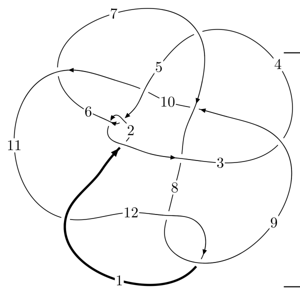
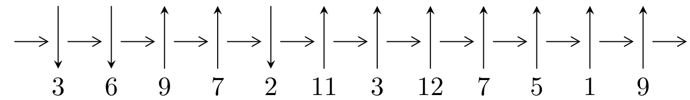
$12n_{0327}$ $(K12n_{0327})$



A knot diagram[1]

Linearized knot diagam



Solving Sequence

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

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

$$\begin{aligned}
I_1^u = \langle & 7.90917 \times 10^{51} u^{45} + 2.18534 \times 10^{51} u^{44} + \cdots + 2.95768 \times 10^{53} b + 5.20715 \times 10^{52}, \\
& -7.60793 \times 10^{53} u^{45} - 9.21427 \times 10^{53} u^{44} + \cdots + 2.07037 \times 10^{54} a + 1.08529 \times 10^{54},\ u^{46} + u^{45} + \cdots + 20u -
\end{aligned}$$

$$\begin{aligned}
I_2^u = \langle & -u^{15} + u^{14} + \cdots + b + 1,\ -2u^{15} - 3u^{14} + \cdots + a + 4, \\
& u^{16} - 5u^{14} - u^{13} + 13u^{12} + 3u^{11} - 23u^{10} - 6u^9 + 29u^8 + 8u^7 - 26u^6 - 8u^5 + 16u^4 + 4u^3 - 6u^2 - u + 1 \rangle
\end{aligned}$$

* 2 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 62 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.

$$\boldsymbol{I^u_1 = \langle 7.91\times10^{51}u^{45}+2.19\times10^{51}u^{44}+\cdots+2.96\times10^{53}b+5.21\times10^{52},\ -7.61\times10^{53}u^{45}-9.21\times10^{53}u^{44}+\cdots+2.07\times10^{54}a+1.09\times10^{54},\ u^{46}+u^{45}+\cdots+20u-7\rangle}$$

(i) Arc colorings

$$a_8 = \begin{pmatrix}1\\0\end{pmatrix}$$

$$a_{12} = \begin{pmatrix}0\\u\end{pmatrix}$$

$$a_3 = \begin{pmatrix}0.367466u^{45}+0.445053u^{44}+\cdots-0.961201u-0.524199\\-0.0267412u^{45}-0.00738870u^{44}+\cdots-0.488769u-0.176055\end{pmatrix}$$

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

$$a_4 = \begin{pmatrix}0.365109u^{45}+0.654340u^{44}+\cdots-0.429450u-0.157144\\0.164232u^{45}-0.120965u^{44}+\cdots+3.76063u-1.65757\end{pmatrix}$$

$$a_1 = \begin{pmatrix}u\\-u^3+u\end{pmatrix}$$

$$a_7 = \begin{pmatrix}-0.236300u^{45}+0.371650u^{44}+\cdots-14.5049u+8.55430\\0.359878u^{45}+0.0463945u^{44}+\cdots+4.16574u-1.59970\end{pmatrix}$$

$$a_5 = \begin{pmatrix}-0.296182u^{45}+0.163568u^{44}+\cdots+3.77995u-0.792151\\0.358221u^{45}-0.341011u^{44}+\cdots+8.83971u-4.10151\end{pmatrix}$$

$$a_{11} = \begin{pmatrix}-u^3\\u^5-u^3+u\end{pmatrix}$$

$$a_6 = \begin{pmatrix}-0.0116433u^{45}+0.300125u^{44}+\cdots-9.16821u+6.98444\\0.144819u^{45}+0.138605u^{44}+\cdots-1.99873u+0.550517\end{pmatrix}$$

$$a_2 = \begin{pmatrix}0.797806u^{45}+0.285789u^{44}+\cdots+9.18124u+0.589049\\-0.315736u^{45}+0.0205995u^{44}+\cdots-5.78048u+0.658747\end{pmatrix}$$

