.03120I$ $b = -1.48547 - 1.07528I$	$-14.4158 + 5.3399I$	0
$u = -1.231500 - 0.478844I$ $a = 0.44079 + 2.03120I$ $b = -1.48547 + 1.07528I$	$-14.4158 - 5.3399I$	0
$u = 1.248430 + 0.483208I$ $a = 0.306682 + 1.364460I$ $b = -0.358428 + 1.116070I$	$-4.37505 - 7.63882I$	0
$u = 1.248430 - 0.483208I$ $a = 0.306682 - 1.364460I$ $b = -0.358428 - 1.116070I$	$-4.37505 + 7.63882I$	0
$u = -0.523547 + 0.374959I$ $a = 0.632108 - 0.620727I$ $b = -0.111012 - 0.458273I$	$-0.431977 + 1.249080I$	$-3.29232 - 5.98996I$
$u = -0.523547 - 0.374959I$ $a = 0.632108 + 0.620727I$ $b = -0.111012 + 0.458273I$	$-0.431977 - 1.249080I$	$-3.29232 + 5.98996I$
$u = -1.298850 + 0.446921I$ $a = -0.302497 + 0.978434I$ $b = 0.474453 + 0.811864I$	$-4.60025 + 2.14253I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = -1.298850 - 0.446921I$ $a = -0.302497 - 0.978434I$ $b = 0.474453 - 0.811864I$	$-4.60025 - 2.14253I$	0
$u = -1.244520 + 0.594030I$ $a = 0.50825 - 2.01870I$ $b = -1.35396 - 1.28721I$	$-14.0727 + 14.1097I$	0
$u = -1.244520 - 0.594030I$ $a = 0.50825 + 2.01870I$ $b = -1.35396 + 1.28721I$	$-14.0727 - 14.1097I$	0
$u = 1.367670 + 0.303326I$ $a = -1.12338 - 1.01518I$ $b = -0.94061 - 1.44352I$	$-16.2192 + 3.9265I$	0
$u = 1.367670 - 0.303326I$ $a = -1.12338 + 1.01518I$ $b = -0.94061 + 1.44352I$	$-16.2192 - 3.9265I$	0
$u = -1.07379 + 0.96465I$ $a = -0.324275 + 0.037659I$ $b = 0.294773 + 0.663976I$	$-5.13971 + 3.86765I$	0
$u = -1.07379 - 0.96465I$ $a = -0.324275 - 0.037659I$ $b = 0.294773 - 0.663976I$	$-5.13971 - 3.86765I$	0

II.
$\boldsymbol{I_2^u = \langle -u^{15} - u^{14} + \cdots + 3u^2 + b,\ -2u^{17} - 3u^{16} + \cdots + a + 2,\ u^{18} - 5u^{16} + \cdots - u + 1 \rangle}$

(i) Arc colorings

$$a_2 = \begin{pmatrix} 0 \\ u \end{pmatrix}$$
$$a_5 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$
$$a_6 = \begin{pmatrix} 1 \\ u^2 \end{pmatrix}$$
$$a_3 = \begin{pmatrix} -u \\ -u^3 + u \end{pmatrix}$$
$$a_1 = \begin{pmatrix} u^3 \\ u^5 - u^3 + u \end{pmatrix}$$
$$a_9 = \begin{pmatrix} 2u^{17} + 3u^{16} + \cdots + 4u - 2 \\ u^{15} + u^{14} + \cdots + 2u^3 - 3u^2 \end{pmatrix}$$
$$a_8 = \begin{pmatrix} 2u^{17} + 3u^{16} + \cdots + 4u - 2 \\ u^{15} + u^{14} + \cdots + 2u^3 - 3u^2 \end{pmatrix}$$
$$a_{12} = \begin{pmatrix} -u^{17} - 2u^{16} + \cdots - 3u - 2 \\ -2u^{17} + 10u^{15} + \cdots + 2u + 1 \end{pmatrix}$$
$$a_{10} = \begin{pmatrix} 2u^{17} + 2u^{16} + \cdots - 2u - 2 \\ -u^{17} + u^{16} + \cdots + 2u + 1 \end{pmatrix}$$
$$a_4 = \begin{pmatrix} 8u^{17} + 6u^{16} + \cdots + 34u^2 - 9 \\ u^{17} + u^{16} + \cdots + u - 2 \end{pmatrix}$$
$$a_7 = \begin{pmatrix} u^6 - u^4 + 1 \\ u^8 - 2u^6 + 2u^4 \end{pmatrix}$$
$$a_{11} = \begin{pmatrix} -3u^{17} - 3u^{16} + \cdots + 6u^4 - u^3 \\ -u^{17} - u^{16} + \cdots + 6u^4 - 3u^2 \end{pmatrix}$$

