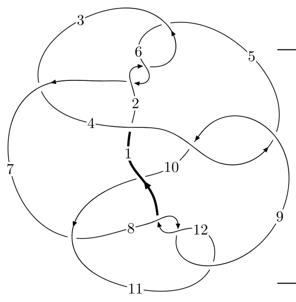
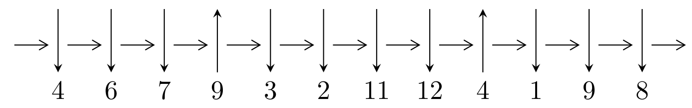
$12n_{0726}$ ($K12n_{0726}$)



A knot diagram[1]

Linearized knot diagam



Solving Sequence

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

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

$$\begin{aligned}
I_1^u &= \langle u^5 + u^4 + 2u^3 + 2u^2 + b,\ -u^5 - u^4 - 3u^3 - 2u^2 + a - 2u,\\
&\quad u^{10} + u^9 + 6u^8 + 5u^7 + 12u^6 + 8u^5 + 8u^4 + 3u^3 + u^2 - 2u + 1\rangle\\
I_2^u &= \langle -2u^{29} - 3u^{28} + \cdots + 2b + 10,\ -13u^{29} - 37u^{28} + \cdots + 2a + 42,\ u^{30} + 3u^{29} + \cdots - 8u - 1\rangle\\
I_3^u &= \langle u^2 + b,\ a + 1,\ u^3 - u^2 + 2u - 1\rangle\\
I_4^u &= \langle -u^2a + b,\ -u^2a + a^2 + u^2 - 2a + 2,\ u^3 - u^2 + 2u - 1\rangle
\end{aligned}$$

* 4 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 49 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.

$$\boldsymbol{I_1^u = \langle u^5+u^4+2u^3+2u^2+b,\ -u^5-u^4-3u^3-2u^2+a-2u,\ u^{10}+u^9+\cdots-2u+1\rangle}$$

(i) Arc colorings

$$a_8 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$
$$a_{12} = \begin{pmatrix} 0 \\ u \end{pmatrix}$$
$$a_4 = \begin{pmatrix} u^5+u^4+3u^3+2u^2+2u \\ -u^5-u^4-2u^3-2u^2 \end{pmatrix}$$
$$a_9 = \begin{pmatrix} 1 \\ u^2 \end{pmatrix}$$
$$a_5 = \begin{pmatrix} -u^7-u^6-3u^5-2u^4-u^3+2u \\ -u^9-u^8-4u^7-3u^6-5u^5-3u^4-2u^3-2u^2 \end{pmatrix}$$
$$a_1 = \begin{pmatrix} -u \\ u \end{pmatrix}$$
$$a_2 = \begin{pmatrix} -u^9-u^8-5u^7-4u^6-8u^5-4u^4-4u^3-u \\ u^9+u^8+4u^7+4u^6+4u^5+4u^4+u \end{pmatrix}$$
$$a_{11} = \begin{pmatrix} u \\ u^3+u \end{pmatrix}$$
$$a_7 = \begin{pmatrix} -u^4-u^2+1 \\ -u^6-2u^4-u^2 \end{pmatrix}$$
$$a_3 = \begin{pmatrix} u^7+3u^5+u^4+3u^3+2u^2+u \\ u^9+3u^7+2u^5-u^4-u^3-2u^2 \end{pmatrix}$$
$$a_6 = \begin{pmatrix} -u^8-u^7-4u^6-4u^5-5u^4-3u^3-u^2+2u \\ 2u^8+u^7+7u^6+4u^5+6u^4+3u^3-u^2-2u+1 \end{pmatrix}$$
$$a_{10} = \begin{pmatrix} u^5+2u^3+u \\ -u^5-u^3+u \end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= 4u^9+4u^8+22u^7+22u^6+42u^5+40u^4+30u^3+20u^2+8u-10$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1, c_{10}	$u^{10} - u^9 + 8u^8 - 7u^7 + 18u^6 - 18u^5 + 8u^4 - 13u^3 + 7u^2 + 1$
c_2, c_5, c_6 c_8, c_{11}, c_{12}	$u^{10} - u^9 + 6u^8 - 5u^7 + 12u^6 - 8u^5 + 8u^4 - 3u^3 + u^2 + 2u + 1$
c_3, c_7	$u^{10} + u^9 + 4u^8 + 4u^7 + 21u^6 - 9u^5 + 33u^4 + 5u^3 + 7u^2 + 3u + 2$
c_4, c_9	$u^{10} + 7u^9 + \cdots + 24u + 8$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_{10}	$y^{10} + 15y^9 + \cdots + 14y + 1$
c_2, c_5, c_6 c_8, c_{11}, c_{12}	$y^{10} + 11y^9 + \cdots - 2y + 1$
c_3, c_7	$y^{10} + 7y^9 + \cdots + 19y + 4$
c_4, c_9	$y^{10} - 7y^9 + \cdots + 256y + 64$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.728898 + 0.479191I$ $a = -0.415541 + 1.217980I$ $b = -0.927397 + 0.394143I$	$5.65760 + 4.71262I$	$-6.31236 - 5.61759I$
$u = -0.728898 - 0.479191I$ $a = -0.415541 - 1.217980I$ $b = -0.927397 - 0.394143I$	$5.65760 - 4.71262I$	$-6.31236 + 5.61759I$
$u = 0.066306 + 1.207890I$ $a = -0.854695 - 0.475151I$ $b = 0.697376 + 1.144550I$	$5.29548 - 2.05211I$	$-3.55200 + 3.27198I$
$u = 0.066306 - 1.207890I$ $a = -0.854695 + 0.475151I$ $b = 0.697376 - 1.144550I$	$5.29548 + 2.05211I$	$-3.55200 - 3.27198I$
$u = 0.11337 + 1.49042I$ $a = 1.075600 - 0.665737I$ $b = -1.60291 + 0.39329I$	$11.32540 - 4.10290I$	$0.47358 + 2.87242I$
$u = 0.11337 - 1.49042I$ $a = 1.075600 + 0.665737I$ $b = -1.60291 - 0.39329I$	$11.32540 + 4.10290I$	$0.47358 - 2.87242I$
$u = -0.28831 + 1.50977I$ $a = -2.00632 + 0.94362I$ $b = 3.37727 - 0.98896I$	$18.5056 + 12.2668I$	$-0.40879 - 5.71170I$
$u = -0.28831 - 1.50977I$ $a = -2.00632 - 0.94362I$ $b = 3.37727 + 0.98896I$	$18.5056 - 12.2668I$	$-0.40879 + 5.71170I$
$u = 0.337535 + 0.237080I$ $a = 0.700954 + 1.016800I$ $b = -0.044343 - 0.474934I$	$-0.483217 - 0.888721I$	$-8.20043 + 7.80792I$
$u = 0.337535 - 0.237080I$ $a = 0.700954 - 1.016800I$ $b = -0.044343 + 0.474934I$	$-0.483217 + 0.888721I$	$-8.20043 - 7.80792I$

