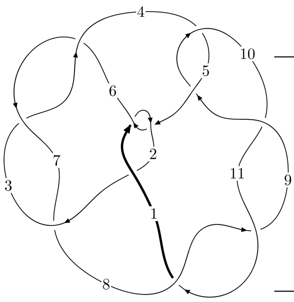
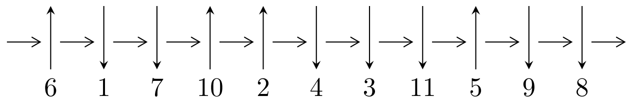
$11a_{103}$ ($K11a_{103}$)



A knot diagram[1]

Linearized knot diagam



Solving Sequence

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

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

$$\begin{aligned}
I_1^u = \langle & 3278045625361u^{33} - 962912057641220u^{32} + \cdots + 5173973686763240b - 10139327463448051, \\
& 165318083439065u^{33} - 292527248838037u^{32} + \cdots + 517397368676324a - 3832627237028687, \\
& u^{34} - u^{33} + \cdots - 8u + 1\rangle \\
I_2^u = \langle & u^9 + 3u^7 + u^6 + 3u^5 + 2u^4 + 3u^3 + u^2 + b + 2u + 1, \\
& u^{10} + u^9 + 3u^8 + 3u^7 + 3u^6 + 3u^5 + 3u^4 + 3u^3 + 2u^2 + a + 2u, \\
& u^{12} + 4u^{10} + u^9 + 6u^8 + 3u^7 + 7u^6 + 3u^5 + 7u^4 + 3u^3 + 3u^2 + 2u + 1\rangle \\
I_3^u = \langle & 3a^2u - 5a^2 - au + 17b - 4a - 14u - 22,\ a^3 - a^2u + 5au + 3a - u + 6,\ u^2 + 1\rangle
\end{aligned}$$

* 3 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 52 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.
$\boldsymbol{I_1^u = \langle 3.28\times10^{12}u^{33} - 9.63\times10^{14}u^{32} + \cdots + 5.17\times10^{15}b - 1.01\times10^{16},\ 1.65\times10^{14}u^{33} - 2.93\times10^{14}u^{32} + \cdots + 5.17\times10^{14}a - 3.83\times10^{15},\ u^{34} - u^{33} + \cdots - 8u + 1\rangle}$

