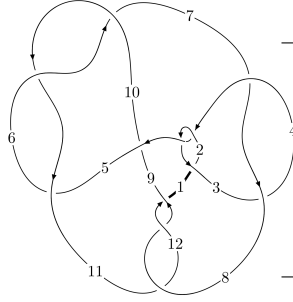
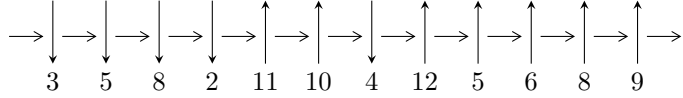


12n₀₁₉₅ (K12n₀₁₉₅)



A knot diagram¹

Linearized knot diagram



Solving Sequence

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

Ideals for irreducible components² of X_{par}

$$I_1^u = \langle -1.62072 \times 10^{18} u^{23} + 1.95726 \times 10^{19} u^{22} + \dots + 1.72477 \times 10^{21} b + 8.62668 \times 10^{20}, \\ - 2.65800 \times 10^{20} u^{23} + 1.49704 \times 10^{20} u^{22} + \dots + 1.03486 \times 10^{22} a - 3.34302 \times 10^{22}, u^{24} - 2u^{23} + \dots - 8u \rangle$$

$$I_2^u = \langle b + 1, 2u^5 - 4u^4 + 7u^3 - 8u^2 + 3a + 6u - 5, u^6 - u^5 + 3u^4 - 2u^3 + 2u^2 - u - 1 \rangle$$

$$I_3^u = \langle 4a^2u - 6a^2 - 8au + 17b + 12a + 2u - 20, 4a^3 + 6a^2u - 8a^2 - 2au - u - 6, u^2 + 2 \rangle$$

$$I_1^v = \langle a, -v^2 + b + 3v + 1, v^3 - 2v^2 - 3v - 1 \rangle$$

* 4 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 39 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.

$$I_1^u = \langle -1.62 \times 10^{18} u^{23} + 1.96 \times 10^{19} u^{22} + \dots + 1.72 \times 10^{21} b + 8.63 \times 10^{20}, -2.66 \times 10^{20} u^{23} + 1.50 \times 10^{20} u^{22} + \dots + 1.03 \times 10^{22} a - 3.34 \times 10^{22}, u^{24} - 2u^{23} + \dots - 8u - 8 \rangle$$

(i) Arc colorings

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

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

$$a_3 = \begin{pmatrix} 0.0256846u^{23} - 0.0144661u^{22} + \dots - 1.52339u + 3.23040 \\ 0.000939669u^{23} - 0.0113479u^{22} + \dots + 0.985369u - 0.500163 \end{pmatrix}$$

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

$$a_2 = \begin{pmatrix} 0.0266242u^{23} - 0.0258140u^{22} + \dots - 0.538021u + 2.73023 \\ 0.000939669u^{23} - 0.0113479u^{22} + \dots + 0.985369u - 0.500163 \end{pmatrix}$$

$$a_1 = \begin{pmatrix} 0.0583259u^{23} - 0.126312u^{22} + \dots + 3.65005u + 0.821695 \\ -0.0138991u^{23} + 0.0340693u^{22} + \dots + 0.0978404u - 0.00653011 \end{pmatrix}$$

$$a_4 = \begin{pmatrix} 0.00790799u^{23} + 0.00662412u^{22} + \dots - 2.90944u + 2.73115 \\ -0.00229500u^{23} - 0.00348046u^{22} + \dots + 1.12451u - 0.423114 \end{pmatrix}$$

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

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

$$a_8 = \begin{pmatrix} 0.0350146u^{23} - 0.0584050u^{22} + \dots + 4.17403u + 0.781518 \\ -0.000987363u^{23} - 0.00177968u^{22} + \dots - 0.799250u - 0.0593477 \end{pmatrix}$$

$$a_9 = \begin{pmatrix} -u^3 - 2u \\ u^3 + u \end{pmatrix}$$

$$a_{12} = \begin{pmatrix} 0.0439159u^{23} - 0.0866142u^{22} + \dots + 2.91071u + 0.725782 \\ -0.00988867u^{23} + 0.0264295u^{22} + \dots + 0.464073u - 0.00361092 \end{pmatrix}$$

