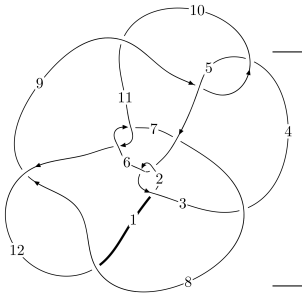
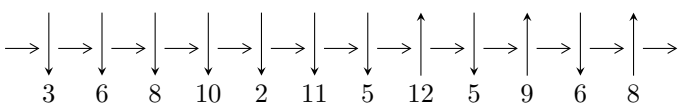
$12n_{0381}$ $(K12n_{0381})$



A knot diagram[1]

Linearized knot diagam



Solving Sequence

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

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

$$I_1^u = \langle -2.36468 \times 10^{56} u^{46} - 1.46395 \times 10^{57} u^{45} + \cdots + 1.51320 \times 10^{57} b - 1.91371 \times 10^{57},$$
$$- 7.99348 \times 10^{54} u^{46} - 2.59401 \times 10^{55} u^{45} + \cdots + 4.32343 \times 10^{55} a - 1.46564 \times 10^{56},\ u^{47} + 3u^{46} + \cdots - 5u^2$$
$$I_2^u = \langle -u^{17} + 2u^{16} + \cdots + b + 2,\ -u^{17} + 4u^{16} + \cdots + a + 1,\ u^{18} - 2u^{17} + \cdots - u + 1 \rangle$$

* 2 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 65 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. $\boldsymbol{I_1^u = \langle -2.36 \times 10^{56} u^{46} - 1.46 \times 10^{57} u^{45} + \cdots + 1.51 \times 10^{57} b - 1.91 \times 10^{57},\ -7.99 \times 10^{54} u^{46} - 2.59 \times 10^{55} u^{45} + \cdots + 4.32 \times 10^{55} a - 1.47 \times 10^{56},\ u^{47} + 3u^{46} + \cdots - 5u^2 + 1 \rangle}$

(i) Arc colorings

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

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

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

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

$$a_{11} = \begin{pmatrix} 0.184887u^{46} + 0.599989u^{45} + \cdots + 7.65952u + 3.38998 \\ 0.156270u^{46} + 0.967456u^{45} + \cdots - 6.23699u + 1.26468 \end{pmatrix}$$

$$a_7 = \begin{pmatrix} -0.392620u^{46} - 1.26417u^{45} + \cdots + 0.374970u - 5.61900 \\ -0.486693u^{46} - 1.16240u^{45} + \cdots - 4.45856u + 0.810275 \end{pmatrix}$$

$$a_8 = \begin{pmatrix} 0.0940733u^{46} - 0.101769u^{45} + \cdots + 4.83353u - 6.42928 \\ -0.486693u^{46} - 1.16240u^{45} + \cdots - 4.45856u + 0.810275 \end{pmatrix}$$

$$a_{12} = \begin{pmatrix} -0.0450287u^{46} - 0.465608u^{45} + \cdots + 13.7116u + 2.07998 \\ 0.351089u^{46} + 1.56063u^{45} + \cdots - 6.00707u + 1.64053 \end{pmatrix}$$

$$a_9 = \begin{pmatrix} -1.71992u^{46} - 4.82180u^{45} + \cdots - 8.94537u - 0.160735 \\ -0.541339u^{46} - 1.45857u^{45} + \cdots - 1.17123u + 0.611126 \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} -1.17858u^{46} - 3.36324u^{45} + \cdots - 7.77415u - 0.771861 \\ -0.541339u^{46} - 1.45857u^{45} + \cdots - 1.17123u + 0.611126 \end{pmatrix}$$