(i) Arc colorings

$$a_2 = \begin{pmatrix} 0 \\ u \end{pmatrix}$$
$$a_5 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$
$$a_6 = \begin{pmatrix} 1 \\ -u^2 \end{pmatrix}$$
$$a_1 = \begin{pmatrix} -u \\ u^3 + u \end{pmatrix}$$
$$a_3 = \begin{pmatrix} -u^3 \\ u^5 + u^3 + u \end{pmatrix}$$
$$a_{10} = \begin{pmatrix} -0.319519u^{33} + 0.565382u^{32} + \cdots - 24.1768u + 7.40751 \\ -0.000633564u^{33} + 0.186107u^{32} + \cdots - 10.0234u + 1.95968 \end{pmatrix}$$
$$a_4 = \begin{pmatrix} -1.45002u^{33} + 1.24609u^{32} + \cdots - 56.5835u + 9.19176 \\ -0.466475u^{33} + 0.463665u^{32} + \cdots - 14.6958u + 1.41968 \end{pmatrix}$$
$$a_7 = \begin{pmatrix} -1.41968u^{33} + 0.953207u^{32} + \cdots - 24.2367u - 2.33833 \\ 0.230732u^{33} - 0.201881u^{32} + \cdots + 6.37702u - 2.17754 \end{pmatrix}$$
$$a_9 = \begin{pmatrix} -0.318885u^{33} + 0.379275u^{32} + \cdots - 14.1534u + 5.44783 \\ -0.000633564u^{33} + 0.186107u^{32} + \cdots - 10.0234u + 1.95968 \end{pmatrix}$$
$$a_{11} = \begin{pmatrix} -2.20913u^{33} + 2.13366u^{32} + \cdots - 73.5810u + 10.9803 \\ -0.401588u^{33} + 0.324840u^{32} + \cdots - 16.0702u + 1.25226 \end{pmatrix}$$
$$a_8 = \begin{pmatrix} -1.62080u^{33} + 0.922129u^{32} + \cdots - 24.3330u - 2.35478 \\ 0.322682u^{33} - 0.130017u^{32} + \cdots + 4.06483u - 1.68221 \end{pmatrix}$$
$$a_8 = \begin{pmatrix} -1.62080u^{33} + 0.922129u^{32} + \cdots - 24.3330u - 2.35478 \\ 0.322682u^{33} - 0.130017u^{32} + \cdots + 4.06483u - 1.68221 \end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes
$= \frac{2045779387053011}{646746710845405}u^{33} - \frac{400807807432123}{129349342169081}u^{32} + \cdots + \frac{628949354325719339}{1293493421690810}u + \frac{471857212990363}{1293493421690810}$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1, c_5	$u^{34} - u^{33} + \cdots - 8u + 1$
c_2	$u^{34} + 11u^{33} + \cdots + 24u + 1$
c_3, c_6, c_7	$u^{34} - u^{33} + \cdots - 10u + 1$
c_4, c_9	$u^{34} - 2u^{33} + \cdots - u + 2$
c_8, c_{10}, c_{11}	$u^{34} + 8u^{33} + \cdots + 19u + 4$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_5	$y^{34} + 11y^{33} + \cdots + 24y + 1$
c_2	$y^{34} + 31y^{33} + \cdots + 916y + 1$
c_3, c_6, c_7	$y^{34} + 39y^{33} + \cdots + 56y + 1$
c_4, c_9	$y^{34} + 8y^{33} + \cdots + 19y + 4$
c_8, c_{10}, c_{11}	$y^{34} + 36y^{33} + \cdots + 495y + 16$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = -0.261633 + 0.992110I$ $a = 0.38508 + 2.26064I$ $b = 0.132179 + 0.885169I$	$-3.37245 - 0.54787I$	$-11.62744 + 0.56640I$
$u = -0.261633 - 0.992110I$ $a = 0.38508 - 2.26064I$ $b = 0.132179 - 0.885169I$	$-3.37245 + 0.54787I$	$-11.62744 - 0.56640I$
$u = -0.026982 + 1.057990I$ $a = -0.20134 - 1.50601I$ $b = -0.756642 - 0.885148I$	$1.40352 + 2.86614I$	$-6.42514 - 2.90312I$
$u = -0.026982 - 1.057990I$ $a = -0.20134 + 1.50601I$ $b = -0.756642 + 0.885148I$	$1.40352 - 2.86614I$	$-6.42514 + 2.90312I$
$u = 0.744389 + 0.572496I$ $a = 0.029128 - 1.295630I$ $b = 0.536369 - 0.967768I$	$5.18197 - 3.30193I$	$1.74557 + 3.15747I$
$u = 0.744389 - 0.572496I$ $a = 0.029128 + 1.295630I$ $b = 0.536369 + 0.967768I$	$5.18197 + 3.30193I$	$1.74557 - 3.15747I$
$u = 0.441745 + 0.826611I$ $a = 0.076268 + 0.399359I$ $b = 0.507078 - 0.314037I$	$-0.14247 + 1.88117I$	$-0.09008 - 3.89150I$
$u = 0.441745 - 0.826611I$ $a = 0.076268 - 0.399359I$ $b = 0.507078 + 0.314037I$	$-0.14247 - 1.88117I$	$-0.09008 + 3.89150I$
$u = 0.625868 + 0.866379I$ $a = -0.47867 + 2.30688I$ $b = -0.064010 + 1.041080I$	$1.54356 + 2.45179I$	$-3.02847 - 2.63078I$
$u = 0.625868 - 0.866379I$ $a = -0.47867 - 2.30688I$ $b = -0.064010 - 1.041080I$	$1.54356 - 2.45179I$	$-3.02847 + 2.63078I$

