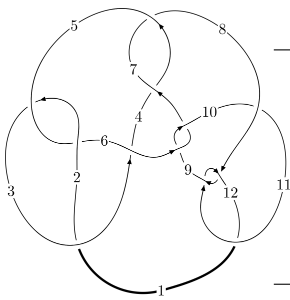
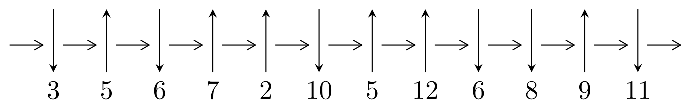
$12n_{0014}$ ($K12n_{0014}$)



A knot diagram[1]

Linearized knot diagam



Solving Sequence

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

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

$$I_1^u = \langle -3.93906 \times 10^{169} u^{53} + 8.11692 \times 10^{169} u^{52} + \cdots + 2.56580 \times 10^{172} b + 5.59119 \times 10^{173},$$
$$2.70535 \times 10^{172} u^{53} + 1.41390 \times 10^{173} u^{52} + \cdots + 1.43685 \times 10^{174} a + 5.91275 \times 10^{175},$$
$$u^{54} + 5u^{53} + \cdots + 2048u + 1024 \rangle$$

$$I_1^v = \langle a,\ 8286v^9 - 14092v^8 + \cdots + 8095b + 12581,$$
$$v^{10} - v^9 - 2v^8 - 19v^7 + 12v^6 + 35v^5 + 50v^4 + 34v^3 + 17v^2 + 5v + 1 \rangle$$

* 2 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 64 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. $\boldsymbol{I_1^u = \langle -3.94 \times 10^{169} u^{53} + 8.12 \times 10^{169} u^{52} + \cdots + 2.57 \times 10^{172} b + 5.59 \times 10^{173},\ 2.71 \times 10^{172} u^{53} + 1.41 \times 10^{173} u^{52} + \cdots + 1.44 \times 10^{174} a + 5.91 \times 10^{175},\ u^{54} + 5u^{53} + \cdots + 2048u + 1024 \rangle}$

