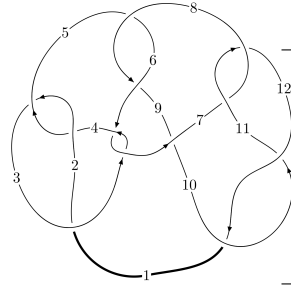
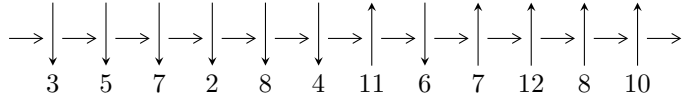


12n₀₀₈₄ (K12n₀₀₈₄)



A knot diagram¹

Linearized knot diagram



Solving Sequence

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

Ideals for irreducible components² of X_{par}

$$I_1^u = \langle -16510225313889u^{40} - 73379619742180u^{39} + \dots + 7015565688188b + 16563398292357, \\ -39282009802613u^{40} - 170243595424532u^{39} + \dots + 7015565688188a + 73325296186875, \\ u^{41} + 5u^{40} + \dots + 5u - 1 \rangle$$

$$I_2^u = \langle -u^2a - 2u^2 + b + a + u + 2, a^2 + 2au + 4u^2 + a - 4u + 4, u^3 - u^2 + 1 \rangle$$

$$I_3^u = \langle u^2 + b, a - u, u^3 - u^2 + 1 \rangle$$

$$I_4^u = \langle b, a + 1, u + 1 \rangle$$

* 4 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 51 representations.

¹The 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>).

²All coefficients of polynomials are rational numbers. But the coefficients are sometimes approximated in decimal forms when there is not enough margin.

I.

$$I_1^u = \langle -1.65 \times 10^{13} u^{40} - 7.34 \times 10^{13} u^{39} + \dots + 7.02 \times 10^{12} b + 1.66 \times 10^{13}, -3.93 \times 10^{13} u^{40} - 1.70 \times 10^{14} u^{39} + \dots + 7.02 \times 10^{12} a + 7.33 \times 10^{13}, u^{41} + 5u^{40} + \dots + 5u - 1 \rangle$$

(i) Arc colorings

$$a_7 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} 0 \\ u \end{pmatrix}$$

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

$$a_4 = \begin{pmatrix} 5.59926u^{40} + 24.2666u^{39} + \dots + 36.6437u - 10.4518 \\ 2.35337u^{40} + 10.4595u^{39} + \dots + 18.2641u - 2.36095 \end{pmatrix}$$

$$a_{12} = \begin{pmatrix} u \\ -u^3 + u \end{pmatrix}$$

$$a_3 = \begin{pmatrix} 7.95264u^{40} + 34.7261u^{39} + \dots + 54.9078u - 12.8128 \\ 2.35337u^{40} + 10.4595u^{39} + \dots + 18.2641u - 2.36095 \end{pmatrix}$$

$$a_6 = \begin{pmatrix} -0.679973u^{40} - 2.74952u^{39} + \dots - 2.24406u + 4.15673 \\ 0.448072u^{40} + 2.09737u^{39} + \dots - 2.27213u - 0.275451 \end{pmatrix}$$

$$a_5 = \begin{pmatrix} -0.0387129u^{40} - 1.20772u^{39} + \dots - 8.44788u + 4.53163 \\ -1.39663u^{40} - 6.29046u^{39} + \dots - 11.2359u + 1.38905 \end{pmatrix}$$

$$a_2 = \begin{pmatrix} 5.78006u^{40} + 24.1415u^{39} + \dots + 36.8035u - 7.87601 \\ 1.39663u^{40} + 6.29046u^{39} + \dots + 11.2359u - 1.38905 \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} -u^3 \\ u^5 - u^3 + u \end{pmatrix}$$