II. $I_2^u = \langle -2u^{29} - 3u^{28} + \cdots + 2b + 10,\ -13u^{29} - 37u^{28} + \cdots + 2a + 42,\ u^{30} + 3u^{29} + \cdots - 8u - 1 \rangle$

(i) Arc colorings

$$a_8 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$
$$a_{12} = \begin{pmatrix} 0 \\ u \end{pmatrix}$$
$$a_4 = \begin{pmatrix} \frac{13}{2}u^{29} + \frac{37}{2}u^{28} + \cdots - \frac{209}{2}u - 21 \\ u^{29} + \frac{3}{2}u^{28} + \cdots - \frac{43}{2}u - 5 \end{pmatrix}$$
$$a_9 = \begin{pmatrix} 1 \\ u^2 \end{pmatrix}$$
$$a_5 = \begin{pmatrix} \frac{15}{2}u^{29} + \frac{43}{2}u^{28} + \cdots - \frac{249}{2}u - 25 \\ u^{29} + \frac{3}{2}u^{28} + \cdots - \frac{41}{2}u - 5 \end{pmatrix}$$
$$a_1 = \begin{pmatrix} -u \\ u \end{pmatrix}$$
$$a_2 = \begin{pmatrix} -u^{29} - \frac{5}{2}u^{28} + \cdots + \frac{11}{2}u + \frac{5}{2} \\ -\frac{1}{2}u^{27} - u^{26} + \cdots + 3u + \frac{1}{2} \end{pmatrix}$$
$$a_{11} = \begin{pmatrix} u \\ u^3 + u \end{pmatrix}$$
$$a_7 = \begin{pmatrix} -u^4 - u^2 + 1 \\ -u^6 - 2u^4 - u^2 \end{pmatrix}$$
$$a_3 = \begin{pmatrix} 8u^{29} + 23u^{28} + \cdots - 142u - \frac{57}{2} \\ \frac{5}{2}u^{29} + 5u^{28} + \cdots - 20u - \frac{9}{2} \end{pmatrix}$$
$$a_6 = \begin{pmatrix} 7u^{29} + 19u^{28} + \cdots - 85u - 13 \\ \frac{1}{2}u^{29} - \frac{1}{2}u^{28} + \cdots - \frac{31}{2}u - 3 \end{pmatrix}$$
$$a_{10} = \begin{pmatrix} u^5 + 2u^3 + u \\ -u^5 - u^3 + u \end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= \frac{11}{2}u^{29} + 15u^{28} + \cdots - 99u - \frac{51}{2}$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1, c_{10}	$u^{30} - 3u^{29} + \cdots - 18u^2 + 1$
c_2, c_5, c_6 c_8, c_{11}, c_{12}	$u^{30} - 3u^{29} + \cdots + 8u - 1$
c_3, c_7	$u^{30} + 3u^{29} + \cdots + 1074u - 153$
c_4, c_9	$(u^{15} - 3u^{14} + \cdots - 12u + 8)^2$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_{10}	$y^{30} + 37y^{29} + \cdots - 36y + 1$
c_2, c_5, c_6 c_8, c_{11}, c_{12}	$y^{30} + 29y^{29} + \cdots - 20y + 1$
c_3, c_7	$y^{30} + 17y^{29} + \cdots - 192024y + 23409$
c_4, c_9	$(y^{15} - 21y^{14} + \cdots + 784y - 64)^2$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.705981+0.612665I$ $a=-0.189821+0.894198I$ $b=-1.092990+0.473497I$	$12.57910-3.33907I$	$-2.38574+0.22991I$