(i) Arc colorings

$$a_5 = \begin{pmatrix} 0 \\ u \end{pmatrix}$$
$$a_7 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$
$$a_8 = \begin{pmatrix} 1 \\ -u^2 \end{pmatrix}$$
$$a_{10} = \begin{pmatrix} -0.0188284u^{53} - 0.0984027u^{52} + \cdots - 57.6613u - 41.1508 \\ 0.00153522u^{53} - 0.00316351u^{52} + \cdots + 2.45774u - 21.7912 \end{pmatrix}$$
$$a_{11} = \begin{pmatrix} -0.0323517u^{53} - 0.147501u^{52} + \cdots - 88.1255u - 23.7227 \\ 0.0109343u^{53} + 0.0438860u^{52} + \cdots + 26.5354u - 2.82844 \end{pmatrix}$$
$$a_4 = \begin{pmatrix} -u \\ u \end{pmatrix}$$
$$a_6 = \begin{pmatrix} -0.0118561u^{53} - 0.0590764u^{52} + \cdots - 36.2368u - 21.2553 \\ 0.0134039u^{53} + 0.0620483u^{52} + \cdots + 36.4660u + 13.4608 \end{pmatrix}$$
$$a_3 = \begin{pmatrix} 0.00441031u^{53} + 0.0172727u^{52} + \cdots + 10.8004u - 5.96037 \\ 0.00533450u^{53} + 0.0282151u^{52} + \cdots + 13.6825u + 15.5729 \end{pmatrix}$$
$$a_2 = \begin{pmatrix} 0.00441031u^{53} + 0.0172727u^{52} + \cdots + 10.8004u - 5.96037 \\ 0.00669340u^{53} + 0.0361984u^{52} + \cdots + 18.9533u + 20.4664 \end{pmatrix}$$
$$a_1 = \begin{pmatrix} -0.00154779u^{53} - 0.00297199u^{52} + \cdots - 0.229176u + 7.79450 \\ 0.0169009u^{53} + 0.0786020u^{52} + \cdots + 44.6438u + 18.3421 \end{pmatrix}$$
$$a_9 = \begin{pmatrix} -0.00933751u^{53} - 0.0594844u^{52} + \cdots - 30.9568u - 43.0824 \\ -0.0225428u^{53} - 0.0990264u^{52} + \cdots - 54.4975u - 12.8121 \end{pmatrix}$$
$$a_{12} = \begin{pmatrix} -0.0399571u^{53} - 0.175227u^{52} + \cdots - 100.366u - 19.0531 \\ 0.00625323u^{53} + 0.0325196u^{52} + \cdots + 12.5340u + 17.1289 \end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= -0.00845297u^{53} - 0.0644904u^{52} + \cdots - 23.1790u - 60.4595$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{54} + 14u^{53} + \cdots - 53u + 1$
c_2, c_5	$u^{54} + 6u^{53} + \cdots + 15u + 1$
c_3	$u^{54} - 6u^{53} + \cdots + 11895099u + 596177$
c_4, c_7	$u^{54} + 5u^{53} + \cdots + 2048u + 1024$
c_6, c_9	$u^{54} + 3u^{53} + \cdots + 4u^2 + 1$
c_8, c_{11}	$u^{54} + 3u^{53} + \cdots - 2u + 1$
c_{10}	$u^{54} - 3u^{53} + \cdots - 8544u + 1217$
c_{12}	$u^{54} + 23u^{53} + \cdots + 8u + 1$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{54} + 58y^{53} + \cdots + 2411y + 1$
c_2, c_5	$y^{54} + 14y^{53} + \cdots - 53y + 1$
c_3	$y^{54} + 102y^{53} + \cdots - 14429377332621y + 355427015329$
c_4, c_7	$y^{54} - 55y^{53} + \cdots - 4194304y + 1048576$
c_6, c_9	$y^{54} - 5y^{53} + \cdots + 8y + 1$
c_8, c_{11}	$y^{54} + 23y^{53} + \cdots + 8y + 1$
c_{10}	$y^{54} + 15y^{53} + \cdots + 18080344y + 1481089$
c_{12}	$y^{54} + 19y^{53} + \cdots - 160y + 1$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.968225+0.607102I$ $a=-0.164875-0.865628I$ $b=\ \ 0.789588+0.453320I$	$-3.62207-1.88435I$	0
$u=-0.968225-0.607102I$ $a=-0.164875+0.865628I$ $b=\ \ 0.789588-0.453320I$	$-3.62207+1.88435I$	0
$u=\ \ 0.556588+0.619363I$ $a=\ \ 0.901194+0.566536I$ $b=\ \ 0.051996-0.642624I$	$0.99939+1.40813I$	$3.91416-3.69919I$
$u=\ \ 0.556588-0.619363I$ $a=\ \ 0.901194-0.566536I$ $b=\ \ 0.051996+0.642624I$	$0.99939-1.40813I$	$3.91416+3.69919I$
$u=-0.661385+0.335932I$ $a=\ \ 1.52538-0.28332I$ $b=-0.395578+0.434236I$	$-0.24598+2.82121I$	$1.02280-2.27971I$
$u=-0.661385-0.335932I$ $a=\ \ 1.52538+0.28332I$ $b=-0.395578-0.434236I$	$-0.24598-2.82121I$	$1.02280+2.27971I$
$u=-0.569346+0.474090I$ $a=\ \ 1.99530-0.80720I$ $b=\ \ 0.663565-0.017228I$	$0.611788+1.006080I$	$-3.88173-0.39430I$
$u=-0.569346-0.474090I$ $a=\ \ 1.99530+0.80720I$ $b=\ \ 0.663565+0.017228I$	$0.611788-1.006080I$	$-3.88173+0.39430I$
$u=\ \ 0.511621+0.452929I$ $a=-0.55984-1.59306I$ $b=\ \ 0.023415+0.808214I$	$-1.18484-1.48546I$	$-2.98046+1.14168I$
$u=\ \ 0.511621-0.452929I$ $a=-0.55984+1.59306I$ $b=\ \ 0.023415-0.808214I$	$-1.18484+1.48546I$	$-2.98046-1.14168I$