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.807854 + 0.740004I$ $a = -0.120969 - 0.562485I$ $b = 0.748669 - 0.433849I$	$6.89618 - 1.36512I$	$4.50793 + 2.51852I$
$u = -0.807854 - 0.740004I$ $a = -0.120969 + 0.562485I$ $b = 0.748669 + 0.433849I$	$6.89618 + 1.36512I$	$4.50793 - 2.51852I$
$u = -0.492701 + 0.994382I$ $a = -1.29280 - 2.00761I$ $b = 0.397288 - 0.911636I$	$-1.90809 - 5.35995I$	$-5.93507 + 8.80123I$
$u = -0.492701 - 0.994382I$ $a = -1.29280 + 2.00761I$ $b = 0.397288 + 0.911636I$	$-1.90809 + 5.35995I$	$-5.93507 - 8.80123I$
$u = 1.062640 + 0.522537I$ $a = 0.515909 + 0.514851I$ $b = -0.866234 + 0.973628I$	$14.3477 - 6.6660I$	$4.12754 + 3.29257I$
$u = 1.062640 - 0.522537I$ $a = 0.515909 - 0.514851I$ $b = -0.866234 - 0.973628I$	$14.3477 + 6.6660I$	$4.12754 - 3.29257I$
$u = 0.708232 + 0.962390I$ $a = -0.202503 - 0.408506I$ $b = -0.875730 + 0.863176I$	$6.14429 + 2.35773I$	$0.48410 - 2.53993I$
$u = 0.708232 - 0.962390I$ $a = -0.202503 + 0.408506I$ $b = -0.875730 - 0.863176I$	$6.14429 - 2.35773I$	$0.48410 + 2.53993I$
$u = -1.057880 + 0.566930I$ $a = 0.584986 + 0.484797I$ $b = -0.913890 + 0.874570I$	$14.6663 + 0.1016I$	$4.57906 + 1.48156I$
$u = -1.057880 - 0.566930I$ $a = 0.584986 - 0.484797I$ $b = -0.913890 - 0.874570I$	$14.6663 - 0.1016I$	$4.57906 - 1.48156I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.698424+1.002800I$ $a=\ \ 1.45163+1.39463I$ $b=-0.837985+0.957359I$	$5.84725-8.71325I$	$-0.27553+7.33315I$
$u=-0.698424-1.002800I$ $a=\ \ 1.45163-1.39463I$ $b=-0.837985-0.957359I$	$5.84725+8.71325I$	$-0.27553-7.33315I$
$u=-0.744862+0.976632I$ $a=-0.359731+0.249557I$ $b=-0.753616-0.286412I$	$6.18222-4.46313I$	$3.61159+3.03058I$
$u=-0.744862-0.976632I$ $a=-0.359731-0.249557I$ $b=-0.753616+0.286412I$	$6.18222+4.46313I$	$3.61159-3.03058I$
$u=\ \ 0.675576+1.053520I$ $a=\ \ 0.94684-2.18547I$ $b=-0.437047-1.024080I$	$3.77297+8.75654I$	$-1.23706-8.00625I$
$u=\ \ 0.675576-1.053520I$ $a=\ \ 0.94684+2.18547I$ $b=-0.437047+1.024080I$	$3.77297-8.75654I$	$-1.23706+8.00625I$
$u=\ \ 0.231881+0.577044I$ $a=\ \ 0.813045+0.154211I$ $b=-0.304181-0.448448I$	$0.165045+1.193180I$	$1.28022-6.36905I$
$u=\ \ 0.231881-0.577044I$ $a=\ \ 0.813045-0.154211I$ $b=-0.304181+0.448448I$	$0.165045-1.193180I$	$1.28022+6.36905I$
$u=-0.779313+1.162920I$ $a=\ \ 0.530381-0.067533I$ $b=\ \ 0.918270+0.834445I$	$12.8109-6.7247I$	$2.85757+2.78604I$
$u=-0.779313-1.162920I$ $a=\ \ 0.530381+0.067533I$ $b=\ \ 0.918270-0.834445I$	$12.8109+6.7247I$	$2.85757-2.78604I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.756680 + 1.182600I$ $a = -1.05832 + 1.72508I$ $b = 0.842815 + 0.996957I$	$12.2913 + 13.2218I$	$1.97446 - 7.47226I$
$u = 0.756680 - 1.182600I$ $a = -1.05832 - 1.72508I$ $b = 0.842815 - 0.996957I$	$12.2913 - 13.2218I$	$1.97446 + 7.47226I$
$u = 0.122630 + 0.166148I$ $a = 4.38106 - 1.67605I$ $b = 0.726668 - 0.862044I$	$4.64121 - 2.76844I$	$5.45074 + 3.04285I$
$u = 0.122630 - 0.166148I$ $a = 4.38106 + 1.67605I$ $b = 0.726668 + 0.862044I$	$4.64121 + 2.76844I$	$5.45074 - 3.04285I$