(ii) Obstruction class = -1

$$(iii) \text{ Cusp Shapes} = \frac{2356346852274434342467}{5174317777594090237716} u^{23} - \frac{1159968679518319967807}{1293579444398522559429} u^{22} + \dots + \frac{50179924203167367792392}{1293579444398522559429} u + \frac{1352352571446172898474}{1293579444398522559429}$$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{24} - 2u^{23} + \dots + 1885u + 81$
c_2, c_4	$u^{24} - 10u^{23} + \dots + 25u + 9$
c_3, c_7	$u^{24} + 2u^{23} + \dots + 960u - 576$
c_5, c_6, c_{10}	$u^{24} - 2u^{23} + \dots - 8u - 8$
c_8, c_{11}, c_{12}	$u^{24} - 5u^{23} + \dots - 357u + 49$
c_9	$u^{24} + 2u^{23} + \dots + 8216u - 1448$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{24} + 66y^{23} + \dots - 3758641y + 6561$
c_2, c_4	$y^{24} + 2y^{23} + \dots - 1885y + 81$
c_3, c_7	$y^{24} + 48y^{23} + \dots - 3022848y + 331776$
c_5, c_6, c_{10}	$y^{24} + 16y^{23} + \dots - 1472y + 64$
c_8, c_{11}, c_{12}	$y^{24} - 41y^{23} + \dots - 196539y + 2401$
c_9	$y^{24} - 80y^{23} + \dots + 25123008y + 2096704$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.036962 + 1.068950I$		
$a = 0.84695 - 1.21226I$	$-2.00407 + 1.55521I$	$2.34191 - 4.04611I$
$b = -0.194048 + 0.569807I$		
$u = -0.036962 - 1.068950I$		
$a = 0.84695 + 1.21226I$	$-2.00407 - 1.55521I$	$2.34191 + 4.04611I$
$b = -0.194048 - 0.569807I$		
$u = -0.323995 + 1.223880I$		
$a = 0.417290 - 0.742338I$	$2.23459 - 5.45156I$	$5.30376 + 8.39066I$
$b = 0.894371 + 0.359693I$		
$u = -0.323995 - 1.223880I$		
$a = 0.417290 + 0.742338I$	$2.23459 + 5.45156I$	$5.30376 - 8.39066I$
$b = 0.894371 - 0.359693I$		
$u = -0.538454 + 0.449191I$		
$a = -1.08603 + 1.29257I$	$5.01148 + 2.07959I$	$5.62929 + 1.97986I$
$b = 1.060300 - 0.751864I$		
$u = -0.538454 - 0.449191I$		
$a = -1.08603 - 1.29257I$	$5.01148 - 2.07959I$	$5.62929 - 1.97986I$
$b = 1.060300 + 0.751864I$		
$u = 0.024256 + 1.316950I$		
$a = 0.95732 + 1.55302I$	$-4.97907 - 0.78003I$	$-5.02882 + 0.00732I$
$b = -1.005510 - 0.226269I$		
$u = 0.024256 - 1.316950I$		
$a = 0.95732 - 1.55302I$	$-4.97907 + 0.78003I$	$-5.02882 - 0.00732I$
$b = -1.005510 + 0.226269I$		
$u = -0.846526 + 1.045030I$		
$a = -0.40282 - 2.36685I$	$6.66087 - 5.31357I$	$3.74628 + 3.91274I$
$b = 0.92407 + 1.32486I$		
$u = -0.846526 - 1.045030I$		
$a = -0.40282 + 2.36685I$	$6.66087 + 5.31357I$	$3.74628 - 3.91274I$
$b = 0.92407 - 1.32486I$		