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.423245 + 0.528845I$ $a = 0.207901 + 0.031710I$ $b = 1.208630 - 0.192759I$	$-2.63355 + 1.15153I$	$-2.76262 + 2.47931I$
$u = -0.423245 - 0.528845I$ $a = 0.207901 - 0.031710I$ $b = 1.208630 + 0.192759I$	$-2.63355 - 1.15153I$	$-2.76262 - 2.47931I$
$u = -0.362967 + 0.571541I$ $a = 0.026420 + 0.236077I$ $b = -1.351430 - 0.085409I$	$-6.34508 - 2.87510I$	$-9.60101 + 6.45832I$
$u = -0.362967 - 0.571541I$ $a = 0.026420 - 0.236077I$ $b = -1.351430 + 0.085409I$	$-6.34508 + 2.87510I$	$-9.60101 - 6.45832I$
$u = -0.376666 + 0.551588I$ $a = -3.09962 + 1.34006I$ $b = -0.581470 + 0.039436I$	$0.57291 - 3.72246I$	$-7.65423 + 7.89265I$
$u = -0.376666 - 0.551588I$ $a = -3.09962 - 1.34006I$ $b = -0.581470 - 0.039436I$	$0.57291 + 3.72246I$	$-7.65423 - 7.89265I$
$u = -0.443126 + 0.469766I$ $a = 0.023144 - 0.202231I$ $b = -1.41853 + 0.34093I$	$-5.84105 + 5.81566I$	$-4.21669 + 1.36326I$
$u = -0.443126 - 0.469766I$ $a = 0.023144 + 0.202231I$ $b = -1.41853 - 0.34093I$	$-5.84105 - 5.81566I$	$-4.21669 - 1.36326I$
$u = 0.604914 + 0.174580I$ $a = -0.76546 - 3.52241I$ $b = 0.255821 + 0.548310I$	$-0.60959 + 4.26256I$	$4.62783 - 4.73451I$
$u = 0.604914 - 0.174580I$ $a = -0.76546 + 3.52241I$ $b = 0.255821 - 0.548310I$	$-0.60959 - 4.26256I$	$4.62783 + 4.73451I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = -1.41543 + 0.25569I$ $a = 0.548000 - 0.556665I$ $b = -0.535084 + 0.575642I$	$0.04114 + 3.00401I$	0
$u = -1.41543 - 0.25569I$ $a = 0.548000 + 0.556665I$ $b = -0.535084 - 0.575642I$	$0.04114 - 3.00401I$	0
$u = 1.44011 + 0.26608I$ $a = -0.018030 + 0.946466I$ $b = 0.96835 - 1.18906I$	$3.23271 + 1.00154I$	0
$u = 1.44011 - 0.26608I$ $a = -0.018030 - 0.946466I$ $b = 0.96835 + 1.18906I$	$3.23271 - 1.00154I$	0
$u = -1.43048 + 0.47132I$ $a = 0.048317 - 0.972966I$ $b = 1.15296 + 1.07758I$	$2.63538 - 7.17562I$	0
$u = -1.43048 - 0.47132I$ $a = 0.048317 + 0.972966I$ $b = 1.15296 - 1.07758I$	$2.63538 + 7.17562I$	0
$u = 0.365593 + 0.176466I$ $a = -2.89742 - 7.37153I$ $b = -0.313165 + 0.318803I$	$-0.056183 - 0.359580I$	$11.4178 - 26.2253I$
$u = 0.365593 - 0.176466I$ $a = -2.89742 + 7.37153I$ $b = -0.313165 - 0.318803I$	$-0.056183 + 0.359580I$	$11.4178 + 26.2253I$
$u = 0.086973 + 0.349018I$ $a = 0.92423 + 1.33854I$ $b = 0.377234 - 0.508733I$	$-0.22325 + 1.43278I$	$-1.54657 - 5.02280I$
$u = 0.086973 - 0.349018I$ $a = 0.92423 - 1.33854I$ $b = 0.377234 + 0.508733I$	$-0.22325 - 1.43278I$	$-1.54657 + 5.02280I$