$$a_1 = \begin{pmatrix} u^5 + u \\ -u^7 + u^5 - 2u^3 + u \end{pmatrix}$$

$$a_9 = \begin{pmatrix} -u^5 - u \\ u^5 - u^3 + u \end{pmatrix}$$

(ii) Obstruction class = -1

(iii) Cusp Shapes

$$= \frac{93247797228429}{1753891422047} u^{40} + \frac{1555830189736099}{7015565688188} u^{39} + \dots + \frac{2808560039807687}{7015565688188} u - \frac{263248389242609}{3507782844094}$$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{41} + 29u^{40} + \dots + 71u + 1$
c_2, c_4	$u^{41} - 5u^{40} + \dots + 7u - 1$
c_3, c_6	$u^{41} - 4u^{40} + \dots - 10u + 2$
c_5, c_8	$u^{41} - 4u^{40} + \dots + 512u - 512$
c_7, c_{11}	$u^{41} - 5u^{40} + \dots + 5u + 1$
c_9	$u^{41} + 3u^{40} + \dots - 19597u + 2017$
c_{10}, c_{12}	$u^{41} - 9u^{40} + \dots + 95u - 1$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{41} - 29y^{40} + \dots + 1223y - 1$
c_2, c_4	$y^{41} - 29y^{40} + \dots + 71y - 1$
c_3, c_6	$y^{41} + 42y^{39} + \dots + 56y - 4$
c_5, c_8	$y^{41} - 50y^{40} + \dots + 6160384y - 262144$
c_7, c_{11}	$y^{41} - 9y^{40} + \dots + 95y - 1$
c_9	$y^{41} + 135y^{40} + \dots + 36517343y - 4068289$
c_{10}, c_{12}	$y^{41} + 51y^{40} + \dots + 6127y - 1$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.716889 + 0.703853I$		
$a = -0.43425 - 2.19682I$	$-4.60661 + 1.52902I$	$-5.50706 - 4.66307I$
$b = -0.336317 + 0.798192I$		
$u = 0.716889 - 0.703853I$		
$a = -0.43425 + 2.19682I$	$-4.60661 - 1.52902I$	$-5.50706 + 4.66307I$
$b = -0.336317 - 0.798192I$		
$u = -0.870049 + 0.467634I$		
$a = -1.164530 + 0.454430I$	$1.79473 + 0.06262I$	$2.65743 - 0.68980I$
$b = 0.135790 - 0.918035I$		
$u = -0.870049 - 0.467634I$		
$a = -1.164530 - 0.454430I$	$1.79473 - 0.06262I$	$2.65743 + 0.68980I$
$b = 0.135790 + 0.918035I$		
$u = 0.356456 + 0.980218I$		
$a = 0.282408 + 0.117731I$	$-7.17972 - 2.87745I$	$-9.28722 + 2.69256I$
$b = -1.039320 - 0.421414I$		
$u = 0.356456 - 0.980218I$		
$a = 0.282408 - 0.117731I$	$-7.17972 + 2.87745I$	$-9.28722 - 2.69256I$
$b = -1.039320 + 0.421414I$		
$u = -0.670401 + 0.652476I$		
$a = 1.010200 - 0.553099I$	$0.97725 - 4.44119I$	$-1.27945 + 4.71656I$
$b = 0.446012 + 1.120950I$		
$u = -0.670401 - 0.652476I$		
$a = 1.010200 + 0.553099I$	$0.97725 + 4.44119I$	$-1.27945 - 4.71656I$
$b = 0.446012 - 1.120950I$		
$u = 0.940640 + 0.501809I$		
$a = -0.02791 + 1.96139I$	$-0.70118 + 4.43572I$	$-0.34738 - 6.39371I$
$b = 0.687266 - 0.758448I$		
$u = 0.940640 - 0.501809I$		
$a = -0.02791 - 1.96139I$	$-0.70118 - 4.43572I$	$-0.34738 + 6.39371I$
$b = 0.687266 + 0.758448I$		