$$a_1 = \begin{pmatrix} u^3 \\ u^5 - u^3 + u \end{pmatrix}$$

$$a_4 = \begin{pmatrix} -0.0281343u^{46} + 0.124133u^{45} + \cdots + 4.75548u + 3.17124 \\ 0.912499u^{46} + 2.86257u^{45} + \cdots - 1.94007u + 1.59134 \end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= -2.80868u^{46} - 7.60191u^{45} + \cdots - 15.3938u + 3.54968$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{47}+9u^{46}+\cdots+10u+1$
c_2, c_5	$u^{47}+3u^{46}+\cdots-5u^2+1$
c_3	$u^{47}+32u^{45}+\cdots+305u+3721$
c_4, c_9	$u^{47}+u^{46}+\cdots-9u+1$
c_6, c_{11}	$u^{47}+2u^{46}+\cdots-1808u+163$
c_7	$u^{47}-3u^{46}+\cdots+37265u+230749$
c_8, c_{12}	$u^{47}+4u^{46}+\cdots+474u+73$
c_{10}	$u^{47}-35u^{46}+\cdots+37u+1$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{47} + 67y^{46} + \cdots - 62y - 1$
c_2, c_5	$y^{47} - 9y^{46} + \cdots + 10y - 1$
c_3	$y^{47} + 64y^{46} + \cdots - 273936299y - 13845841$
c_4, c_9	$y^{47} + 35y^{46} + \cdots + 37y - 1$
c_6, c_{11}	$y^{47} + 46y^{46} + \cdots + 1197786y - 26569$
c_7	$y^{47} + 97y^{46} + \cdots - 501554609163y - 53245101001$
c_8, c_{12}	$y^{47} + 46y^{45} + \cdots + 210660y - 5329$
c_{10}	$y^{47} - 37y^{46} + \cdots - 1687y - 1$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.762370 + 0.649452I$ $a = -1.50637 + 1.24868I$ $b = -0.989488 - 0.131338I$	$5.23780 - 6.46320I$	$-1.46400 + 8.28387I$
$u = 0.762370 - 0.649452I$ $a = -1.50637 - 1.24868I$ $b = -0.989488 + 0.131338I$	$5.23780 + 6.46320I$	$-1.46400 - 8.28387I$
$u = -0.969690 + 0.156566I$ $a = -0.78768 + 1.48941I$ $b = -0.170053 + 0.274049I$	$1.28197 + 2.91902I$	$-6.17943 - 3.54883I$
$u = -0.969690 - 0.156566I$ $a = -0.78768 - 1.48941I$ $b = -0.170053 - 0.274049I$	$1.28197 - 2.91902I$	$-6.17943 + 3.54883I$
$u = -0.999768 + 0.303365I$ $a = -0.822827 + 0.875403I$ $b = 0.047491 + 1.410890I$	$-3.50808 + 0.30720I$	$-13.9878 - 2.1509I$
$u = -0.999768 - 0.303365I$ $a = -0.822827 - 0.875403I$ $b = 0.047491 - 1.410890I$	$-3.50808 - 0.30720I$	$-13.9878 + 2.1509I$
$u = 0.927859 + 0.501471I$ $a = 0.391994 + 0.880414I$ $b = -1.15238 + 1.05300I$	$-2.42036 - 5.43835I$	$-10.53298 + 5.82034I$
$u = 0.927859 - 0.501471I$ $a = 0.391994 - 0.880414I$ $b = -1.15238 - 1.05300I$	$-2.42036 + 5.43835I$	$-10.53298 - 5.82034I$
$u = -0.538449 + 0.740127I$ $a = 0.51120 + 1.74597I$ $b = 0.835490 + 0.313643I$	$2.12448 + 2.88678I$	$-5.05632 - 3.90476I$
$u = -0.538449 - 0.740127I$ $a = 0.51120 - 1.74597I$ $b = 0.835490 - 0.313643I$	$2.12448 - 2.88678I$	$-5.05632 + 3.90476I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.812709 + 0.407282I$ $a = 0.917456 - 0.540115I$ $b = 1.22892 - 0.77634I$	$4.89911 + 2.22864I$	$-0.91069 + 1.26993I$
$u = 0.812709 - 0.407282I$ $a = 0.917456 + 0.540115I$ $b = 1.22892 + 0.77634I$	$4.89911 - 2.22864I$	$-0.91069 - 1.26993I$
$u = 0.356859 + 1.085610I$ $a = -0.123516 + 1.294310I$ $b = -0.684132 + 0.610771I$	$6.45758 - 0.19356I$	$1.61840 + 0.58039I$
$u = 0.356859 - 1.085610I$ $a = -0.123516 - 1.294310I$ $b = -0.684132 - 0.610771I$	$6.45758 + 0.19356I$	$1.61840 - 0.58039I$
$u = -1.112960 + 0.392492I$ $a = -0.993882 - 0.188437I$ $b = -1.275610 - 0.507155I$	$0.02525 + 1.58346I$	$-5.18804 - 1.00520I$
$u = -1.112960 - 0.392492I$ $a = -0.993882 + 0.188437I$ $b = -1.275610 + 0.507155I$	$0.02525 - 1.58346I$	$-5.18804 + 1.00520I$