$$a_{10} = \begin{pmatrix}-0.185941u^{45}-0.174269u^{44}+\cdots+9.41906u-2.70922\\-0.0739068u^{45}-0.292990u^{44}+\cdots+0.996475u-1.61521\end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= 1.28396u^{45}+1.62893u^{44}+\cdots-44.8335u+13.8636$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{46} + 15u^{45} + \cdots + 2321u + 49$
c_2, c_5	$u^{46} + 3u^{45} + \cdots - 33u + 7$
c_3, c_{10}	$u^{46} + u^{45} + \cdots + 19u + 1$
c_4	$u^{46} + 5u^{45} + \cdots - 2895u - 209$
c_6	$u^{46} - 2u^{45} + \cdots + 15u - 19$
c_7	$u^{46} - 3u^{45} + \cdots - 113405u + 77291$
c_8, c_{12}	$u^{46} - u^{45} + \cdots - 20u - 7$
c_9	$u^{46} + 6u^{45} + \cdots - 75u + 9$
c_{11}	$u^{46} - 33u^{45} + \cdots - 1366u + 49$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{46} + 53y^{45} + \cdots - 1065437y + 2401$
c_2, c_5	$y^{46} - 15y^{45} + \cdots - 2321y + 49$
c_3, c_{10}	$y^{46} - 63y^{45} + \cdots - 121y + 1$
c_4	$y^{46} - 67y^{45} + \cdots - 133885y + 43681$
c_6	$y^{46} + 2y^{45} + \cdots - 985y + 361$
c_7	$y^{46} - 71y^{45} + \cdots - 125034513563y + 5973898681$
c_8, c_{12}	$y^{46} - 33y^{45} + \cdots - 1366y + 49$
c_9	$y^{46} - 82y^{45} + \cdots + 5697y + 81$
c_{11}	$y^{46} - 29y^{45} + \cdots + 39654y + 2401$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -1.020210 + 0.218826I$ $a = 1.96292 + 1.78837I$ $b = -1.39819 - 1.19639I$	$2.78540 - 4.43305I$	$7.31683 + 2.46379I$
$u = -1.020210 - 0.218826I$ $a = 1.96292 - 1.78837I$ $b = -1.39819 + 1.19639I$	$2.78540 + 4.43305I$	$7.31683 - 2.46379I$
$u = 0.095870 + 1.057170I$ $a = 0.449277 - 0.228270I$ $b = 2.15949 - 0.25287I$	$10.80880 + 1.13108I$	$8.33919 + 0.09433I$
$u = 0.095870 - 1.057170I$ $a = 0.449277 + 0.228270I$ $b = 2.15949 + 0.25287I$	$10.80880 - 1.13108I$	$8.33919 - 0.09433I$
$u = -0.746943 + 0.560155I$ $a = 0.238979 - 0.456580I$ $b = -1.019220 + 0.072002I$	$2.29880 + 1.44879I$	$7.06855 + 0.81086I$
$u = -0.746943 - 0.560155I$ $a = 0.238979 + 0.456580I$ $b = -1.019220 - 0.072002I$	$2.29880 - 1.44879I$	$7.06855 - 0.81086I$
$u = 1.052910 + 0.350962I$ $a = 0.652736 + 0.849236I$ $b = 0.00161 - 1.51789I$	$0.32230 + 4.17094I$	$4.61272 - 9.33404I$
$u = 1.052910 - 0.350962I$ $a = 0.652736 - 0.849236I$ $b = 0.00161 + 1.51789I$	$0.32230 - 4.17094I$	$4.61272 + 9.33404I$
$u = -0.750943 + 0.440135I$ $a = 1.60823 + 1.02092I$ $b = -0.351616 + 1.000540I$	$-1.61798 - 2.21982I$	$4.07754 + 3.82774I$
$u = -0.750943 - 0.440135I$ $a = 1.60823 - 1.02092I$ $b = -0.351616 - 1.000540I$	$-1.61798 + 2.21982I$	$4.07754 - 3.82774I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 1.17301$ $a = -2.66494$ $b = 1.80680$	9.52036	8.51710
$u = -1.068340 + 0.517725I$ $a = 0.464086 + 1.138280I$ $b = -0.566866 - 0.471411I$	$3.83816 - 4.69784I$	$11.69749 + 4.30932I$
$u = -1.068340 - 0.517725I$ $a = 0.464086 - 1.138280I$ $b = -0.566866 + 0.471411I$	$3.83816 + 4.69784I$	$11.69749 - 4.30932I$
$u = 0.870642 + 0.823142I$ $a = -0.126114 + 0.358538I$ $b = 0.623928 + 0.125399I$	$-4.07204 + 3.05319I$	$15.3891 - 6.8553I$
$u = 0.870642 - 0.823142I$ $a = -0.126114 - 0.358538I$ $b = 0.623928 - 0.125399I$	$-4.07204 - 3.05319I$	$15.3891 + 6.8553I$
$u = -0.086683 + 1.203980I$ $a = -0.374986 + 0.103292I$ $b = -2.30710 - 0.06443I$	$10.00560 + 7.40008I$	$7.39350 - 4.31642I$
$u = -0.086683 - 1.203980I$ $a = -0.374986 - 0.103292I$ $b = -2.30710 + 0.06443I$	$10.00560 - 7.40008I$	$7.39350 + 4.31642I$
