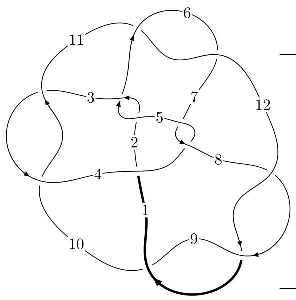
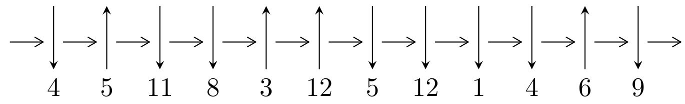
$12n_{0787}$ ($K12n_{0787}$)



A knot diagram[1]

Linearized knot diagam



Solving Sequence

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

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

$$\begin{aligned}
I_1^u = \langle & -4.86056 \times 10^{58} u^{51} - 6.69927 \times 10^{58} u^{50} + \cdots + 6.23296 \times 10^{59} b + 8.49108 \times 10^{59}, \\
& -6.68649 \times 10^{58} u^{51} + 2.75220 \times 10^{59} u^{50} + \cdots + 4.79459 \times 10^{58} a + 8.71827 \times 10^{59}, \\
& u^{52} - 4u^{51} + \cdots + 18u + 1 \rangle \\
I_2^u = \langle & -u^{16} - u^{15} + \cdots + b + 1,\ 2u^{16} + u^{15} + \cdots + a - 6u,\ u^{17} + u^{16} + \cdots - 2u - 1 \rangle
\end{aligned}$$

* 2 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 69 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. $\boldsymbol{I_1^u = \langle -4.86 \times 10^{58} u^{51} - 6.70 \times 10^{58} u^{50} + \cdots + 6.23 \times 10^{59} b + 8.49 \times 10^{59},\ -6.69 \times 10^{58} u^{51} + 2.75 \times 10^{59} u^{50} + \cdots + 4.79 \times 10^{58} a + 8.72 \times 10^{59},\ u^{52} - 4u^{51} + \cdots + 18u + 1 \rangle}$

(i) Arc colorings

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

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

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

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

$$a_5 = \begin{pmatrix} 1.39459u^{51} - 5.74023u^{50} + \cdots + 155.294u - 18.1836 \\ 0.0779815u^{51} + 0.107481u^{50} + \cdots - 22.1919u - 1.36229 \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} -u^2 + 1 \\ -u^4 + 2u^2 \end{pmatrix}$$

$$a_4 = \begin{pmatrix} 1.47257u^{51} - 5.63275u^{50} + \cdots + 133.102u - 19.5459 \\ 0.0779815u^{51} + 0.107481u^{50} + \cdots - 22.1919u - 1.36229 \end{pmatrix}$$

$$a_2 = \begin{pmatrix} -4.28758u^{51} + 17.1080u^{50} + \cdots - 1091.27u - 36.3160 \\ 0.0338379u^{51} - 0.0711693u^{50} + \cdots - 2.55862u + 1.27029 \end{pmatrix}$$

$$a_7 = \begin{pmatrix} -1.21648u^{51} + 4.74618u^{50} + \cdots - 367.518u - 25.5631 \\ -0.0685253u^{51} + 0.296845u^{50} + \cdots - 8.41934u + 0.118102 \end{pmatrix}$$

$$a_6 = \begin{pmatrix} -1.21648u^{51} + 4.74618u^{50} + \cdots - 367.518u - 25.5631 \\ -0.194638u^{51} + 0.560317u^{50} + \cdots - 5.04742u + 0.237849 \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} 1.55761u^{51} - 6.02658u^{50} + \cdots + 450.253u + 35.6977 \\ 0.0494698u^{51} - 0.154809u^{50} + \cdots + 12.1116u - 0.0549377 \end{pmatrix}$$