II.

$$\boldsymbol{I_2^u = \langle u^9 + 3u^7 + \cdots + b + 1,\ u^{10} + u^9 + \cdots + a + 2u,\ u^{12} + 4u^{10} + \cdots + 2u + 1\rangle}$$

(i) Arc colorings

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

$$a_5 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$

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

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

$$a_3 = \begin{pmatrix} -u^3 \\ u^5 + u^3 + u \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} -u^{10} - u^9 - 3u^8 - 3u^7 - 3u^6 - 3u^5 - 3u^4 - 3u^3 - 2u^2 - 2u \\ -u^9 - 3u^7 - u^6 - 3u^5 - 2u^4 - 3u^3 - u^2 - 2u - 1 \end{pmatrix}$$

$$a_4 = \begin{pmatrix} -u \\ u^3 + u \end{pmatrix}$$

$$a_7 = \begin{pmatrix} -u^2 + 1 \\ u^4 \end{pmatrix}$$

$$a_9 = \begin{pmatrix} -u^{10} - 3u^8 - 2u^6 - u^4 - u^2 + 1 \\ -u^9 - 3u^7 - u^6 - 3u^5 - 2u^4 - 3u^3 - u^2 - 2u - 1 \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} u^7 + 2u^5 \\ -u^9 - 3u^7 - 3u^5 - 2u^3 - u \end{pmatrix}$$

$$a_8 = \begin{pmatrix} -u^4 - u^2 + 1 \\ u^6 + 2u^4 + u^2 \end{pmatrix}$$

$$a_8 = \begin{pmatrix} -u^4 - u^2 + 1 \\ u^6 + 2u^4 + u^2 \end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= -4u^9 - 12u^7 - 4u^6 - 12u^5 - 8u^4 - 16u^3 - 4u^2 - 12u - 6$