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 1.63008 + 0.27442I$ $a = -0.070772 - 0.883996I$ $b = 1.03860 + 1.15294I$	$7.40537 + 7.44620I$	0
$u = 1.63008 - 0.27442I$ $a = -0.070772 + 0.883996I$ $b = 1.03860 - 1.15294I$	$7.40537 - 7.44620I$	0
$u = -1.65228 + 0.05485I$ $a = 0.080653 + 0.885577I$ $b = 1.16375 - 1.00098I$	$7.65653 - 0.97520I$	0
$u = -1.65228 - 0.05485I$ $a = 0.080653 - 0.885577I$ $b = 1.16375 + 1.00098I$	$7.65653 + 0.97520I$	0
$u = -1.72238 + 0.16170I$ $a = -0.086105 + 0.916649I$ $b = -1.15021 - 1.02233I$	$9.40334 - 4.97639I$	0
$u = -1.72238 - 0.16170I$ $a = -0.086105 - 0.916649I$ $b = -1.15021 + 1.02233I$	$9.40334 + 4.97639I$	0
$u = 1.73138 + 0.06809I$ $a = 0.043882 + 0.891061I$ $b = -1.01279 - 1.15273I$	$9.47308 + 1.61822I$	0
$u = 1.73138 - 0.06809I$ $a = 0.043882 - 0.891061I$ $b = -1.01279 + 1.15273I$	$9.47308 - 1.61822I$	0
$u = -1.76374 + 0.21792I$ $a = -0.360469 - 0.631007I$ $b = 0.631595 + 0.625797I$	$-1.14583 - 7.63336I$	0
$u = -1.76374 - 0.21792I$ $a = -0.360469 + 0.631007I$ $b = 0.631595 - 0.625797I$	$-1.14583 + 7.63336I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -1.71169 + 0.70638I$ $a = -0.103752 + 0.988152I$ $b = -1.11053 - 1.06013I$	$9.11085 - 9.64421I$	0
$u = -1.71169 - 0.70638I$ $a = -0.103752 - 0.988152I$ $b = -1.11053 + 1.06013I$	$9.11085 + 9.64421I$	0
$u = -1.65609 + 0.87083I$ $a = 0.109961 - 1.010800I$ $b = 1.09592 + 1.06931I$	$7.1548 - 15.5018I$	0
$u = -1.65609 - 0.87083I$ $a = 0.109961 + 1.010800I$ $b = 1.09592 - 1.06931I$	$7.1548 + 15.5018I$	0
$u = 1.84254 + 0.55471I$ $a = -0.024388 - 0.899775I$ $b = -0.96048 + 1.13369I$	$10.02790 + 2.89871I$	0
$u = 1.84254 - 0.55471I$ $a = -0.024388 + 0.899775I$ $b = -0.96048 - 1.13369I$	$10.02790 - 2.89871I$	0
$u = 0.32734 + 1.90477I$ $a = 0.068219 + 0.161006I$ $b = 0.209333 - 0.729341I$	$2.99545 + 1.06109I$	0
$u = 0.32734 - 1.90477I$ $a = 0.068219 - 0.161006I$ $b = 0.209333 + 0.729341I$	$2.99545 - 1.06109I$	0
$u = 1.80022 + 0.78166I$ $a = 0.046975 + 0.901747I$ $b = 0.94658 - 1.12324I$	$8.36288 + 8.76828I$	0
$u = 1.80022 - 0.78166I$ $a = 0.046975 - 0.901747I$ $b = 0.94658 + 1.12324I$	$8.36288 - 8.76828I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = -0.27509 + 2.02948I$ $a = 0.062934 - 0.138328I$ $b = -0.268730 + 0.724836I$	$2.55849 + 5.96109I$	0
$u = -0.27509 - 2.02948I$ $a = 0.062934 + 0.138328I$ $b = -0.268730 - 0.724836I$	$2.55849 - 5.96109I$	0
$u = 2.03479 + 0.31103I$ $a = 0.038225 + 0.499273I$ $b = 0.020667 - 0.781951I$	$3.81792 + 2.50371I$	0
$u = 2.03479 - 0.31103I$ $a = 0.038225 - 0.499273I$ $b = 0.020667 + 0.781951I$	$3.81792 - 2.50371I$	0