$$a_3 = \begin{pmatrix} -1.21792u^{51} + 5.14238u^{50} + \cdots - 481.653u - 35.7438 \\ -0.124343u^{51} + 0.226786u^{50} + \cdots - 5.42725u + 0.405315 \end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= 0.948355u^{51} - 2.66963u^{50} + \cdots + 228.868u + 10.1763$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{52} - 9u^{51} + \cdots + 27964u - 1601$
c_2, c_5	$u^{52} - 2u^{51} + \cdots + 273u + 131$
c_3, c_{10}	$u^{52} - u^{51} + \cdots + 455u + 47$
c_4, c_7	$u^{52} - 3u^{51} + \cdots + 6u - 1$
c_6, c_{11}	$u^{52} - 14u^{50} + \cdots - 1895u + 425$
c_8, c_9, c_{12}	$u^{52} + 4u^{51} + \cdots - 18u + 1$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{52} - 69y^{51} + \cdots + 3606192y + 2563201$
c_2, c_5	$y^{52} - 26y^{51} + \cdots - 263693y + 17161$
c_3, c_{10}	$y^{52} + 19y^{51} + \cdots - 52301y + 2209$
c_4, c_7	$y^{52} + 13y^{51} + \cdots - 80y + 1$
c_6, c_{11}	$y^{52} - 28y^{51} + \cdots - 3054675y + 180625$
c_8, c_9, c_{12}	$y^{52} - 68y^{51} + \cdots + 260y + 1$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.963102 + 0.345038I$ $a = 0.367913 + 0.884454I$ $b = -0.701674 - 0.540338I$	$1.19699 + 4.57480I$	0
$u = -0.963102 - 0.345038I$ $a = 0.367913 - 0.884454I$ $b = -0.701674 + 0.540338I$	$1.19699 - 4.57480I$	0
$u = 1.010440 + 0.226511I$ $a = -0.195406 + 0.336697I$ $b = -0.565644 - 0.187214I$	$-1.74134 - 0.12755I$	0
$u = 1.010440 - 0.226511I$ $a = -0.195406 - 0.336697I$ $b = -0.565644 + 0.187214I$	$-1.74134 + 0.12755I$	0
$u = -0.284882 + 1.011440I$ $a = 0.769715 + 0.747090I$ $b = -0.604356 - 0.603378I$	$3.70336 - 4.26964I$	0
$u = -0.284882 - 1.011440I$ $a = 0.769715 - 0.747090I$ $b = -0.604356 + 0.603378I$	$3.70336 + 4.26964I$	0
$u = -0.654100 + 0.538210I$ $a = 0.26052 + 1.52753I$ $b = 0.855051 - 0.775108I$	$-1.64856 + 4.08097I$	$-3.59358 - 7.53580I$
$u = -0.654100 - 0.538210I$ $a = 0.26052 - 1.52753I$ $b = 0.855051 + 0.775108I$	$-1.64856 - 4.08097I$	$-3.59358 + 7.53580I$
$u = 1.109320 + 0.362480I$ $a = -0.49904 + 1.54272I$ $b = -0.519449 - 0.934936I$	$0.59353 - 3.33817I$	0
$u = 1.109320 - 0.362480I$ $a = -0.49904 - 1.54272I$ $b = -0.519449 + 0.934936I$	$0.59353 + 3.33817I$	0

Solutions to I_1^u	$\sqrt{-1}(\text{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.822872+0.103062I$ $a=\ \ 0.257461+0.646673I$ $b=-0.242471+1.056410I$	$6.24954-0.94391I$	$0.647108-0.326933I$
$u=-0.822872-0.103062I$ $a=\ \ 0.257461-0.646673I$ $b=-0.242471-1.056410I$	$6.24954+0.94391I$	$0.647108+0.326933I$
$u=-0.862860+0.795004I$ $a=\ \ 0.01742-1.46293I$ $b=-0.818392+0.955221I$	$1.92110+10.19650I$	0
$u=-0.862860-0.795004I$ $a=\ \ 0.01742+1.46293I$ $b=-0.818392-0.955221I$	$1.92110-10.19650I$	0
$u=\ \ 0.940755+0.772008I$ $a=-0.376983-0.720478I$ $b=\ \ 0.668255+0.424349I$	$-0.98442-3.07513I$	0
$u=\ \ 0.940755-0.772008I$ $a=-0.376983+0.720478I$ $b=\ \ 0.668255-0.424349I$	$-0.98442+3.07513I$	0
$u=-0.038382+0.763918I$ $a=\ \ 0.34582-2.02691I$ $b=-0.418556+0.708156I$	$4.27045-0.69241I$	$2.11238-0.92531I$
$u=-0.038382-0.763918I$ $a=\ \ 0.34582+2.02691I$ $b=-0.418556-0.708156I$	$4.27045+0.69241I$	$2.11238+0.92531I$
$u=\ \ 1.251610+0.050476I$ $a=-0.50166+1.68503I$ $b=-0.371536-1.046800I$	$0.92724-3.35039I$	0
$u=\ \ 1.251610-0.050476I$ $a=-0.50166-1.68503I$ $b=-0.371536+1.046800I$	$0.92724+3.35039I$	0