(iv) u-Polynomials at the component

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

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_3, c_5 c_6, c_7	$y^{12} + 8y^{11} + \cdots + 2y + 1$
c_2	$y^{12} - 8y^{11} + \cdots + 18y + 1$
c_4, c_9	$(y^4 + y^3 + 3y^2 + 2y + 1)^3$
c_8, c_{10}, c_{11}	$(y^4 + 5y^3 + 7y^2 + 2y + 1)^3$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = -0.757780 + 0.691817I$ $a = -0.537761 - 0.236860I$ $b = 0.851808 + 0.911292I$	$6.79074 + 3.16396I$	$1.82674 - 2.56480I$
$u = -0.757780 - 0.691817I$ $a = -0.537761 + 0.236860I$ $b = 0.851808 - 0.911292I$	$6.79074 - 3.16396I$	$1.82674 + 2.56480I$
$u = 0.737742 + 0.749761I$ $a = -1.39038 + 0.60728I$ $b = 0.851808 + 0.911292I$	$6.79074 + 3.16396I$	$1.82674 - 2.56480I$
$u = 0.737742 - 0.749761I$ $a = -1.39038 - 0.60728I$ $b = 0.851808 - 0.911292I$	$6.79074 - 3.16396I$	$1.82674 + 2.56480I$
$u = 0.337741 + 0.872538I$ $a = 1.71032 - 1.02179I$ $b = -0.351808 - 0.720342I$	$-0.21101 + 1.41510I$	$-1.82674 - 4.90874I$
$u = 0.337741 - 0.872538I$ $a = 1.71032 + 1.02179I$ $b = -0.351808 + 0.720342I$	$-0.21101 - 1.41510I$	$-1.82674 + 4.90874I$
$u = 0.117310 + 1.208580I$ $a = -0.74302 + 1.91397I$ $b = -0.351808 + 0.720342I$	$-0.21101 - 1.41510I$	$-1.82674 + 4.90874I$
$u = 0.117310 - 1.208580I$ $a = -0.74302 - 1.91397I$ $b = -0.351808 - 0.720342I$	$-0.21101 + 1.41510I$	$-1.82674 - 4.90874I$
$u = -0.455051 + 0.336038I$ $a = 0.674975 - 0.426864I$ $b = -0.351808 - 0.720342I$	$-0.21101 + 1.41510I$	$-1.82674 - 4.90874I$
$u = -0.455051 - 0.336038I$ $a = 0.674975 + 0.426864I$ $b = -0.351808 + 0.720342I$	$-0.21101 - 1.41510I$	$-1.82674 + 4.90874I$

	Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=$	$0.02004+1.44158I$		
$a=$	$0.28587-1.38654I$	$6.79074-3.16396I$	$1.82674+2.56480I$
$b=$	$0.851808-0.911292I$		
$u=$	$0.02004-1.44158I$		
$a=$	$0.28587+1.38654I$	$6.79074+3.16396I$	$1.82674-2.56480I$
$b=$	$0.851808+0.911292I$		

III.

$$I^u_3 = \langle 3a^2u-5a^2-au+17b-4a-14u-22,\ a^3-a^2u+5au+3a-u+6,\ u^2+1\rangle$$

(i) Arc colorings

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

$$a_5 = \begin{pmatrix}1\\0\end{pmatrix}$$

$$a_6 = \begin{pmatrix}1\\1\end{pmatrix}$$

$$a_1 = \begin{pmatrix}-u\\0\end{pmatrix}$$

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

$$a_{10} = \begin{pmatrix}a\\-0.176471a^2u+0.0588235au+\cdots+0.235294a+1.29412\end{pmatrix}$$

$$a_4 = \begin{pmatrix}0.352941a^2u-0.117647au+\cdots-0.470588a-0.588235\\0.352941a^2u-0.117647au+\cdots-0.470588a-0.588235\end{pmatrix}$$

$$a_7 = \begin{pmatrix}0.411765a^2u-0.470588au+\cdots+0.117647a-0.352941\\0.411765a^2u-0.470588au+\cdots+0.117647a-1.35294\end{pmatrix}$$

$$a_9 = \begin{pmatrix}0.176471a^2u-0.0588235au+\cdots+0.764706a-1.29412\\-0.176471a^2u+0.0588235au+\cdots+0.235294a+1.29412\end{pmatrix}$$

$$a_{11} = \begin{pmatrix}-0.117647a^2u-0.294118au+\cdots+0.823529a-0.470588\\0.235294a^2u-0.411765au+\cdots+0.352941a-1.05882\end{pmatrix}$$

$$a_8 = \begin{pmatrix}0.411765a^2u-0.470588au+\cdots+0.117647a-1.35294\\0.411765a^2u-0.470588au+\cdots+0.117647a-2.35294\end{pmatrix}$$

$$a_8 = \begin{pmatrix}0.411765a^2u-0.470588au+\cdots+0.117647a-1.35294\\0.411765a^2u-0.470588au+\cdots+0.117647a-2.35294\end{pmatrix}$$