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.877966 + 0.643589I$		
$a = 0.016521 + 1.234530I$	$-4.07708 + 3.51500I$	$-8.28852 - 2.95507I$
$b = -0.609480 - 0.518945I$		
$u = 0.877966 - 0.643589I$		
$a = 0.016521 - 1.234530I$	$-4.07708 - 3.51500I$	$-8.28852 + 2.95507I$
$b = -0.609480 + 0.518945I$		
$u = -0.854623 + 0.159200I$		
$a = -0.978695 + 0.858024I$	$1.46993 - 0.34552I$	$6.06026 + 0.56755I$
$b = 0.041696 - 0.419660I$		
$u = -0.854623 - 0.159200I$		
$a = -0.978695 - 0.858024I$	$1.46993 + 0.34552I$	$6.06026 - 0.56755I$
$b = 0.041696 + 0.419660I$		
$u = 0.877954 + 0.775956I$		
$a = -0.968702 - 0.351197I$	$-3.83803 + 2.91878I$	$4.79738 - 5.00057I$
$b = -0.598603 + 0.031599I$		
$u = 0.877954 - 0.775956I$		
$a = -0.968702 + 0.351197I$	$-3.83803 - 2.91878I$	$4.79738 + 5.00057I$
$b = -0.598603 - 0.031599I$		
$u = 0.537453 + 0.625371I$		
$a = -0.426437 - 0.272772I$	$-2.04074 - 0.11127I$	$-4.60725 + 0.35706I$
$b = 0.891755 + 0.389086I$		
$u = 0.537453 - 0.625371I$		
$a = -0.426437 + 0.272772I$	$-2.04074 + 0.11127I$	$-4.60725 - 0.35706I$
$b = 0.891755 - 0.389086I$		
$u = -0.802702$		
$a = -5.09181$	-0.345711	-64.7260
$b = -0.275758$		
$u = 1.139710 + 0.532282I$		
$a = 0.29262 - 1.64354I$	$-4.48025 + 8.31246I$	$0. - 7.85034I$
$b = -0.893901 + 0.701047I$		

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 1.139710 - 0.532282I$ $a = 0.29262 + 1.64354I$ $b = -0.893901 - 0.701047I$	$-4.48025 - 8.31246I$	$0. + 7.85034I$
$u = -1.26772$ $a = 0.964605$ $b = -0.640215$	-0.787444	-12.1570
$u = -0.891473 + 0.933329I$ $a = -0.528554 + 0.154006I$ $b = 1.25025 - 1.10628I$	$-10.38260 + 1.04574I$	0
$u = -0.891473 - 0.933329I$ $a = -0.528554 - 0.154006I$ $b = 1.25025 + 1.10628I$	$-10.38260 - 1.04574I$	0
$u = -0.841724 + 0.990823I$ $a = 0.377207 - 0.291737I$ $b = -1.21490 + 1.06493I$	$-15.1663 + 7.0683I$	0
$u = -0.841724 - 0.990823I$ $a = 0.377207 + 0.291737I$ $b = -1.21490 - 1.06493I$	$-15.1663 - 7.0683I$	0
$u = -0.934438 + 0.935551I$ $a = -0.61279 + 1.51752I$ $b = -1.12955 - 1.22573I$	$-14.6673 - 1.5212I$	0
$u = -0.934438 - 0.935551I$ $a = -0.61279 - 1.51752I$ $b = -1.12955 + 1.22573I$	$-14.6673 + 1.5212I$	0
$u = -0.982434 + 0.885456I$ $a = 0.67122 - 1.65206I$ $b = 1.17691 + 1.18848I$	$-10.08510 - 7.74293I$	0
$u = -0.982434 - 0.885456I$ $a = 0.67122 + 1.65206I$ $b = 1.17691 - 1.18848I$	$-10.08510 + 7.74293I$	0