II. $\boldsymbol{I_1^v = \langle a,\ 8286v^9 - 14092v^8 + \cdots + 8095b + 12581,\ v^{10} - v^9 + \cdots + 5v + 1\rangle}$

(i) Arc colorings

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

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

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

$$a_{10} = \begin{pmatrix} 0 \\ -1.02359v^9 + 1.74083v^8 + \cdots - 2.14256v - 1.55417 \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} 1.02359v^9 - 1.74083v^8 + \cdots + 2.14256v + 1.55417 \\ -1.02359v^9 + 1.74083v^8 + \cdots - 2.14256v - 1.55417 \end{pmatrix}$$

$$a_4 = \begin{pmatrix} v \\ 0 \end{pmatrix}$$

$$a_6 = \begin{pmatrix} 1 \\ 0.566770v^9 - 0.910562v^8 + \cdots + 1.12069v - 2.46844 \end{pmatrix}$$

$$a_3 = \begin{pmatrix} 0.343792v^9 - 0.433107v^8 + \cdots + 6.30229v + 0.566770 \\ -1.56677v^9 + 1.91056v^8 + \cdots - 18.1207v - 2.53156 \end{pmatrix}$$

$$a_2 = \begin{pmatrix} 0.433107v^9 - 0.556763v^8 + \cdots + 6.45448v + 0.910562 \\ -1.56677v^9 + 1.91056v^8 + \cdots - 18.1207v - 2.53156 \end{pmatrix}$$

$$a_1 = \begin{pmatrix} -1 \\ -0.566770v^9 + 0.910562v^8 + \cdots - 1.12069v + 2.46844 \end{pmatrix}$$

$$a_9 = \begin{pmatrix} -1.02359v^9 + 1.74083v^8 + \cdots - 2.14256v - 1.55417 \\ -0.515256v^9 + 0.785300v^8 + \cdots - 0.966523v + 2.10241 \end{pmatrix}$$

$$a_{12} = \begin{pmatrix} -1.96479v^9 + 3.18777v^8 + \cdots - 3.92341v + 1.99444 \\ 1.39802v^9 - 2.27721v^8 + \cdots + 2.80272v - 0.526004 \end{pmatrix}$$

(ii) Obstruction class $= 1$

(iii) Cusp Shapes $= -\frac{20287}{1619}v^9 + \frac{28878}{1619}v^8 + \frac{30807}{1619}v^7 + \frac{368475}{1619}v^6 - \frac{403029}{1619}v^5 - \frac{583117}{1619}v^4 - \frac{710653}{1619}v^3 - \frac{322767}{1619}v^2 - \frac{137041}{1619}v - \frac{22786}{1619}$