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -1.272460 + 0.135660I$ $a = 0.48984 + 1.43474I$ $b = -0.144334 - 0.106513I$	$1.17738 + 4.15170I$	0
$u = -1.272460 - 0.135660I$ $a = 0.48984 - 1.43474I$ $b = -0.144334 + 0.106513I$	$1.17738 - 4.15170I$	0
$u = -0.687341 + 0.187968I$ $a = -0.167504 - 0.552195I$ $b = 0.675651 + 0.912887I$	$-1.04394 - 1.60688I$	$-0.66527 - 4.34427I$
$u = -0.687341 - 0.187968I$ $a = -0.167504 + 0.552195I$ $b = 0.675651 - 0.912887I$	$-1.04394 + 1.60688I$	$-0.66527 + 4.34427I$
$u = 0.647636 + 0.201060I$ $a = -0.00791 - 1.98697I$ $b = 0.806130 + 0.597381I$	$-1.174450 - 0.681589I$	$-4.08137 - 1.34656I$
$u = 0.647636 - 0.201060I$ $a = -0.00791 + 1.98697I$ $b = 0.806130 - 0.597381I$	$-1.174450 + 0.681589I$	$-4.08137 + 1.34656I$
$u = 1.42899 + 0.06703I$ $a = -0.209013 - 0.868503I$ $b = -0.03651 + 1.49771I$	$1.98258 - 2.19587I$	0
$u = 1.42899 - 0.06703I$ $a = -0.209013 + 0.868503I$ $b = -0.03651 - 1.49771I$	$1.98258 + 2.19587I$	0
$u = 1.59652$ $a = 0.0339995$ $b = -0.841839$	-2.31786	0
$u = 1.61247 + 0.20315I$ $a = 0.576829 - 1.030930I$ $b = 1.00137 + 1.04577I$	$-9.32125 - 7.00176I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 1.61247 - 0.20315I$ $a = 0.576829 + 1.030930I$ $b = 1.00137 - 1.04577I$	$-9.32125 + 7.00176I$	0
$u = -1.64815 + 0.06439I$ $a = 0.225695 + 1.000060I$ $b = 1.06497 - 1.24440I$	$-9.35796 + 1.73629I$	0
$u = -1.64815 - 0.06439I$ $a = 0.225695 - 1.000060I$ $b = 1.06497 + 1.24440I$	$-9.35796 - 1.73629I$	0
$u = 0.025016 + 0.346811I$ $a = -1.56278 - 0.62107I$ $b = 0.478121 + 0.406062I$	$-0.212444 - 1.082960I$	$-3.65080 + 5.73682I$
$u = 0.025016 - 0.346811I$ $a = -1.56278 + 0.62107I$ $b = 0.478121 - 0.406062I$	$-0.212444 + 1.082960I$	$-3.65080 - 5.73682I$
$u = -0.324576 + 0.095938I$ $a = -1.45555 + 2.26639I$ $b = -0.12420 - 1.49308I$	$7.90529 + 1.59104I$	$-6.15709 - 6.22190I$
$u = -0.324576 - 0.095938I$ $a = -1.45555 - 2.26639I$ $b = -0.12420 + 1.49308I$	$7.90529 - 1.59104I$	$-6.15709 + 6.22190I$
$u = 1.67054 + 0.05789I$ $a = 0.072885 + 0.406252I$ $b = 1.08948 - 0.99449I$	$-9.55452 + 0.59565I$	0
$u = 1.67054 - 0.05789I$ $a = 0.072885 - 0.406252I$ $b = 1.08948 + 0.99449I$	$-9.55452 - 0.59565I$	0
$u = 1.69396 + 0.07384I$ $a = 0.019572 - 0.434345I$ $b = -1.29976 + 0.82350I$	$-8.09214 - 6.09898I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 1.69396 - 0.07384I$ $a = 0.019572 + 0.434345I$ $b = -1.29976 - 0.82350I$	$-8.09214 + 6.09898I$	0
$u = 1.69403 + 0.24798I$ $a = -0.417925 + 1.083500I$ $b = -0.99514 - 1.24001I$	$-6.6989 - 14.2733I$	0
$u = 1.69403 - 0.24798I$ $a = -0.417925 - 1.083500I$ $b = -0.99514 + 1.24001I$	$-6.6989 + 14.2733I$	0
$u = -1.72157 + 0.11548I$ $a = -0.252652 - 0.581934I$ $b = -1.024730 + 0.709607I$	$-11.31890 + 1.98764I$	0
$u = -1.72157 - 0.11548I$ $a = -0.252652 + 0.581934I$ $b = -1.024730 - 0.709607I$	$-11.31890 - 1.98764I$	0
$u = -1.73054 + 0.06720I$ $a = -0.366356 - 0.965910I$ $b = -0.79731 + 1.27731I$	$-9.45621 + 4.84743I$	0
$u = -1.73054 - 0.06720I$ $a = -0.366356 + 0.965910I$ $b = -0.79731 - 1.27731I$	$-9.45621 - 4.84743I$	0
$u = -1.72514 + 0.16764I$ $a = 0.047255 + 0.719370I$ $b = 1.21416 - 0.93670I$	$-10.30920 + 6.54217I$	0
$u = -1.72514 - 0.16764I$ $a = 0.047255 - 0.719370I$ $b = 1.21416 + 0.93670I$	$-10.30920 - 6.54217I$	0
$u = 1.76333$ $a = 0.283022$ $b = 0.127597$	-3.04170	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.0287121 + 0.0617140I$ $a = -26.0966 + 4.5514I$ $b = -0.332012 - 0.710988I$	$5.14104 - 3.45107I$	$1.85198 + 12.31156I$
$u = -0.0287121 - 0.0617140I$ $a = -26.0966 - 4.5514I$ $b = -0.332012 + 0.710988I$	$5.14104 + 3.45107I$	$1.85198 - 12.31156I$