$u=-0.705981-0.612665I$ $a=-0.189821-0.894198I$ $b=-1.092990-0.473497I$	$12.57910+3.33907I$	$-2.38574-0.22991I$
$u=-0.786126+0.466474I$ $a=\ \ 0.307960-1.352620I$ $b=\ \ 0.918649-0.316331I$	$12.1008+8.3364I$	$-3.32084-5.47194I$
$u=-0.786126-0.466474I$ $a=\ \ 0.307960+1.352620I$ $b=\ \ 0.918649+0.316331I$	$12.1008-8.3364I$	$-3.32084+5.47194I$
$u=-0.685541+0.538898I$ $a=\ \ 0.386781-0.997148I$ $b=\ \ 0.987952-0.464825I$	5.87309	$-5.59057+0.I$
$u=-0.685541-0.538898I$ $a=\ \ 0.386781+0.997148I$ $b=\ \ 0.987952+0.464825I$	5.87309	$-5.59057+0.I$
$u=\ \ 0.713656+0.166582I$ $a=-0.855543-0.376613I$ $b=\ \ 0.448037+0.280112I$	$2.81581-0.87895I$	$-5.63582+0.83931I$
$u=\ \ 0.713656-0.166582I$ $a=-0.855543+0.376613I$ $b=\ \ 0.448037-0.280112I$	$2.81581+0.87895I$	$-5.63582-0.83931I$
$u=\ \ 0.243602+1.279880I$ $a=\ \ 0.169871+0.426938I$ $b=\ \ 0.032440-0.551805I$	$2.51678-3.17894I$	$0.37815+5.88971I$
$u=\ \ 0.243602-1.279880I$ $a=\ \ 0.169871-0.426938I$ $b=\ \ 0.032440+0.551805I$	$2.51678+3.17894I$	$0.37815-5.88971I$

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.302233 + 0.572979I$ $a = -0.891160 - 0.823170I$ $b = 0.029484 + 0.794061I$	$4.68149 - 2.48936I$	$-2.42897 + 4.40087I$
$u = 0.302233 - 0.572979I$ $a = -0.891160 + 0.823170I$ $b = 0.029484 - 0.794061I$	$4.68149 + 2.48936I$	$-2.42897 - 4.40087I$
$u = -0.029336 + 1.362430I$ $a = 1.53009 + 0.04314I$ $b = -2.06494 - 0.86724I$	$2.81581 + 0.87895I$	$-5.63582 - 0.83931I$
$u = -0.029336 - 1.362430I$ $a = 1.53009 - 0.04314I$ $b = -2.06494 + 0.86724I$	$2.81581 - 0.87895I$	$-5.63582 + 0.83931I$
$u = 0.635625$ $a = 0.526188$ $b = -0.268208$	-1.48208	-4.72100
$u = 0.315927 + 1.335280I$ $a = 0.056628 - 0.761520I$ $b = -0.400717 + 0.793524I$	$7.52431 - 4.63680I$	$0. + 2.51110I$
$u = 0.315927 - 1.335280I$ $a = 0.056628 + 0.761520I$ $b = -0.400717 - 0.793524I$	$7.52431 + 4.63680I$	$0. - 2.51110I$
$u = 0.099338 + 1.386390I$ $a = -0.972274 + 0.248617I$ $b = 1.323920 + 0.164440I$	$4.68149 - 2.48936I$	$-2.42897 + 4.40087I$
$u = 0.099338 - 1.386390I$ $a = -0.972274 - 0.248617I$ $b = 1.323920 - 0.164440I$	$4.68149 + 2.48936I$	$-2.42897 - 4.40087I$
$u = -0.084417 + 1.399330I$ $a = -1.87882 + 0.15021I$ $b = 2.75314 + 0.68684I$	$7.52431 + 4.63680I$	$0. - 2.51110I$