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.962450 + 0.919824I$ $a = 0.713562 - 0.200841I$ $b = -1.20978 + 1.14699I$	$-14.5747 - 5.2989I$	0
$u = -0.962450 - 0.919824I$ $a = 0.713562 + 0.200841I$ $b = -1.20978 - 1.14699I$	$-14.5747 + 5.2989I$	0
$u = 0.961309 + 0.961016I$ $a = -0.125970 + 0.554955I$ $b = 1.019520 - 0.111695I$	$-9.11622 + 3.51279I$	0
$u = 0.961309 - 0.961016I$ $a = -0.125970 - 0.554955I$ $b = 1.019520 + 0.111695I$	$-9.11622 - 3.51279I$	0
$u = -1.039620 + 0.876652I$ $a = -0.63077 + 1.75489I$ $b = -1.15233 - 1.13531I$	$-14.5120 - 13.9039I$	0
$u = -1.039620 - 0.876652I$ $a = -0.63077 - 1.75489I$ $b = -1.15233 + 1.13531I$	$-14.5120 + 13.9039I$	0
$u = 0.629652 + 0.060391I$ $a = -0.09621 + 3.42389I$ $b = 0.189078 - 1.367880I$	$3.87413 + 2.95359I$	$-12.9329 - 8.6631I$
$u = 0.629652 - 0.060391I$ $a = -0.09621 - 3.42389I$ $b = 0.189078 + 1.367880I$	$3.87413 - 2.95359I$	$-12.9329 + 8.6631I$
$u = -0.512134 + 0.182325I$ $a = 2.61667 + 0.05062I$ $b = 0.497781 - 0.337919I$	$-1.008150 - 0.694652I$	$-6.89267 - 0.99274I$
$u = -0.512134 - 0.182325I$ $a = 2.61667 - 0.05062I$ $b = 0.497781 + 0.337919I$	$-1.008150 + 0.694652I$	$-6.89267 + 0.99274I$

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.113052$		
$a = -3.84398$	-1.00335	-10.2280
$b = 0.612202$		

II.

$$I_2^u = \langle -u^2a - 2u^2 + b + a + u + 2, a^2 + 2au + 4u^2 + a - 4u + 4, u^3 - u^2 + 1 \rangle$$

(i) Arc colorings

$$a_7 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} 0 \\ u \end{pmatrix}$$

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

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

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

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

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

$$a_5 = \begin{pmatrix} u^2a - au - a - 3 \\ u^2a + au + 3u^2 \end{pmatrix}$$

$$a_2 = \begin{pmatrix} 2u^2a + 3u^2 - a - 5 \\ u^2a + au + 3u^2 \end{pmatrix}$$

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

$$a_1 = \begin{pmatrix} -1 \\ 0 \end{pmatrix}$$

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

(ii) Obstruction class = 1

$$(iii) \text{ Cusp Shapes} = -u^2a + 15au + 20u^2 + 11a + 4u + 4$$

(iv) u-Polynomials at the component

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

(v) Riley Polynomials at the component

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

(vi) Complex Volumes and Cusp Shapes

Solutions to I_2^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.877439 + 0.744862I$ $a = -1.06984 - 1.06527I$ $b = -0.215080 + 1.307140I$	$5.65624I$	$-3.29784 - 6.94206I$
$u = 0.877439 + 0.744862I$ $a = -1.68504 - 0.42445I$ $b = -0.569840$	$-4.13758 + 2.82812I$	$-24.3518 + 2.3339I$
$u = 0.877439 - 0.744862I$ $a = -1.06984 + 1.06527I$ $b = -0.215080 - 1.307140I$	$-5.65624I$	$-3.29784 + 6.94206I$
$u = 0.877439 - 0.744862I$ $a = -1.68504 + 0.42445I$ $b = -0.569840$	$-4.13758 - 2.82812I$	$-24.3518 - 2.3339I$
$u = -0.754878$ $a = 0.25488 + 3.03873I$ $b = -0.215080 - 1.307140I$	$4.13758 - 2.82812I$	$12.14969 - 2.71361I$
$u = -0.754878$ $a = 0.25488 - 3.03873I$ $b = -0.215080 + 1.307140I$	$4.13758 + 2.82812I$	$12.14969 + 2.71361I$

$$\text{III. } I_3^u = \langle u^2 + b, a - u, u^3 - u^2 + 1 \rangle$$

(i) Arc colorings

$$a_7 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} 0 \\ u \end{pmatrix}$$