II.

$\boldsymbol{I^u_2 = \langle -u^{16} - u^{15} + \cdots + b + 1,\ 2u^{16} + u^{15} + \cdots + a - 6u,\ u^{17} + u^{16} + \cdots - 2u - 1\rangle}$

(i) Arc colorings

$$a_8 = \begin{pmatrix}1\\0\end{pmatrix}$$
$$a_{12} = \begin{pmatrix}0\\u\end{pmatrix}$$
$$a_9 = \begin{pmatrix}1\\u^2\end{pmatrix}$$
$$a_1 = \begin{pmatrix}-u\\-u^3+u\end{pmatrix}$$
$$a_5 = \begin{pmatrix}-2u^{16} - u^{15} + \cdots + 6u^2 + 6u\\u^{16} + u^{15} + \cdots - 3u - 1\end{pmatrix}$$
$$a_{10} = \begin{pmatrix}-u^2+1\\-u^4+2u^2\end{pmatrix}$$
$$a_4 = \begin{pmatrix}-u^{16} + 11u^{14} + \cdots + 3u - 1\\u^{16} + u^{15} + \cdots - 3u - 1\end{pmatrix}$$
$$a_2 = \begin{pmatrix}7u^{16} - u^{15} + \cdots - 12u - 5\\-u^{16} + u^{15} + \cdots + 4u + 2\end{pmatrix}$$
$$a_7 = \begin{pmatrix}-2u^{16} + u^{15} + \cdots - 4u - 1\\-u^{16} + u^{15} + \cdots + 2u + 3\end{pmatrix}$$
$$a_6 = \begin{pmatrix}-2u^{16} + u^{15} + \cdots - 4u - 1\\-5u^{16} + 2u^{15} + \cdots + 6u + 6\end{pmatrix}$$
$$a_{11} = \begin{pmatrix}-u^{16} - u^{15} + \cdots + 7u + 4\\-3u^{16} + u^{15} + \cdots + 5u + 1\end{pmatrix}$$
$$a_3 = \begin{pmatrix}2u^{16} + u^{15} + \cdots - 15u - 2\\u^{14} - 9u^{12} + \cdots + 6u + 2\end{pmatrix}$$