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.084417-1.399330I$ $a=-1.87882-0.15021I$ $b=\ \ 2.75314-0.68684I$	$7.52431-4.63680I$	$0.+2.51110I$
$u=-0.26139+1.50518I$ $a=\ \ 2.03229-0.92308I$ $b=-3.40445+0.88020I$	$12.1008+8.3364I$	$0.-5.47194I$
$u=-0.26139-1.50518I$ $a=\ \ 2.03229+0.92308I$ $b=-3.40445-0.88020I$	$12.1008-8.3364I$	$0.+5.47194I$
$u=-0.23109+1.51730I$ $a=-2.02333+0.87807I$ $b=\ \ 3.32265-0.75494I$	$12.57910+3.33907I$	0
$u=-0.23109-1.51730I$ $a=-2.02333-0.87807I$ $b=\ \ 3.32265+0.75494I$	$12.57910-3.33907I$	0
$u=-0.21368+1.55326I$ $a=\ \ 1.97146-0.87493I$ $b=-3.15532+0.76228I$	19.7380	0
$u=-0.21368-1.55326I$ $a=\ \ 1.97146+0.87493I$ $b=-3.15532-0.76228I$	19.7380	0
$u=-0.354580+0.145881I$ $a=\ \ 2.47267-0.38301I$ $b=\ \ 0.785485-0.312110I$	$2.51678+3.17894I$	$0.37815-5.88971I$
$u=-0.354580-0.145881I$ $a=\ \ 2.47267+0.38301I$ $b=\ \ 0.785485+0.312110I$	$2.51678-3.17894I$	$0.37815+5.88971I$
$u=-0.280853$ $a=-2.75980$ $b=-0.698487$	-1.48208	-4.72100

III. $I^u_3 = \langle u^2 + b,\ a + 1,\ u^3 - u^2 + 2u - 1\rangle$

(i) Arc colorings

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

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

$$a_4 = \begin{pmatrix} -1 \\ -u^2 \end{pmatrix}$$

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

$$a_5 = \begin{pmatrix} -1 \\ -u^2 \end{pmatrix}$$

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

$$a_2 = \begin{pmatrix} -u^2 - 1 \\ u^2 \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} u \\ u^2 - u + 1 \end{pmatrix}$$

$$a_7 = \begin{pmatrix} u \\ -u \end{pmatrix}$$

$$a_3 = \begin{pmatrix} u - 2 \\ -u^2 - u + 1 \end{pmatrix}$$

$$a_6 = \begin{pmatrix} -u^2 + 2u - 1 \\ u^2 - 3u + 1 \end{pmatrix}$$

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

(ii) Obstruction class $= 1$

(iii) Cusp Shapes $= -8u^2 + 8u - 20$

(iv) u-Polynomials at the component

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

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_3, c_7 c_{10}	$y^3 - y^2 + 2y - 1$
c_2, c_5, c_6 c_8, c_{11}, c_{12}	$y^3 + 3y^2 + 2y - 1$
c_4, c_9	y^3

(vi) Complex Volumes and Cusp Shapes

Solutions to I_3^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.215080 + 1.307140I$ $a = -1.00000$ $b = 1.66236 - 0.56228I$	$6.04826 - 5.65624I$	$-4.98049 + 5.95889I$
$u = 0.215080 - 1.307140I$ $a = -1.00000$ $b = 1.66236 + 0.56228I$	$6.04826 + 5.65624I$	$-4.98049 - 5.95889I$
$u = 0.569840$ $a = -1.00000$ $b = -0.324718$	-2.22691	-18.0390