$u = -1.226800 + 0.055153I$ $a = -1.27654 - 0.97559I$ $b = 0.91044 + 1.53643I$	$4.08578 + 2.48503I$	$10.70236 - 2.61783I$
$u = -1.226800 - 0.055153I$ $a = -1.27654 + 0.97559I$ $b = 0.91044 - 1.53643I$	$4.08578 - 2.48503I$	$10.70236 + 2.61783I$
$u = -1.226440 + 0.133188I$ $a = -0.021931 - 0.272138I$ $b = -0.127594 - 0.708761I$	$2.26273 - 2.31358I$	$11.62542 + 2.67684I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -1.226440 - 0.133188I$ $a = -0.021931 + 0.272138I$ $b = -0.127594 + 0.708761I$	$2.26273 + 2.31358I$	$11.62542 - 2.67684I$
$u = -1.106930 + 0.595666I$ $a = -0.835543 - 0.024113I$ $b = -0.293003 - 1.317840I$	$-0.37143 - 2.13318I$	$6.00000 + 0.I$
$u = -1.106930 - 0.595666I$ $a = -0.835543 + 0.024113I$ $b = -0.293003 + 1.317840I$	$-0.37143 + 2.13318I$	$6.00000 + 0.I$
$u = -0.283256 + 0.684205I$ $a = 0.210975 - 0.269709I$ $b = -0.682833 + 0.139746I$	$1.63018 + 0.14156I$	$8.28809 + 0.51848I$
$u = -0.283256 - 0.684205I$ $a = 0.210975 + 0.269709I$ $b = -0.682833 - 0.139746I$	$1.63018 - 0.14156I$	$8.28809 - 0.51848I$
$u = -0.019529 + 0.725158I$ $a = -0.777308 + 0.478111I$ $b = 0.500963 - 0.256778I$	$0.47573 - 4.85542I$	$5.18911 + 6.50934I$
$u = -0.019529 - 0.725158I$ $a = -0.777308 - 0.478111I$ $b = 0.500963 + 0.256778I$	$0.47573 + 4.85542I$	$5.18911 - 6.50934I$
$u = 1.260380 + 0.241271I$ $a = 1.265940 - 0.312252I$ $b = -1.138130 + 0.326314I$	$6.24098 + 2.89108I$	0
$u = 1.260380 - 0.241271I$ $a = 1.265940 + 0.312252I$ $b = -1.138130 - 0.326314I$	$6.24098 - 2.89108I$	0
$u = 0.640221 + 0.191594I$ $a = -1.51549 + 0.94495I$ $b = 0.776010 - 0.543436I$	$-1.81559 + 1.36574I$	$0.37681 - 4.32154I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.640221 - 0.191594I$ $a = -1.51549 - 0.94495I$ $b = 0.776010 + 0.543436I$	$-1.81559 - 1.36574I$	$0.37681 + 4.32154I$
$u = 1.309540 + 0.386533I$ $a = -1.175660 + 0.376325I$ $b = 1.196350 - 0.295467I$	$4.61382 + 9.03597I$	0
$u = 1.309540 - 0.386533I$ $a = -1.175660 - 0.376325I$ $b = 1.196350 + 0.295467I$	$4.61382 - 9.03597I$	0
$u = 0.626188$ $a = 1.42934$ $b = 1.02581$	7.47324	21.6980
$u = -1.37352 + 0.48037I$ $a = -1.81578 - 1.08493I$ $b = 2.71556 - 0.36369I$	$15.4278 - 6.5327I$	0
$u = -1.37352 - 0.48037I$ $a = -1.81578 + 1.08493I$ $b = 2.71556 + 0.36369I$	$15.4278 + 6.5327I$	0
$u = -0.538688$ $a = -0.314299$ $b = -0.326196$	0.769410	13.1770
$u = 1.34301 + 0.58680I$ $a = -1.59637 + 1.02056I$ $b = 2.15155 + 1.01181I$	$14.6331 + 4.7800I$	0
$u = 1.34301 - 0.58680I$ $a = -1.59637 - 1.02056I$ $b = 2.15155 - 1.01181I$	$14.6331 - 4.7800I$	0
$u = -1.39068 + 0.61150I$ $a = 1.57695 + 1.08397I$ $b = -2.52625 + 0.71884I$	$14.1038 - 13.8171I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -1.39068 - 0.61150I$ $a = 1.57695 - 1.08397I$ $b = -2.52625 - 0.71884I$	$14.1038 + 13.8171I$	0
$u = 1.51006 + 0.50481I$ $a = 1.54874 - 0.74984I$ $b = -2.47250 - 0.79950I$	$15.1375 - 1.1980I$	0
$u = 1.51006 - 0.50481I$ $a = 1.54874 + 0.74984I$ $b = -2.47250 + 0.79950I$	$15.1375 + 1.1980I$	0
$u = 1.61183$ $a = 1.65979$ $b = -2.42384$	11.0760	0
$u = 0.281467 + 0.135960I$ $a = -3.23232 - 0.74415I$ $b = 0.306108 + 0.706255I$	$-1.71245 - 1.30539I$	$-1.21304 + 2.73809I$
$u = 0.281467 - 0.135960I$ $a = -3.23232 + 0.74415I$ $b = 0.306108 - 0.706255I$	$-1.71245 + 1.30539I$	$-1.21304 - 2.73809I$