$u = 0.599789 + 0.540388I$ $a = -0.036112 + 0.593518I$ $b = 0.363889 - 0.014702I$	$2.07065 - 1.88289I$	$-2.57014 + 4.18704I$
$u = 0.599789 - 0.540388I$ $a = -0.036112 - 0.593518I$ $b = 0.363889 + 0.014702I$	$2.07065 + 1.88289I$	$-2.57014 - 4.18704I$
$u = -0.897826 + 0.816897I$ $a = 0.478130 - 0.208097I$ $b = 0.010006 - 0.790312I$	$8.49975 + 3.05476I$	$3.70184 - 1.92364I$
$u = -0.897826 - 0.816897I$ $a = 0.478130 + 0.208097I$ $b = 0.010006 + 0.790312I$	$8.49975 - 3.05476I$	$3.70184 + 1.92364I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.935406 + 0.903350I$ $a = -0.061964 + 0.510432I$ $b = 0.129870 - 0.075176I$	$4.37878 - 3.33131I$	0
$u = 0.935406 - 0.903350I$ $a = -0.061964 - 0.510432I$ $b = 0.129870 + 0.075176I$	$4.37878 + 3.33131I$	0
$u = -0.895107 + 1.020460I$ $a = -0.59940 - 1.56714I$ $b = -2.53084 - 0.17370I$	$15.0606 + 5.0419I$	0
$u = -0.895107 - 1.020460I$ $a = -0.59940 + 1.56714I$ $b = -2.53084 + 0.17370I$	$15.0606 - 5.0419I$	0
$u = 0.872024 + 1.067490I$ $a = 0.462555 - 1.314280I$ $b = 2.51393 - 0.29226I$	$10.96990 + 1.03471I$	0
$u = 0.872024 - 1.067490I$ $a = 0.462555 + 1.314280I$ $b = 2.51393 + 0.29226I$	$10.96990 - 1.03471I$	0
$u = 0.609271 + 0.090864I$ $a = 1.73564 + 0.80655I$ $b = -0.015666 - 0.339586I$	$-0.78577 - 2.24530I$	$-1.90996 + 0.61737I$
$u = 0.609271 - 0.090864I$ $a = 1.73564 - 0.80655I$ $b = -0.015666 + 0.339586I$	$-0.78577 + 2.24530I$	$-1.90996 - 0.61737I$
$u = -1.060760 + 0.918923I$ $a = 1.02378 + 1.23868I$ $b = 2.73250 - 0.04492I$	$14.5035 + 2.0770I$	0
$u = -1.060760 - 0.918923I$ $a = 1.02378 - 1.23868I$ $b = 2.73250 + 0.04492I$	$14.5035 - 2.0770I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.88048+1.11465I$ $a=-0.585508-1.063030I$ $b=-2.40490-0.28862I$	$15.6315-6.8243I$	0
$u=-0.88048-1.11465I$ $a=-0.585508+1.063030I$ $b=-2.40490+0.28862I$	$15.6315+6.8243I$	0
$u=\ \ 1.09371+0.92621I$ $a=-1.10674+1.32508I$ $b=-2.67812-0.20782I$	$10.22340-8.30631I$	0
$u=\ \ 1.09371-0.92621I$ $a=-1.10674-1.32508I$ $b=-2.67812+0.20782I$	$10.22340+8.30631I$	0
$u=-0.558280$ $a=-0.365775$ $b=-0.445102$	-0.793031	-12.7680
$u=\ \ 1.32146+0.57871I$ $a=\ \ 1.001920+0.175193I$ $b=\ \ 1.252130-0.118762I$	$3.13147-6.06944I$	0
$u=\ \ 1.32146-0.57871I$ $a=\ \ 1.001920-0.175193I$ $b=\ \ 1.252130+0.118762I$	$3.13147+6.06944I$	0
$u=-1.11216+0.94153I$ $a=\ \ 1.17595+1.33807I$ $b=\ \ 2.51990-0.19390I$	$14.8227+14.2823I$	0
$u=-1.11216-0.94153I$ $a=\ \ 1.17595-1.33807I$ $b=\ \ 2.51990+0.19390I$	$14.8227-14.2823I$	0
$u=-1.01074+1.18267I$ $a=-0.271199+1.032090I$ $b=-0.252566+0.583242I$	$7.80553+4.18941I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-1.01074-1.18267I$ $a=-0.271199-1.032090I$ $b=-0.252566-0.583242I$	$7.80553-4.18941I$	0
$u=0.393275+0.193365I$ $a=3.04506-1.79634I$ $b=0.209999+0.923947I$	$-1.11354+2.17945I$	$-8.17041-2.91637I$
$u=0.393275-0.193365I$ $a=3.04506+1.79634I$ $b=0.209999-0.923947I$	$-1.11354-2.17945I$	$-8.17041+2.91637I$
$u=-0.235367+0.361169I$ $a=-1.10685-1.57370I$ $b=0.612976-1.024460I$	$4.58828+3.58928I$	$-1.93036-7.49852I$
$u=-0.235367-0.361169I$ $a=-1.10685+1.57370I$ $b=0.612976+1.024460I$	$4.58828-3.58928I$	$-1.93036+7.49852I$
$u=-0.192286+0.378326I$ $a=-3.55874-0.28507I$ $b=0.419190+1.143200I$	$-0.94050+2.40895I$	$-3.87483-0.19612I$
$u=-0.192286-0.378326I$ $a=-3.55874+0.28507I$ $b=0.419190-1.143200I$	$-0.94050-2.40895I$	$-3.87483+0.19612I$