IV. $I_4^u = \langle -u^2a + b,\ -u^2a + a^2 + u^2 - 2a + 2,\ u^3 - u^2 + 2u - 1\rangle$

(i) Arc colorings

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

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

$$a_4 = \begin{pmatrix} a \\ u^2a \end{pmatrix}$$

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

$$a_5 = \begin{pmatrix} a \\ u^2a \end{pmatrix}$$

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

$$a_2 = \begin{pmatrix} -u^2a + au + u^2 - 2a - 2u + 2 \\ -au + 2u \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} u \\ u^2 - u + 1 \end{pmatrix}$$

$$a_7 = \begin{pmatrix} u \\ -u \end{pmatrix}$$

$$a_3 = \begin{pmatrix} -au + 2a \\ u^2a + au - a \end{pmatrix}$$

$$a_6 = \begin{pmatrix} -2u^2a + 2au + 3u^2 - 2a - u + 4 \\ 2u^2a - 2au - u^2 + a \end{pmatrix}$$

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

(ii) Obstruction class $= 1$

(iii) Cusp Shapes $= 3u^2a - 5au - 3u^2 + 3a + 3u - 12$

(iv) u-Polynomials at the component

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

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_3, c_7 c_{10}	$(y^3 - y^2 + 2y - 1)^2$
c_2, c_5, c_6 c_8, c_{11}, c_{12}	$(y^3 + 3y^2 + 2y - 1)^2$
c_4, c_9	y^6

(vi) Complex Volumes and Cusp Shapes

Solutions to I_4^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.215080 + 1.307140I$ $a = -0.162359 + 0.986732I$ $b = -0.28492 - 1.73159I$	6.04826	$-6 - 1.085931 + 0.10I$
$u = 0.215080 + 1.307140I$ $a = 0.500000 - 0.424452I$ $b = -0.592519 + 0.986732I$	$1.91067 - 2.82812I$	$-9.95703 + 1.11003I$
$u = 0.215080 - 1.307140I$ $a = -0.162359 - 0.986732I$ $b = -0.28492 + 1.73159I$	6.04826	$-6 - 1.085931 + 0.10I$
$u = 0.215080 - 1.307140I$ $a = 0.500000 + 0.424452I$ $b = -0.592519 - 0.986732I$	$1.91067 + 2.82812I$	$-9.95703 - 1.11003I$
$u = 0.569840$ $a = 1.16236 + 0.98673I$ $b = 0.377439 + 0.320410I$	$1.91067 - 2.82812I$	$-9.95703 + 1.11003I$
$u = 0.569840$ $a = 1.16236 - 0.98673I$ $b = 0.377439 - 0.320410I$	$1.91067 + 2.82812I$	$-9.95703 - 1.11003I$

V. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1, c_{10}	$(u^3+u^2-1)^3$ $\cdot\,(u^{10}-u^9+8u^8-7u^7+18u^6-18u^5+8u^4-13u^3+7u^2+1)$ $\cdot\,(u^{30}-3u^{29}+\cdots-18u^2+1)$
c_2, c_8	$(u^3-u^2+2u-1)^3$ $\cdot\,(u^{10}-u^9+6u^8-5u^7+12u^6-8u^5+8u^4-3u^3+u^2+2u+1)$ $\cdot\,(u^{30}-3u^{29}+\cdots+8u-1)$
c_3, c_7	$(u^3+u^2-1)^3$ $\cdot\,(u^{10}+u^9+4u^8+4u^7+21u^6-9u^5+33u^4+5u^3+7u^2+3u+2)$ $\cdot\,(u^{30}+3u^{29}+\cdots+1074u-153)$
c_4, c_9	$u^9(u^{10}+7u^9+\cdots+24u+8)(u^{15}-3u^{14}+\cdots-12u+8)^2$
c_5, c_6, c_{11} c_{12}	$(u^3+u^2+2u+1)^3$ $\cdot\,(u^{10}-u^9+6u^8-5u^7+12u^6-8u^5+8u^4-3u^3+u^2+2u+1)$ $\cdot\,(u^{30}-3u^{29}+\cdots+8u-1)$

VI. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1, c_{10}	$((y^3 - y^2 + 2y - 1)^3)(y^{10} + 15y^9 + \cdots + 14y + 1)$ $\cdot (y^{30} + 37y^{29} + \cdots - 36y + 1)$
c_2, c_5, c_6 c_8, c_{11}, c_{12}	$((y^3 + 3y^2 + 2y - 1)^3)(y^{10} + 11y^9 + \cdots - 2y + 1)$ $\cdot (y^{30} + 29y^{29} + \cdots - 20y + 1)$
c_3, c_7	$((y^3 - y^2 + 2y - 1)^3)(y^{10} + 7y^9 + \cdots + 19y + 4)$ $\cdot (y^{30} + 17y^{29} + \cdots - 192024y + 23409)$
c_4, c_9	$y^9(y^{10} - 7y^9 + \cdots + 256y + 64)(y^{15} - 21y^{14} + \cdots + 784y - 64)^2$