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.586420 + 0.250857I$ $a = 1.02868 - 2.84832I$ $b = -0.586430 + 0.543498I$	$0.984746 + 0.178881I$	$6.09874 - 3.14218I$
$u = 0.586420 - 0.250857I$ $a = 1.02868 + 2.84832I$ $b = -0.586430 - 0.543498I$	$0.984746 - 0.178881I$	$6.09874 + 3.14218I$
$u = 0.182077 + 1.361640I$ $a = 0.527856 + 0.849532I$ $b = 0.493008 - 0.547865I$	$-3.21229 + 2.94427I$	$1.02339 - 4.25834I$
$u = 0.182077 - 1.361640I$ $a = 0.527856 - 0.849532I$ $b = 0.493008 + 0.547865I$	$-3.21229 - 2.94427I$	$1.02339 + 4.25834I$
$u = -0.976649 + 0.994558I$ $a = -0.62257 + 2.02385I$ $b = 0.09341 - 1.47455I$	$6.90898 - 1.54857I$	$4.91054 + 1.41410I$
$u = -0.976649 - 0.994558I$ $a = -0.62257 - 2.02385I$ $b = 0.09341 + 1.47455I$	$6.90898 + 1.54857I$	$4.91054 - 1.41410I$
$u = 1.46226 + 0.22351I$ $a = -1.52657 + 2.40294I$ $b = 1.43989 - 1.34762I$	$-17.7659 + 5.2038I$	$4.94066 - 2.06441I$
$u = 1.46226 - 0.22351I$ $a = -1.52657 - 2.40294I$ $b = 1.43989 + 1.34762I$	$-17.7659 - 5.2038I$	$4.94066 + 2.06441I$
$u = 0.401729$ $a = 2.19393$ $b = -0.203908$	0.910545	12.3570
$u = 0.56079 + 1.60245I$ $a = -0.31621 + 1.95238I$ $b = 1.40238 - 1.01134I$	$15.8466 + 12.3266I$	$2.77536 - 4.87802I$

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.56079 - 1.60245I$ $a = -0.31621 - 1.95238I$ $b = 1.40238 + 1.01134I$	$15.8466 - 12.3266I$	$2.77536 + 4.87802I$
$u = -0.235957$ $a = 3.84635$ $b = -0.892923$	-1.27848	-10.9250
$u = 0.82389 + 1.57851I$ $a = -1.34403 - 1.58945I$ $b = 1.02698 + 1.58176I$	$17.6395 + 2.9890I$	$3.87648 - 0.98637I$
$u = 0.82389 - 1.57851I$ $a = -1.34403 + 1.58945I$ $b = 1.02698 - 1.58176I$	$17.6395 - 2.9890I$	$3.87648 + 0.98637I$

II.

$$I_2^u = \langle b+1, 2u^5 - 4u^4 + 7u^3 - 8u^2 + 3a + 6u - 5, u^6 - u^5 + 3u^4 - 2u^3 + 2u^2 - u - 1 \rangle$$

(i) Arc colorings

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

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

$$a_3 = \begin{pmatrix} -\frac{2}{3}u^5 + \frac{4}{3}u^4 + \dots - 2u + \frac{5}{3} \\ -1 \end{pmatrix}$$

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

$$a_2 = \begin{pmatrix} -\frac{2}{3}u^5 + \frac{4}{3}u^4 + \dots - 2u + \frac{2}{3} \\ -1 \end{pmatrix}$$

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

$$a_4 = \begin{pmatrix} -\frac{2}{3}u^5 + \frac{4}{3}u^4 + \dots - 2u + \frac{5}{3} \\ -1 \end{pmatrix}$$

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

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

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

$$a_9 = \begin{pmatrix} -u^3 - 2u \\ u^3 + u \end{pmatrix}$$

$$a_{12} = \begin{pmatrix} u^5 + 2u^3 + u \\ -u^5 + u^4 - 2u^3 + u^2 - u - 1 \end{pmatrix}$$

(ii) Obstruction class = 1

(iii) Cusp Shapes = $-\frac{7}{9}u^5 + \frac{41}{9}u^4 - \frac{62}{9}u^3 + \frac{103}{9}u^2 - 6u + \frac{70}{9}$