II.

$\boldsymbol{I_2^u = \langle -u^{15}+u^{14}+\cdots+b+1,\ -2u^{15}-3u^{14}+\cdots+a+4,\ u^{16}-5u^{14}+\cdots-u+1\rangle}$

(i) Arc colorings

$$a_8 = \begin{pmatrix}1\\0\end{pmatrix}$$
$$a_{12} = \begin{pmatrix}0\\u\end{pmatrix}$$
$$a_3 = \begin{pmatrix}2u^{15}+3u^{14}+\cdots-3u-4\\u^{15}-u^{14}+\cdots-4u-1\end{pmatrix}$$
$$a_9 = \begin{pmatrix}1\\-u^2\end{pmatrix}$$
$$a_4 = \begin{pmatrix}4u^{15}+4u^{14}+\cdots-6u-8\\u^{15}-u^{14}+\cdots-u^2-3u\end{pmatrix}$$
$$a_1 = \begin{pmatrix}u\\-u^3+u\end{pmatrix}$$
$$a_7 = \begin{pmatrix}2u^{15}+u^{14}+\cdots+u+4\\-3u^{15}-2u^{14}+\cdots+2u+3\end{pmatrix}$$
$$a_5 = \begin{pmatrix}-5u^{15}-u^{14}+\cdots+9u+9\\u^{15}-4u^{13}+\cdots+u+1\end{pmatrix}$$
$$a_{11} = \begin{pmatrix}-u^3\\u^5-u^3+u\end{pmatrix}$$
$$a_6 = \begin{pmatrix}2u^{15}+u^{14}+\cdots+u+4\\-3u^{15}-2u^{14}+\cdots+2u+4\end{pmatrix}$$
$$a_2 = \begin{pmatrix}3u^{15}+6u^{14}+\cdots+5u-8\\-2u^{15}-3u^{14}+\cdots-3u+3\end{pmatrix}$$
$$a_{10} = \begin{pmatrix}-2u^{15}+11u^{13}+\cdots-5u-1\\6u^{15}+3u^{14}+\cdots-5u-9\end{pmatrix}$$