(ii) Obstruction class $= 1$

(iii) Cusp Shapes $= 12u^{17} + 12u^{16} - 56u^{15} - 55u^{14} + 146u^{13} + 130u^{12} - 239u^{11} - 151u^{10} + 274u^9 + 56u^8 - 211u^7 + 81u^6 + 106u^5 - 112u^4 - 27u^3 + 53u^2 - 16$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{18} - 10u^{17} + \cdots - 7u + 1$
c_2	$u^{18} - 5u^{16} + \cdots + u + 1$
c_3	$u^{18} - 2u^{17} + \cdots - 16u + 101$
c_4	$u^{18} + u^{17} + \cdots + 3u + 1$
c_5	$u^{18} - 5u^{16} + \cdots - u + 1$
c_6	$u^{18} + 2u^{16} + \cdots - 3u + 1$
c_7	$u^{18} + u^{17} + \cdots - 6u + 1$
c_8	$u^{18} + 2u^{17} + \cdots + 4u + 1$
c_9	$u^{18} - 6u^{17} + \cdots + u + 1$
c_{10}	$u^{18} - u^{17} + \cdots - 3u + 1$
c_{11}	$u^{18} - u^{17} + \cdots + 6u + 1$
c_{12}	$u^{18} + 6u^{17} + \cdots - u + 1$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{18} + 6y^{17} + \cdots + 9y + 1$
c_2, c_5	$y^{18} - 10y^{17} + \cdots - 7y + 1$
c_3	$y^{18} + 14y^{17} + \cdots + 13884y + 10201$
c_4, c_{10}	$y^{18} + 19y^{17} + \cdots + 11y + 1$
c_6	$y^{18} + 4y^{17} + \cdots - y + 1$
c_7, c_{11}	$y^{18} - 9y^{17} + \cdots + 8y + 1$
c_8	$y^{18} - 14y^{17} + \cdots - 6y + 1$
c_9, c_{12}	$y^{18} + 8y^{17} + \cdots - 9y + 1$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_2^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.911423 + 0.313351I$ $a = -1.02137 + 3.11139I$ $b = 0.079988 + 1.151000I$	$-8.73578 - 1.31626I$	$-13.91898 - 0.89713I$
$u = 0.911423 - 0.313351I$ $a = -1.02137 - 3.11139I$ $b = 0.079988 - 1.151000I$	$-8.73578 + 1.31626I$	$-13.91898 + 0.89713I$
$u = -1.099540 + 0.219817I$ $a = 0.000777 - 0.869675I$ $b = 0.350991 - 0.272048I$	$-3.73137 + 0.34305I$	$-6.94049 - 0.42724I$
$u = -1.099540 - 0.219817I$ $a = 0.000777 + 0.869675I$ $b = 0.350991 + 0.272048I$	$-3.73137 - 0.34305I$	$-6.94049 + 0.42724I$
$u = -1.025280 + 0.454429I$ $a = 0.828326 + 0.479984I$ $b = 1.45038 - 0.24289I$	$0.84046 + 4.52433I$	$-3.35223 - 6.04100I$
$u = -1.025280 - 0.454429I$ $a = 0.828326 - 0.479984I$ $b = 1.45038 + 0.24289I$	$0.84046 - 4.52433I$	$-3.35223 + 6.04100I$
$u = 1.035030 + 0.480226I$ $a = -0.05553 - 1.64991I$ $b = 1.46258 - 0.02856I$	$1.04035 - 1.78617I$	$-4.18125 + 2.75892I$
$u = 1.035030 - 0.480226I$ $a = -0.05553 + 1.64991I$ $b = 1.46258 + 0.02856I$	$1.04035 + 1.78617I$	$-4.18125 - 2.75892I$
$u = 0.245321 + 0.787397I$ $a = 0.293070 - 0.605885I$ $b = -0.825077 - 0.167815I$	$0.99457 + 2.65474I$	$0.16626 - 4.79929I$
$u = 0.245321 - 0.787397I$ $a = 0.293070 + 0.605885I$ $b = -0.825077 + 0.167815I$	$0.99457 - 2.65474I$	$0.16626 + 4.79929I$