II.

$\boldsymbol{I_2^u = \langle -u^{17}+2u^{16}+\cdots+b+2,\ -u^{17}+4u^{16}+\cdots+a+1,\ u^{18}-2u^{17}+\cdots-u+1\rangle}$

(i) Arc colorings

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

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

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

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

$$a_{11} = \begin{pmatrix} u^{17}-4u^{16}+\cdots-3u-1 \\ u^{17}-2u^{16}+\cdots-4u-2 \end{pmatrix}$$

$$a_7 = \begin{pmatrix} -u^{16}+2u^{15}+\cdots-3u+4 \\ -3u^{17}+4u^{16}+\cdots-u+3 \end{pmatrix}$$

$$a_8 = \begin{pmatrix} 3u^{17}-5u^{16}+\cdots-2u+1 \\ -3u^{17}+4u^{16}+\cdots-u+3 \end{pmatrix}$$

$$a_{12} = \begin{pmatrix} -u^{17}-u^{16}+\cdots-2u+3 \\ u^{17}-2u^{16}+\cdots-3u-1 \end{pmatrix}$$

$$a_9 = \begin{pmatrix} u^{17}-2u^{16}+\cdots+4u-1 \\ -3u^{17}+4u^{16}+\cdots-25u^2+5 \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} 4u^{17}-6u^{16}+\cdots+4u-6 \\ -3u^{17}+4u^{16}+\cdots-25u^2+5 \end{pmatrix}$$

$$a_1 = \begin{pmatrix} u^3 \\ u^5-u^3+u \end{pmatrix}$$

$$a_4 = \begin{pmatrix} 2u^{17}-6u^{16}+\cdots-8u-2 \\ u^{17}-4u^{15}+\cdots+2u+1 \end{pmatrix}$$