(ii) Obstruction class $= 1$

(iii) Cusp Shapes $= 4u^{15}-u^{14}-21u^{13}-u^{12}+59u^{11}+11u^{10}-107u^9-31u^8+137u^7+47u^6-125u^5-54u^4+74u^3+30u^2-23u-3$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{16} - 8u^{15} + \cdots - 16u + 1$
c_2	$u^{16} + 4u^{15} + \cdots + 4u + 1$
c_3	$u^{16} - 10u^{14} + \cdots - 2u - 1$
c_4	$u^{16} + 5u^{13} + \cdots - 8u + 1$
c_5	$u^{16} - 4u^{15} + \cdots - 4u + 1$
c_6	$u^{16} - u^{15} + \cdots - 4u^2 - 1$
c_7	$u^{16} + 4u^{14} + \cdots - 6u + 1$
c_8	$u^{16} - 5u^{14} + \cdots - u + 1$
c_9	$u^{16} - 7u^{15} + \cdots + 16u - 1$
c_{10}	$u^{16} - 10u^{14} + \cdots + 2u - 1$
c_{11}	$u^{16} + 10u^{15} + \cdots + 13u + 1$
c_{12}	$u^{16} - 5u^{14} + \cdots + u + 1$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{16} + 20y^{15} + \cdots - 52y + 1$
c_2, c_5	$y^{16} - 8y^{15} + \cdots - 16y + 1$
c_3, c_{10}	$y^{16} - 20y^{15} + \cdots + 4y + 1$
c_4	$y^{16} - 12y^{14} + \cdots - 20y + 1$
c_6	$y^{16} + 9y^{15} + \cdots + 8y + 1$
c_7	$y^{16} + 8y^{15} + \cdots - 10y + 1$
c_8, c_{12}	$y^{16} - 10y^{15} + \cdots - 13y + 1$
c_9	$y^{16} + 9y^{15} + \cdots - 26y + 1$
c_{11}	$y^{16} + 2y^{15} + \cdots - 17y + 1$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = -0.772761 + 0.712653I$ $a = 1.12093 + 0.97459I$ $b = 0.174212 + 0.983327I$	$-0.10256 - 4.89171I$	$5.59970 + 5.98315I$
$u = -0.772761 - 0.712653I$ $a = 1.12093 - 0.97459I$ $b = 0.174212 - 0.983327I$	$-0.10256 + 4.89171I$	$5.59970 - 5.98315I$
$u = 1.026470 + 0.385848I$ $a = -0.41213 + 1.88514I$ $b = 0.64749 - 1.56601I$	$2.91384 + 5.58512I$	$6.71356 - 9.57258I$
$u = 1.026470 - 0.385848I$ $a = -0.41213 - 1.88514I$ $b = 0.64749 + 1.56601I$	$2.91384 - 5.58512I$	$6.71356 + 9.57258I$
$u = 0.868992 + 0.775777I$ $a = -0.370213 + 0.101152I$ $b = 0.267354 + 0.100433I$	$-4.40041 + 2.92387I$	$-6.18250 + 1.00458I$
$u = 0.868992 - 0.775777I$ $a = -0.370213 - 0.101152I$ $b = 0.267354 - 0.100433I$	$-4.40041 - 2.92387I$	$-6.18250 - 1.00458I$
$u = -1.153510 + 0.323030I$ $a = -0.758240 + 0.176409I$ $b = 0.125626 - 1.307330I$	$0.78724 - 3.14561I$	$8.37696 + 4.04477I$
$u = -1.153510 - 0.323030I$ $a = -0.758240 - 0.176409I$ $b = 0.125626 + 1.307330I$	$0.78724 + 3.14561I$	$8.37696 - 4.04477I$
$u = 0.730829 + 0.328251I$ $a = -0.94332 - 1.95374I$ $b = 0.722249 + 1.146800I$	$1.78640 - 2.52540I$	$4.45953 + 3.01445I$
$u = 0.730829 - 0.328251I$ $a = -0.94332 + 1.95374I$ $b = 0.722249 - 1.146800I$	$1.78640 + 2.52540I$	$4.45953 - 3.01445I$