(iv) u-Polynomials at the component

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

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_2, c_4	$(y - 1)^6$
c_3, c_7	y^6
c_5, c_6, c_{10}	$y^6 + 5y^5 + 9y^4 + 4y^3 - 6y^2 - 5y + 1$
c_8, c_9, c_{11} c_{12}	$y^6 - 7y^5 + 17y^4 - 16y^3 + 6y^2 - 5y + 1$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_2^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.873214$ $a = 0.836730$ $b = -1.00000$	6.01515	8.93190
$u = -0.138835 + 1.234450I$ $a = 0.366605 + 0.544193I$ $b = -1.00000$	$-4.60518 - 1.97241I$	$-1.96265 + 3.88708I$
$u = -0.138835 - 1.234450I$ $a = 0.366605 - 0.544193I$ $b = -1.00000$	$-4.60518 + 1.97241I$	$-1.96265 - 3.88708I$
$u = 0.408802 + 1.276380I$ $a = -0.031424 - 0.540243I$ $b = -1.00000$	$2.05064 + 4.59213I$	$3.29989 + 0.22957I$
$u = 0.408802 - 1.276380I$ $a = -0.031424 + 0.540243I$ $b = -1.00000$	$2.05064 - 4.59213I$	$3.29989 - 0.22957I$
$u = -0.413150$ $a = 3.15957$ $b = -1.00000$	-0.906083	12.8380

$$\text{III. } I_3^u = \langle 4a^2u - 6a^2 - 8au + 17b + 12a + 2u - 20, 4a^3 + 6a^2u - 8a^2 - 2au - u - 6, u^2 + 2 \rangle$$

(i) Arc colorings

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

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

$$a_3 = \begin{pmatrix} a \\ -0.235294a^2u + 0.470588au + \dots - 0.705882a + 1.17647 \end{pmatrix}$$

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

$$a_2 = \begin{pmatrix} -0.235294a^2u + 0.470588au + \dots + 0.294118a + 1.17647 \\ -0.235294a^2u + 0.470588au + \dots - 0.705882a + 1.17647 \end{pmatrix}$$

$$a_1 = \begin{pmatrix} -\frac{1}{2}u \\ -0.352941a^2u - 0.294118au + \dots + 0.941176a + 1.76471 \end{pmatrix}$$

$$a_4 = \begin{pmatrix} 0.411765a^2u - 0.823529au + \dots + 0.235294a - 0.0588235 \\ -0.117647a^2u - 0.764706au + \dots + 1.64706a - 0.411765 \end{pmatrix}$$

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

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

$$a_8 = \begin{pmatrix} -\frac{1}{2}u \\ -0.352941a^2u - 0.294118au + \dots + 0.941176a + 1.76471 \end{pmatrix}$$

$$a_9 = \begin{pmatrix} 0 \\ -u \end{pmatrix}$$

$$a_{12} = \begin{pmatrix} -\frac{1}{2}u \\ -0.352941a^2u - 0.294118au + \dots + 0.941176a + 1.76471 \end{pmatrix}$$

(ii) Obstruction class = 1

$$\text{(iii) Cusp Shapes} = -\frac{16}{17}a^2u + \frac{24}{17}a^2 + \frac{32}{17}au - \frac{48}{17}a - \frac{8}{17}u + \frac{80}{17}$$

(iv) u-Polynomials at the component

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

(v) Riley Polynomials at the component

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

(vi) Complex Volumes and Cusp Shapes

Solutions to I_3^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 1.414210I$ $a = 0.520153 - 0.983610I$ $b = 0.877439 + 0.744862I$	$-0.26574 - 2.82812I$	$3.50976 + 2.97945I$
$u = 1.414210I$ $a = -0.275030 + 0.506114I$ $b = 0.877439 - 0.744862I$	$-0.26574 + 2.82812I$	$3.50976 - 2.97945I$
$u = 1.414210I$ $a = 1.75488 - 1.64382I$ $b = -0.754878$	-4.40332	$-3.01951 + 0.I$
$u = -1.414210I$ $a = 0.520153 + 0.983610I$ $b = 0.877439 - 0.744862I$	$-0.26574 + 2.82812I$	$3.50976 - 2.97945I$
$u = -1.414210I$ $a = -0.275030 - 0.506114I$ $b = 0.877439 + 0.744862I$	$-0.26574 - 2.82812I$	$3.50976 + 2.97945I$
$u = -1.414210I$ $a = 1.75488 + 1.64382I$ $b = -0.754878$	-4.40332	$-3.01951 + 0.I$

$$\text{IV. } I_1^v = \langle a, -v^2 + b + 3v + 1, v^3 - 2v^2 - 3v - 1 \rangle$$