(ii) Obstruction class $= 1$

(iii) Cusp Shapes $= -\frac{20}{17}a^2u-\frac{12}{17}a^2-\frac{16}{17}au+\frac{4}{17}a-\frac{88}{17}u-\frac{12}{17}$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1, c_3, c_5 c_6, c_7	$(u^2+1)^3$
c_2	$(u+1)^6$
c_4, c_9	$u^6+u^4+2u^2+1$
c_8	$(u^3-u^2+2u-1)^2$
c_{10}, c_{11}	$(u^3+u^2+2u+1)^2$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_3, c_5 c_6, c_7	$(y+1)^6$
c_2	$(y-1)^6$
c_4, c_9	$(y^3+y^2+2y+1)^2$
c_8, c_{10}, c_{11}	$(y^3+3y^2+2y-1)^2$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_3^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 1.000000I$ $a = -0.479777 + 0.977518I$ $b = 0.744862 + 0.877439I$	$3.02413 + 2.82812I$	$-0.49024 - 2.97945I$
$u = 1.000000I$ $a = -0.84494 + 2.10208I$ $b = -0.744862 + 0.877439I$	$3.02413 - 2.82812I$	$-0.49024 + 2.97945I$
$u = 1.000000I$ $a = 1.32472 - 2.07960I$ $b = -0.754878I$	-1.11345	$-7.01951 + 0.I$
$u = -1.000000I$ $a = -0.479777 - 0.977518I$ $b = 0.744862 - 0.877439I$	$3.02413 - 2.82812I$	$-0.49024 + 2.97945I$
$u = -1.000000I$ $a = -0.84494 - 2.10208I$ $b = -0.744862 - 0.877439I$	$3.02413 + 2.82812I$	$-0.49024 - 2.97945I$
$u = -1.000000I$ $a = 1.32472 + 2.07960I$ $b = 0.754878I$	-1.11345	$-7.01951 + 0.I$

IV. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1, c_5	$(u^2+1)^3$ $\cdot\,(u^{12}+4u^{10}+u^9+6u^8+3u^7+7u^6+3u^5+7u^4+3u^3+3u^2+2u+1)$ $\cdot\,(u^{34}-u^{33}+\cdots-8u+1)$
c_2	$((u+1)^6)(u^{12}+8u^{11}+\cdots+2u+1)(u^{34}+11u^{33}+\cdots+24u+1)$
c_3, c_6, c_7	$(u^2+1)^3$ $\cdot\,(u^{12}+4u^{10}+u^9+6u^8+3u^7+7u^6+3u^5+7u^4+3u^3+3u^2+2u+1)$ $\cdot\,(u^{34}-u^{33}+\cdots-10u+1)$
c_4, c_9	$((u^4+u^3+u^2+1)^3)(u^6+u^4+2u^2+1)(u^{34}-2u^{33}+\cdots-u+2)$
c_8	$(u^3-u^2+2u-1)^2(u^4+u^3+3u^2+2u+1)^3$ $\cdot\,(u^{34}+8u^{33}+\cdots+19u+4)$
c_{10}, c_{11}	$(u^3+u^2+2u+1)^2(u^4+u^3+3u^2+2u+1)^3$ $\cdot\,(u^{34}+8u^{33}+\cdots+19u+4)$

V. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1, c_5	$((y+1)^6)(y^{12}+8y^{11}+\cdots+2y+1)(y^{34}+11y^{33}+\cdots+24y+1)$
c_2	$((y-1)^6)(y^{12}-8y^{11}+\cdots+18y+1)(y^{34}+31y^{33}+\cdots+916y+1)$
c_3, c_6, c_7	$((y+1)^6)(y^{12}+8y^{11}+\cdots+2y+1)(y^{34}+39y^{33}+\cdots+56y+1)$
c_4, c_9	$(y^3+y^2+2y+1)^2(y^4+y^3+3y^2+2y+1)^3$ $\cdot\,(y^{34}+8y^{33}+\cdots+19y+4)$
c_8, c_{10}, c_{11}	$(y^3+3y^2+2y-1)^2(y^4+5y^3+7y^2+2y+1)^3$ $\cdot\,(y^{34}+36y^{33}+\cdots+495y+16)$