(ii) Obstruction class $= 1$

(iii) Cusp Shapes $= 10u^{16} - 6u^{15} - 110u^{14} + 70u^{13} + 488u^{12} - 325u^{11} - 1118u^{10} + 745u^9 + 1405u^8 - 837u^7 - 967u^6 + 345u^5 + 383u^4 + 54u^3 - 104u^2 - 30u - 7$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{17} - 2u^{16} + \cdots - 6u - 1$
c_2	$u^{17} + 3u^{16} + \cdots + 3u + 1$
c_3	$u^{17} + 6u^{15} + \cdots + 5u + 1$
c_4	$u^{17} - 2u^{16} + \cdots + 3u^2 + 1$
c_5	$u^{17} - 3u^{16} + \cdots + 3u - 1$
c_6	$u^{17} - u^{16} + \cdots + u - 1$
c_7	$u^{17} + 2u^{16} + \cdots - 3u^2 - 1$
c_8, c_9	$u^{17} + u^{16} + \cdots - 2u - 1$
c_{10}	$u^{17} + 6u^{15} + \cdots + 5u - 1$
c_{11}	$u^{17} + u^{16} + \cdots + u + 1$
c_{12}	$u^{17} - u^{16} + \cdots - 2u + 1$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{17} + 4y^{16} + \cdots - 26y - 1$
c_2, c_5	$y^{17} - 9y^{16} + \cdots - y - 1$
c_3, c_{10}	$y^{17} + 12y^{16} + \cdots - y - 1$
c_4, c_7	$y^{17} + 14y^{16} + \cdots - 6y - 1$
c_6, c_{11}	$y^{17} - 15y^{16} + \cdots - 11y - 1$
c_8, c_9, c_{12}	$y^{17} - 23y^{16} + \cdots - 10y - 1$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.814883 + 0.146214I$ $a = -0.160618 + 1.013790I$ $b = -0.571946 - 0.823470I$	$-1.33985 - 2.24720I$	$-5.95506 + 5.95440I$
$u = 0.814883 - 0.146214I$ $a = -0.160618 - 1.013790I$ $b = -0.571946 + 0.823470I$	$-1.33985 + 2.24720I$	$-5.95506 - 5.95440I$
$u = 1.095140 + 0.425247I$ $a = 0.092570 + 1.009470I$ $b = -0.455837 - 0.491181I$	$-1.08205 - 2.27893I$	$-6.70496 + 1.73929I$
$u = 1.095140 - 0.425247I$ $a = 0.092570 - 1.009470I$ $b = -0.455837 + 0.491181I$	$-1.08205 + 2.27893I$	$-6.70496 - 1.73929I$
$u = -1.275130 + 0.141662I$ $a = 0.37799 + 2.40221I$ $b = 0.219893 - 0.781229I$	$1.94744 + 4.76023I$	$2.64985 - 7.50749I$
$u = -1.275130 - 0.141662I$ $a = 0.37799 - 2.40221I$ $b = 0.219893 + 0.781229I$	$1.94744 - 4.76023I$	$2.64985 + 7.50749I$
$u = -1.360960 + 0.148840I$ $a = -0.176402 - 0.162239I$ $b = 0.183220 + 1.287410I$	$3.94456 + 3.04243I$	$-0.60355 - 3.01266I$
$u = -1.360960 - 0.148840I$ $a = -0.176402 + 0.162239I$ $b = 0.183220 - 1.287410I$	$3.94456 - 3.04243I$	$-0.60355 + 3.01266I$
$u = 1.42974 + 0.17726I$ $a = 0.068411 - 1.219830I$ $b = -0.04806 + 1.42695I$	$3.20138 - 0.56588I$	$-0.308792 - 0.292572I$
$u = 1.42974 - 0.17726I$ $a = 0.068411 + 1.219830I$ $b = -0.04806 - 1.42695I$	$3.20138 + 0.56588I$	$-0.308792 + 0.292572I$