(i) Arc colorings

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

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

$$a_3 = \begin{pmatrix} 0 \\ v^2 - 3v - 1 \end{pmatrix}$$

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

$$a_2 = \begin{pmatrix} v^2 - 3v - 1 \\ v^2 - 3v - 1 \end{pmatrix}$$

$$a_1 = \begin{pmatrix} v^2 - 3v - 1 \\ -v^2 + 2v + 3 \end{pmatrix}$$

$$a_4 = \begin{pmatrix} -2v^2 + 5v + 4 \\ -2v^2 + 5v + 3 \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} v \\ 0 \end{pmatrix}$$

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

$$a_8 = \begin{pmatrix} -v^2 + 3v + 1 \\ v^2 - 2v - 3 \end{pmatrix}$$

$$a_9 = \begin{pmatrix} v \\ 0 \end{pmatrix}$$

$$a_{12} = \begin{pmatrix} v^2 - 2v - 1 \\ -v^2 + 2v + 3 \end{pmatrix}$$

(ii) Obstruction class = 1

(iii) Cusp Shapes = $8v^2 - 26v - 14$

(iv) u-Polynomials at the component

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

(v) Riley Polynomials at the component

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

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^v	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$v = -0.539798 + 0.182582I$ $a = 0$ $b = 0.877439 - 0.744862I$	$4.66906 + 2.82812I$	$2.09911 - 6.32406I$
$v = -0.539798 - 0.182582I$ $a = 0$ $b = 0.877439 + 0.744862I$	$4.66906 - 2.82812I$	$2.09911 + 6.32406I$
$v = 3.07960$ $a = 0$ $b = -0.754878$	0.531480	-18.1980

V. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1	$((u-1)^6)(u^3-u^2+2u-1)^3(u^{24}-2u^{23}+\dots+1885u+81)$
c_2	$((u-1)^6)(u^3+u^2-1)^3(u^{24}-10u^{23}+\dots+25u+9)$
c_3	$u^6(u^3-u^2+2u-1)(u^3+u^2+2u+1)^2(u^{24}+2u^{23}+\dots+960u-576)$
c_4	$((u+1)^6)(u^3-u^2+1)^3(u^{24}-10u^{23}+\dots+25u+9)$
c_5, c_6	$u^3(u^2+2)^3(u^6-u^5+\dots-u-1)(u^{24}-2u^{23}+\dots-8u-8)$
c_7	$u^6(u^3-u^2+2u-1)^2(u^3+u^2+2u+1)(u^{24}+2u^{23}+\dots+960u-576)$
c_8	$(u-1)^6(u+1)^3(u^6+u^5-3u^4-2u^3+2u^2-u-1)$ $\cdot (u^{24}-5u^{23}+\dots-357u+49)$
c_9	$u^3(u^2+2)^3(u^6-u^5-3u^4+2u^3+2u^2+u-1)$ $\cdot (u^{24}+2u^{23}+\dots+8216u-1448)$
c_{10}	$u^3(u^2+2)^3(u^6+u^5+\dots+u-1)(u^{24}-2u^{23}+\dots-8u-8)$
c_{11}, c_{12}	$(u-1)^3(u+1)^6(u^6-u^5-3u^4+2u^3+2u^2+u-1)$ $\cdot (u^{24}-5u^{23}+\dots-357u+49)$

VI. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1	$((y-1)^6)(y^3+3y^2+2y-1)^3(y^{24}+66y^{23}+\dots-3758641y+6561)$
c_2, c_4	$((y-1)^6)(y^3-y^2+2y-1)^3(y^{24}+2y^{23}+\dots-1885y+81)$
c_3, c_7	$y^6(y^3+3y^2+2y-1)^3(y^{24}+48y^{23}+\dots-3022848y+331776)$
c_5, c_6, c_{10}	$y^3(y+2)^6(y^6+5y^5+9y^4+4y^3-6y^2-5y+1)$ $\cdot (y^{24}+16y^{23}+\dots-1472y+64)$
c_8, c_{11}, c_{12}	$(y-1)^9(y^6-7y^5+17y^4-16y^3+6y^2-5y+1)$ $\cdot (y^{24}-41y^{23}+\dots-196539y+2401)$
c_9	$y^3(y+2)^6(y^6-7y^5+17y^4-16y^3+6y^2-5y+1)$ $\cdot (y^{24}-80y^{23}+\dots+25123008y+2096704)$