(iv) u-Polynomials at the component

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

(v) Riley Polynomials at the component

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

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^v	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$v = -0.337181 + 0.584015I$ $a = 0$ $b = 1.21774$	$-2.40108 + 2.02988I$	$-0.15429 - 4.97460I$
$v = -0.337181 - 0.584015I$ $a = 0$ $b = 1.21774$	$-2.40108 - 2.02988I$	$-0.15429 + 4.97460I$
$v = -0.104500 + 0.473819I$ $a = 0$ $b = -1.41878 - 0.21917I$	$-5.87256 - 2.37095I$	$-0.67715 - 1.65320I$
$v = -0.104500 - 0.473819I$ $a = 0$ $b = -1.41878 + 0.21917I$	$-5.87256 + 2.37095I$	$-0.67715 + 1.65320I$
$v = -0.358089 + 0.327409I$ $a = 0$ $b = -1.41878 + 0.21917I$	$-5.87256 + 6.43072I$	$-5.14480 - 10.95886I$
$v = -0.358089 - 0.327409I$ $a = 0$ $b = -1.41878 - 0.21917I$	$-5.87256 - 6.43072I$	$-5.14480 + 10.95886I$
$v = -1.20942 + 2.19910I$ $a = 0$ $b = 0.309916 + 0.549911I$	$-0.32910 - 3.56046I$	$2.94328 + 13.07994I$
$v = -1.20942 - 2.19910I$ $a = 0$ $b = 0.309916 - 0.549911I$	$-0.32910 + 3.56046I$	$2.94328 - 13.07994I$
$v = 2.50919 + 0.05217I$ $a = 0$ $b = 0.309916 - 0.549911I$	$-0.329100 - 0.499304I$	$-6.96704 - 1.22174I$
$v = 2.50919 - 0.05217I$ $a = 0$ $b = 0.309916 + 0.549911I$	$-0.329100 + 0.499304I$	$-6.96704 + 1.22174I$

III. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1	$((u^2-u+1)^5)(u^{54}+14u^{53}+\cdots-53u+1)$
c_2	$((u^2+u+1)^5)(u^{54}+6u^{53}+\cdots+15u+1)$
c_3	$((u^2-u+1)^5)(u^{54}-6u^{53}+\cdots+1.18951\times10^7u+596177)$
c_4, c_7	$u^{10}(u^{54}+5u^{53}+\cdots+2048u+1024)$
c_5	$((u^2-u+1)^5)(u^{54}+6u^{53}+\cdots+15u+1)$
c_6	$((u^5+u^4-2u^3-u^2+u-1)^2)(u^{54}+3u^{53}+\cdots+4u^2+1)$
c_8	$((u^5-u^4+2u^3-u^2+u-1)^2)(u^{54}+3u^{53}+\cdots-2u+1)$
c_9	$((u^5-u^4-2u^3+u^2+u+1)^2)(u^{54}+3u^{53}+\cdots+4u^2+1)$
c_{10}	$((u^5-u^4-2u^3+u^2+u+1)^2)(u^{54}-3u^{53}+\cdots-8544u+1217)$
c_{11}	$((u^5+u^4+2u^3+u^2+u+1)^2)(u^{54}+3u^{53}+\cdots-2u+1)$
c_{12}	$((u^5+3u^4+4u^3+u^2-u-1)^2)(u^{54}+23u^{53}+\cdots+8u+1)$

IV. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1	$((y^2+y+1)^5)(y^{54}+58y^{53}+\cdots+2411y+1)$
c_2, c_5	$((y^2+y+1)^5)(y^{54}+14y^{53}+\cdots-53y+1)$
c_3	$(y^2+y+1)^5$ $\cdot\,(y^{54}+102y^{53}+\cdots-14429377332621y+355427015329)$
c_4, c_7	$y^{10}(y^{54}-55y^{53}+\cdots-4194304y+1048576)$
c_6, c_9	$((y^5-5y^4+8y^3-3y^2-y-1)^2)(y^{54}-5y^{53}+\cdots+8y+1)$
c_8, c_{11}	$((y^5+3y^4+4y^3+y^2-y-1)^2)(y^{54}+23y^{53}+\cdots+8y+1)$
c_{10}	$(y^5-5y^4+8y^3-3y^2-y-1)^2$ $\cdot\,(y^{54}+15y^{53}+\cdots+18080344y+1481089)$
c_{12}	$((y^5-y^4+8y^3-3y^2+3y-1)^2)(y^{54}+19y^{53}+\cdots-160y+1)$