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

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

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

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

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

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

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

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

$$a_1 = \begin{pmatrix} -1 \\ 0 \end{pmatrix}$$

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

(ii) Obstruction class = 1

(iii) Cusp Shapes = $2u^2 - 3u - 2$

(iv) u-Polynomials at the component

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

(v) Riley Polynomials at the component

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

(vi) Complex Volumes and Cusp Shapes

Solutions to I_3^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.877439 + 0.744862I$ $a = 0.877439 + 0.744862I$ $b = -0.215080 - 1.307140I$	0	$-4.20216 + 0.37970I$
$u = 0.877439 - 0.744862I$ $a = 0.877439 - 0.744862I$ $b = -0.215080 + 1.307140I$	0	$-4.20216 - 0.37970I$
$u = -0.754878$ $a = -0.754878$ $b = -0.569840$	0	1.40430

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

(i) Arc colorings

$$a_7 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} 0 \\ -1 \end{pmatrix}$$

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

$$a_4 = \begin{pmatrix} -1 \\ 0 \end{pmatrix}$$

$$a_{12} = \begin{pmatrix} -1 \\ 0 \end{pmatrix}$$

$$a_3 = \begin{pmatrix} -1 \\ 0 \end{pmatrix}$$

$$a_6 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$

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

$$a_2 = \begin{pmatrix} -3 \\ 1 \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} 1 \\ -1 \end{pmatrix}$$

$$a_1 = \begin{pmatrix} -2 \\ 1 \end{pmatrix}$$

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

(ii) Obstruction class = 1

(iii) Cusp Shapes = 0

(iv) **u**-Polynomials at the component

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

(v) Riley Polynomials at the component

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

(vi) Complex Volumes and Cusp Shapes

Solutions to I_4^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -1.00000$		
$a = -1.00000$	0	0
$b = 0$		

V. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1	$(u-1)(u^3-u^2+2u-1)^3(u^{41}+29u^{40}+\dots+71u+1)$
c_2	$(u-1)(u^3+u^2-1)^3(u^{41}-5u^{40}+\dots+7u-1)$
c_3	$u(u^3-u^2+2u-1)^3(u^{41}-4u^{40}+\dots-10u+2)$
c_4	$(u+1)(u^3-u^2+1)^3(u^{41}-5u^{40}+\dots+7u-1)$
c_5	$u^9(u+1)(u^{41}-4u^{40}+\dots+512u-512)$
c_6	$u(u^3+u^2+2u+1)^3(u^{41}-4u^{40}+\dots-10u+2)$
c_7	$(u+1)(u^3-u^2+1)^3(u^{41}-5u^{40}+\dots+5u+1)$
c_8	$u^9(u-1)(u^{41}-4u^{40}+\dots+512u-512)$
c_9	$(u-1)(u^3-u^2+2u-1)^3(u^{41}+3u^{40}+\dots-19597u+2017)$
c_{10}	$(u+1)(u^3+u^2+2u+1)^3(u^{41}-9u^{40}+\dots+95u-1)$
c_{11}	$(u-1)(u^3+u^2-1)^3(u^{41}-5u^{40}+\dots+5u+1)$
c_{12}	$(u-1)(u^3-u^2+2u-1)^3(u^{41}-9u^{40}+\dots+95u-1)$

VI. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1	$(y - 1)(y^3 + 3y^2 + 2y - 1)^3(y^{41} - 29y^{40} + \dots + 1223y - 1)$
c_2, c_4	$(y - 1)(y^3 - y^2 + 2y - 1)^3(y^{41} - 29y^{40} + \dots + 71y - 1)$
c_3, c_6	$y(y^3 + 3y^2 + 2y - 1)^3(y^{41} + 42y^{39} + \dots + 56y - 4)$
c_5, c_8	$y^9(y - 1)(y^{41} - 50y^{40} + \dots + 6160384y - 262144)$
c_7, c_{11}	$(y - 1)(y^3 - y^2 + 2y - 1)^3(y^{41} - 9y^{40} + \dots + 95y - 1)$
c_9	$(y - 1)(y^3 + 3y^2 + 2y - 1)^3$ $\cdot (y^{41} + 135y^{40} + \dots + 36517343y - 4068289)$
c_{10}, c_{12}	$(y - 1)(y^3 + 3y^2 + 2y - 1)^3(y^{41} + 51y^{40} + \dots + 6127y - 1)$