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.361683+0.406042I$ $a=-2.74838+0.48990I$ $b=\ \ 0.271380+0.625613I$	$5.13097-2.92831I$	$1.67399-2.10848I$
$u=-0.361683-0.406042I$ $a=-2.74838-0.48990I$ $b=\ \ 0.271380-0.625613I$	$5.13097+2.92831I$	$1.67399+2.10848I$
$u=-0.067162+0.319437I$ $a=-2.12846+2.03319I$ $b=\ \ 0.101807-1.385190I$	$8.35935-1.32853I$	$8.08277-1.45889I$
$u=-0.067162-0.319437I$ $a=-2.12846-2.03319I$ $b=\ \ 0.101807+1.385190I$	$8.35935+1.32853I$	$8.08277+1.45889I$
$u=-1.68979+0.08907I$ $a=-0.307853-0.828725I$ $b=-0.95599+1.10192I$	$-10.26660+3.59650I$	$-5.48002-1.90134I$
$u=-1.68979-0.08907I$ $a=-0.307853+0.828725I$ $b=-0.95599-1.10192I$	$-10.26660-3.59650I$	$-5.48002+1.90134I$
$u=\ \ 1.82991$ $a=-0.0345207$ $b=\ \ 0.511063$	-3.34108	-21.7080

III. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1	$(u^{17} - 2u^{16} + \cdots - 6u - 1)(u^{52} - 9u^{51} + \cdots + 27964u - 1601)$
c_2	$(u^{17} + 3u^{16} + \cdots + 3u + 1)(u^{52} - 2u^{51} + \cdots + 273u + 131)$
c_3	$(u^{17} + 6u^{15} + \cdots + 5u + 1)(u^{52} - u^{51} + \cdots + 455u + 47)$
c_4	$(u^{17} - 2u^{16} + \cdots + 3u^2 + 1)(u^{52} - 3u^{51} + \cdots + 6u - 1)$
c_5	$(u^{17} - 3u^{16} + \cdots + 3u - 1)(u^{52} - 2u^{51} + \cdots + 273u + 131)$
c_6	$(u^{17} - u^{16} + \cdots + u - 1)(u^{52} - 14u^{50} + \cdots - 1895u + 425)$
c_7	$(u^{17} + 2u^{16} + \cdots - 3u^2 - 1)(u^{52} - 3u^{51} + \cdots + 6u - 1)$
c_8, c_9	$(u^{17} + u^{16} + \cdots - 2u - 1)(u^{52} + 4u^{51} + \cdots - 18u + 1)$
c_{10}	$(u^{17} + 6u^{15} + \cdots + 5u - 1)(u^{52} - u^{51} + \cdots + 455u + 47)$
c_{11}	$(u^{17} + u^{16} + \cdots + u + 1)(u^{52} - 14u^{50} + \cdots - 1895u + 425)$
c_{12}	$(u^{17} - u^{16} + \cdots - 2u + 1)(u^{52} + 4u^{51} + \cdots - 18u + 1)$

IV. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1	$(y^{17}+4y^{16}+\cdots-26y-1)$ $\cdot(y^{52}-69y^{51}+\cdots+3606192y+2563201)$
c_2, c_5	$(y^{17}-9y^{16}+\cdots-y-1)(y^{52}-26y^{51}+\cdots-263693y+17161)$
c_3, c_{10}	$(y^{17}+12y^{16}+\cdots-y-1)(y^{52}+19y^{51}+\cdots-52301y+2209)$
c_4, c_7	$(y^{17}+14y^{16}+\cdots-6y-1)(y^{52}+13y^{51}+\cdots-80y+1)$
c_6, c_{11}	$(y^{17}-15y^{16}+\cdots-11y-1)$ $\cdot(y^{52}-28y^{51}+\cdots-3054675y+180625)$
c_8, c_9, c_{12}	$(y^{17}-23y^{16}+\cdots-10y-1)(y^{52}-68y^{51}+\cdots+260y+1)$