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 1.139670 + 0.550067I$ $a = -0.12667 - 1.72867I$ $b = 0.831035 - 0.381458I$	$-1.58532 - 7.59591I$	$-3.31038 + 8.36386I$
$u = 1.139670 - 0.550067I$ $a = -0.12667 + 1.72867I$ $b = 0.831035 + 0.381458I$	$-1.58532 + 7.59591I$	$-3.31038 - 8.36386I$
$u = -0.622208 + 0.347865I$ $a = -0.37175 - 1.66905I$ $b = -1.281030 - 0.281080I$	$2.26249 - 0.94977I$	$1.46449 + 1.20584I$
$u = -0.622208 - 0.347865I$ $a = -0.37175 + 1.66905I$ $b = -1.281030 + 0.281080I$	$2.26249 + 0.94977I$	$1.46449 - 1.20584I$
$u = 0.548147 + 0.424026I$ $a = 1.52770 + 1.26420I$ $b = -1.301760 + 0.008505I$	$2.59877 - 2.11586I$	$-0.21775 + 2.73352I$
$u = 0.548147 - 0.424026I$ $a = 1.52770 - 1.26420I$ $b = -1.301760 - 0.008505I$	$2.59877 + 2.11586I$	$-0.21775 - 2.73352I$
$u = -1.132560 + 0.827334I$ $a = -0.574547 + 0.086284I$ $b = 0.232885 + 0.649747I$	$-5.19872 + 3.58923I$	$-11.70969 + 5.37750I$
$u = -1.132560 - 0.827334I$ $a = -0.574547 - 0.086284I$ $b = 0.232885 - 0.649747I$	$-5.19872 - 3.58923I$	$-11.70969 - 5.37750I$

III. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1	$(u^{18} - 10u^{17} + \cdots - 7u + 1)(u^{47} + 27u^{46} + \cdots + 1050u + 121)$
c_2	$(u^{18} - 5u^{16} + \cdots + u + 1)(u^{47} + 3u^{46} + \cdots - 40u - 11)$
c_3	$(u^{18} - 2u^{17} + \cdots - 16u + 101)(u^{47} + u^{46} + \cdots + 721u - 77)$
c_4	$(u^{18} + u^{17} + \cdots + 3u + 1)(u^{47} + 2u^{46} + \cdots + 880u + 259)$
c_5	$(u^{18} - 5u^{16} + \cdots - u + 1)(u^{47} + 3u^{46} + \cdots - 40u - 11)$
c_6	$(u^{18} + 2u^{16} + \cdots - 3u + 1)(u^{47} + 9u^{46} + \cdots - 2486u - 605)$
c_7	$(u^{18} + u^{17} + \cdots - 6u + 1)(u^{47} + 2u^{46} + \cdots + 7139507u + 4293137)$
c_8	$(u^{18} + 2u^{17} + \cdots + 4u + 1)(u^{47} - 3u^{46} + \cdots + 1235u + 319)$
c_9	$(u^{18} - 6u^{17} + \cdots + u + 1)(u^{47} - 7u^{46} + \cdots - 68u + 7)$
c_{10}	$(u^{18} - u^{17} + \cdots - 3u + 1)(u^{47} + 2u^{46} + \cdots + 880u + 259)$
c_{11}	$(u^{18} - u^{17} + \cdots + 6u + 1)(u^{47} + 2u^{46} + \cdots + 7139507u + 4293137)$
c_{12}	$(u^{18} + 6u^{17} + \cdots - u + 1)(u^{47} - 7u^{46} + \cdots - 68u + 7)$

IV. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1	$(y^{18}+6y^{17}+\cdots+9y+1)(y^{47}-3y^{46}+\cdots+22454y-14641)$
c_2, c_5	$(y^{18}-10y^{17}+\cdots-7y+1)(y^{47}-27y^{46}+\cdots+1050y-121)$
c_3	$(y^{18}+14y^{17}+\cdots+13884y+10201)$ $\cdot(y^{47}+89y^{46}+\cdots+1443379y-5929)$
c_4, c_{10}	$(y^{18}+19y^{17}+\cdots+11y+1)(y^{47}+70y^{46}+\cdots+827236y-67081)$
c_6	$(y^{18}+4y^{17}+\cdots-y+1)(y^{47}+39y^{46}+\cdots+7716896y-366025)$
c_7, c_{11}	$(y^{18}-9y^{17}+\cdots+8y+1)$ $\cdot(y^{47}-90y^{46}+\cdots+10351799467819y-18431025300769)$
c_8	$(y^{18}-14y^{17}+\cdots-6y+1)(y^{47}+y^{46}+\cdots-1880419y-101761)$
c_9, c_{12}	$(y^{18}+8y^{17}+\cdots-9y+1)(y^{47}+3y^{46}+\cdots+396y-49)$