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-1.004110+0.721375I$ $a=-0.824924-0.586632I$ $b=-0.144368-1.128410I$	$0.607371-0.610177I$	$7.63791-0.29957I$
$u=-1.004110-0.721375I$ $a=-0.824924+0.586632I$ $b=-0.144368+1.128410I$	$0.607371+0.610177I$	$7.63791+0.29957I$
$u=-0.698430+0.203647I$ $a=\ \ 1.97025-0.90358I$ $b=-0.148546+0.648408I$	$-1.042730+0.875084I$	$7.78189+1.85913I$
$u=-0.698430-0.203647I$ $a=\ \ 1.97025+0.90358I$ $b=-0.148546-0.648408I$	$-1.042730-0.875084I$	$7.78189-1.85913I$
$u=\ \ 0.491820$ $a=-2.36858$ $b=-1.05815$	7.14832	−3.64500
$u=\ \ 1.51322$ $a=\ \ 1.80388$ $b=-2.22988$	11.4926	17.8710

III. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1	$(u^{16} - 8u^{15} + \cdots - 16u + 1)(u^{46} + 15u^{45} + \cdots + 2321u + 49)$
c_2	$(u^{16} + 4u^{15} + \cdots + 4u + 1)(u^{46} + 3u^{45} + \cdots - 33u + 7)$
c_3	$(u^{16} - 10u^{14} + \cdots - 2u - 1)(u^{46} + u^{45} + \cdots + 19u + 1)$
c_4	$(u^{16} + 5u^{13} + \cdots - 8u + 1)(u^{46} + 5u^{45} + \cdots - 2895u - 209)$
c_5	$(u^{16} - 4u^{15} + \cdots - 4u + 1)(u^{46} + 3u^{45} + \cdots - 33u + 7)$
c_6	$(u^{16} - u^{15} + \cdots - 4u^2 - 1)(u^{46} - 2u^{45} + \cdots + 15u - 19)$
c_7	$(u^{16} + 4u^{14} + \cdots - 6u + 1)(u^{46} - 3u^{45} + \cdots - 113405u + 77291)$
c_8	$(u^{16} - 5u^{14} + \cdots - u + 1)(u^{46} - u^{45} + \cdots - 20u - 7)$
c_9	$(u^{16} - 7u^{15} + \cdots + 16u - 1)(u^{46} + 6u^{45} + \cdots - 75u + 9)$
c_{10}	$(u^{16} - 10u^{14} + \cdots + 2u - 1)(u^{46} + u^{45} + \cdots + 19u + 1)$
c_{11}	$(u^{16} + 10u^{15} + \cdots + 13u + 1)(u^{46} - 33u^{45} + \cdots - 1366u + 49)$
c_{12}	$(u^{16} - 5u^{14} + \cdots + u + 1)(u^{46} - u^{45} + \cdots - 20u - 7)$

IV. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1	$(y^{16}+20y^{15}+\cdots-52y+1)(y^{46}+53y^{45}+\cdots-1065437y+2401)$
c_2, c_5	$(y^{16}-8y^{15}+\cdots-16y+1)(y^{46}-15y^{45}+\cdots-2321y+49)$
c_3, c_{10}	$(y^{16}-20y^{15}+\cdots+4y+1)(y^{46}-63y^{45}+\cdots-121y+1)$
c_4	$(y^{16}-12y^{14}+\cdots-20y+1)(y^{46}-67y^{45}+\cdots-133885y+43681)$
c_6	$(y^{16}+9y^{15}+\cdots+8y+1)(y^{46}+2y^{45}+\cdots-985y+361)$
c_7	$(y^{16}+8y^{15}+\cdots-10y+1)$ $\cdot(y^{46}-71y^{45}+\cdots-125034513563y+5973898681)$
c_8, c_{12}	$(y^{16}-10y^{15}+\cdots-13y+1)(y^{46}-33y^{45}+\cdots-1366y+49)$
c_9	$(y^{16}+9y^{15}+\cdots-26y+1)(y^{46}-82y^{45}+\cdots+5697y+81)$
c_{11}	$(y^{16}+2y^{15}+\cdots-17y+1)(y^{46}-29y^{45}+\cdots+39654y+2401)$