(ii) Obstruction class $= 1$

(iii) Cusp Shapes $= -13u^{17}+22u^{16}+25u^{15}-68u^{14}-46u^{13}+148u^{12}+58u^{11}-256u^{10}-31u^9+318u^8-64u^7-247u^6+114u^5+95u^4-79u^3-9u^2+20u-12$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{18} - 8u^{17} + \cdots - 11u + 1$
c_2	$u^{18} + 2u^{17} + \cdots + u + 1$
c_3	$u^{18} - u^{17} + \cdots - 2u + 1$
c_4	$u^{18} + 6u^{16} + \cdots + 4u + 1$
c_5	$u^{18} - 2u^{17} + \cdots - u + 1$
c_6	$u^{18} + u^{17} + \cdots - 3u + 1$
c_7	$u^{18} + 2u^{17} + \cdots + 4u + 1$
c_8	$u^{18} + 3u^{17} + \cdots - u + 1$
c_9	$u^{18} + 6u^{16} + \cdots - 4u + 1$
c_{10}	$u^{18} - 12u^{17} + \cdots - 2u + 1$
c_{11}	$u^{18} - u^{17} + \cdots + 3u + 1$
c_{12}	$u^{18} - 3u^{17} + \cdots + u + 1$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{18} + 12y^{17} + \cdots + 5y + 1$
c_2, c_5	$y^{18} - 8y^{17} + \cdots - 11y + 1$
c_3	$y^{18} + 17y^{17} + \cdots + 22y + 1$
c_4, c_9	$y^{18} + 12y^{17} + \cdots + 2y + 1$
c_6, c_{11}	$y^{18} + 7y^{17} + \cdots + 13y + 1$
c_7	$y^{18} + 14y^{17} + \cdots - 22y + 1$
c_8, c_{12}	$y^{18} + 13y^{17} + \cdots + 7y + 1$
c_{10}	$y^{18} - 4y^{17} + \cdots - 18y + 1$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.938607+0.177796I$ $a=-1.277810+0.352527I$ $b=-0.532976-0.231640I$	$-1.49224+2.44774I$	$-13.11338-3.83957I$
$u=-0.938607-0.177796I$ $a=-1.277810-0.352527I$ $b=-0.532976+0.231640I$	$-1.49224-2.44774I$	$-13.11338+3.83957I$
$u=-0.991070+0.379386I$ $a=-0.386409+0.925899I$ $b=\ \ 0.55160+1.88537I$	$-2.57337-0.15300I$	$-5.91487+0.60575I$
$u=-0.991070-0.379386I$ $a=-0.386409-0.925899I$ $b=\ \ 0.55160-1.88537I$	$-2.57337+0.15300I$	$-5.91487-0.60575I$
$u=\ \ 0.664659+0.594539I$ $a=\ \ 2.33242-0.85415I$ $b=\ \ 0.95795+1.08548I$	$-0.212595+1.383300I$	$-3.10748+0.84622I$
$u=\ \ 0.664659-0.594539I$ $a=\ \ 2.33242+0.85415I$ $b=\ \ 0.95795-1.08548I$	$-0.212595-1.383300I$	$-3.10748-0.84622I$
$u=\ \ 1.010780+0.560346I$ $a=\ \ 0.108550+1.284390I$ $b=-1.31489+1.78640I$	$-1.34156-5.99798I$	$-4.55960+7.13102I$
$u=\ \ 1.010780-0.560346I$ $a=\ \ 0.108550-1.284390I$ $b=-1.31489-1.78640I$	$-1.34156+5.99798I$	$-4.55960-7.13102I$
$u=\ \ 1.157390+0.449657I$ $a=\ \ 1.48723+0.18657I$ $b=\ \ 1.178190+0.178057I$	$1.91663-5.91874I$	$-6.80744+5.83665I$
$u=\ \ 1.157390-0.449657I$ $a=\ \ 1.48723-0.18657I$ $b=\ \ 1.178190-0.178057I$	$1.91663+5.91874I$	$-6.80744-5.83665I$

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.851063+0.965985I$ $a=-0.103785+0.850001I$ $b=-0.108161+0.557031I$	$7.22994+3.50970I$	$-2.55016-2.04029I$
$u=-0.851063-0.965985I$ $a=-0.103785-0.850001I$ $b=-0.108161-0.557031I$	$7.22994-3.50970I$	$-2.55016+2.04029I$
$u=0.912172+0.926718I$ $a=-0.316703+0.525825I$ $b=0.003727-0.356760I$	$5.15374-3.38704I$	$1.14776+3.09347I$
$u=0.912172-0.926718I$ $a=-0.316703-0.525825I$ $b=0.003727+0.356760I$	$5.15374+3.38704I$	$1.14776-3.09347I$
$u=0.637201+0.247045I$ $a=-0.552936+0.306520I$ $b=-0.835105+1.116970I$	$4.10299+2.87051I$	$-7.47106-1.58702I$
$u=0.637201-0.247045I$ $a=-0.552936-0.306520I$ $b=-0.835105-1.116970I$	$4.10299-2.87051I$	$-7.47106+1.58702I$
$u=-0.601462+0.303618I$ $a=-2.79057+1.63140I$ $b=0.099665+0.804647I$	$-1.26899+3.08403I$	$-10.1238-9.9181I$
$u=-0.601462-0.303618I$ $a=-2.79057-1.63140I$ $b=0.099665-0.804647I$	$-1.26899-3.08403I$	$-10.1238+9.9181I$

III. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1	$(u^{18}-8u^{17}+\cdots-11u+1)(u^{47}+9u^{46}+\cdots+10u+1)$
c_2	$(u^{18}+2u^{17}+\cdots+u+1)(u^{47}+3u^{46}+\cdots-5u^2+1)$
c_3	$(u^{18}-u^{17}+\cdots-2u+1)(u^{47}+32u^{45}+\cdots+305u+3721)$
c_4	$(u^{18}+6u^{16}+\cdots+4u+1)(u^{47}+u^{46}+\cdots-9u+1)$
c_5	$(u^{18}-2u^{17}+\cdots-u+1)(u^{47}+3u^{46}+\cdots-5u^2+1)$
c_6	$(u^{18}+u^{17}+\cdots-3u+1)(u^{47}+2u^{46}+\cdots-1808u+163)$
c_7	$(u^{18}+2u^{17}+\cdots+4u+1)(u^{47}-3u^{46}+\cdots+37265u+230749)$
c_8	$(u^{18}+3u^{17}+\cdots-u+1)(u^{47}+4u^{46}+\cdots+474u+73)$
c_9	$(u^{18}+6u^{16}+\cdots-4u+1)(u^{47}+u^{46}+\cdots-9u+1)$
c_{10}	$(u^{18}-12u^{17}+\cdots-2u+1)(u^{47}-35u^{46}+\cdots+37u+1)$
c_{11}	$(u^{18}-u^{17}+\cdots+3u+1)(u^{47}+2u^{46}+\cdots-1808u+163)$
c_{12}	$(u^{18}-3u^{17}+\cdots+u+1)(u^{47}+4u^{46}+\cdots+474u+73)$

IV. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1	$(y^{18}+12y^{17}+\cdots+5y+1)(y^{47}+67y^{46}+\cdots-62y-1)$
c_2, c_5	$(y^{18}-8y^{17}+\cdots-11y+1)(y^{47}-9y^{46}+\cdots+10y-1)$
c_3	$(y^{18}+17y^{17}+\cdots+22y+1)$ $\cdot(y^{47}+64y^{46}+\cdots-273936299y-13845841)$
c_4, c_9	$(y^{18}+12y^{17}+\cdots+2y+1)(y^{47}+35y^{46}+\cdots+37y-1)$
c_6, c_{11}	$(y^{18}+7y^{17}+\cdots+13y+1)(y^{47}+46y^{46}+\cdots+1197786y-26569)$
c_7	$(y^{18}+14y^{17}+\cdots-22y+1)$ $\cdot(y^{47}+97y^{46}+\cdots-501554609163y-53245101001)$
c_8, c_{12}	$(y^{18}+13y^{17}+\cdots+7y+1)(y^{47}+46y^{45}+\cdots+210660y-5329)$
c_{10}	$(y^{18}-4y^{17}+\cdots-18y+1)(y^{47}-37y^{46}+\cdots-1687y-1)$