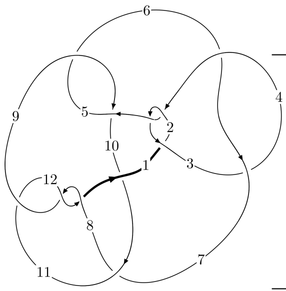
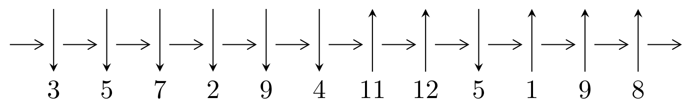
$12n_{0111}$ ($K12n_{0111}$)



A knot diagram[1]

Linearized knot diagam



Solving Sequence

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

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

$$I_1^u = \langle -1.05669 \times 10^{17} u^{53} - 3.57059 \times 10^{17} u^{52} + \cdots + 7.54024 \times 10^{16} b + 4.04284 \times 10^{16},$$
$$1.02527 \times 10^{17} u^{53} + 3.61000 \times 10^{17} u^{52} + \cdots + 7.54024 \times 10^{16} a - 5.95597 \times 10^{17},\ u^{54} + 4u^{53} + \cdots - 13u -$$
$$I_2^u = \langle au - u^2 + b + a,\ -u^2 a + a^2 + 1,\ u^3 - u^2 + 2u - 1 \rangle$$
$$I_3^u = \langle u^2 + b + u,\ -u^2 + a - 2,\ u^3 - u^2 + 2u - 1 \rangle$$

* 3 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 63 representations.

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[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. $\boldsymbol{I_1^u = \langle -1.06 \times 10^{17}u^{53} - 3.57 \times 10^{17}u^{52} + \cdots + 7.54 \times 10^{16}b + 4.04 \times 10^{16},\ 1.03 \times 10^{17}u^{53} + 3.61 \times 10^{17}u^{52} + \cdots + 7.54 \times 10^{16}a - 5.96 \times 10^{17},\ u^{54} + 4u^{53} + \cdots - 13u - 1\rangle}$

(i) Arc colorings

$$a_9 = \begin{pmatrix} 0 \\ u \end{pmatrix}$$
$$a_{11} = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$
$$a_{12} = \begin{pmatrix} 1 \\ -u^2 \end{pmatrix}$$
$$a_8 = \begin{pmatrix} -u \\ u^3 + u \end{pmatrix}$$
$$a_1 = \begin{pmatrix} u^2 + 1 \\ -u^4 - 2u^2 \end{pmatrix}$$
$$a_4 = \begin{pmatrix} -1.35974u^{53} - 4.78764u^{52} + \cdots + 20.4946u + 7.89891 \\ 1.40141u^{53} + 4.73538u^{52} + \cdots - 10.6807u - 0.536168 \end{pmatrix}$$
$$a_7 = \begin{pmatrix} -u^3 - 2u \\ u^3 + u \end{pmatrix}$$
$$a_3 = \begin{pmatrix} 0.267734u^{53} + 0.167743u^{52} + \cdots + 2.48003u + 6.45689 \\ -0.218764u^{53} - 0.990227u^{52} + \cdots + 3.51913u + 0.584554 \end{pmatrix}$$
$$a_6 = \begin{pmatrix} 0.166746u^{53} + 0.935589u^{52} + \cdots - 14.0641u - 4.81630 \\ 0.693852u^{53} + 2.26828u^{52} + \cdots - 3.45221u - 0.695131 \end{pmatrix}$$
$$a_5 = \begin{pmatrix} 0.166746u^{53} + 0.935589u^{52} + \cdots - 14.0641u - 4.81630 \\ 0.629304u^{53} + 2.35002u^{52} + \cdots - 7.11080u - 0.963735 \end{pmatrix}$$
$$a_2 = \begin{pmatrix} -1.06576u^{53} - 3.70343u^{52} + \cdots + 13.6083u + 5.08949 \\ 0.272628u^{53} + 0.559742u^{52} + \cdots + 6.49074u + 0.762024 \end{pmatrix}$$
$$a_{10} = \begin{pmatrix} -u^6 - 3u^4 - 2u^2 + 1 \\ u^8 + 4u^6 + 4u^4 \end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes
$$= \frac{26029323830005351}{12567067818736266}u^{53} + \frac{97584229084765271}{12567067818736266}u^{52} + \cdots - \frac{143860013591375096\,3}{25134135637472532}u - \frac{393297976137728599}{25134135637472532}$$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{54} + 32u^{53} + \cdots + u + 1$
c_2, c_4	$u^{54} - 4u^{53} + \cdots - 7u + 1$
c_3, c_6	$u^{54} - 4u^{53} + \cdots + 5u - 1$
c_5, c_9	$u^{54} + 3u^{53} + \cdots + 1024u + 512$
c_7	$u^{54} - 4u^{53} + \cdots - 37353u - 3137$
c_8, c_{11}, c_{12}	$u^{54} + 4u^{53} + \cdots - 13u - 1$
c_{10}	$u^{54} + 8u^{53} + \cdots - 5325u + 99$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{54} - 16y^{53} + \cdots + 283y + 1$
c_2, c_4	$y^{54} - 32y^{53} + \cdots - y + 1$
c_3, c_6	$y^{54} + 12y^{53} + \cdots - y + 1$
c_5, c_9	$y^{54} - 49y^{53} + \cdots - 9830400y + 262144$
c_7	$y^{54} + 20y^{53} + \cdots - 1173862245y + 9840769$
c_8, c_{11}, c_{12}	$y^{54} + 52y^{53} + \cdots - 133y + 1$
c_{10}	$y^{54} + 48y^{53} + \cdots - 31673313y + 9801$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.634596 + 0.687676I$ $a = -1.74382 - 0.72872I$ $b = 0.550252 - 0.214317I$	$-6.73797 + 6.00183I$	$-5.20384 - 3.02358I$
$u = -0.634596 - 0.687676I$ $a = -1.74382 + 0.72872I$ $b = 0.550252 + 0.214317I$	$-6.73797 - 6.00183I$	$-5.20384 + 3.02358I$
$u = -0.795857 + 0.397748I$ $a = 1.38136 + 1.64625I$ $b = -1.02366 - 1.50366I$	$-5.79563 - 10.85900I$	$-3.40249 + 7.71802I$
$u = -0.795857 - 0.397748I$ $a = 1.38136 - 1.64625I$ $b = -1.02366 + 1.50366I$	$-5.79563 + 10.85900I$	$-3.40249 - 7.71802I$
$u = 0.819414 + 0.164591I$ $a = 0.045931 + 0.903156I$ $b = -0.032318 - 0.835765I$	$1.37542 + 1.07510I$	$6.59040 - 4.82915I$
$u = 0.819414 - 0.164591I$ $a = 0.045931 - 0.903156I$ $b = -0.032318 + 0.835765I$	$1.37542 - 1.07510I$	$6.59040 + 4.82915I$
$u = 0.561613 + 0.609285I$ $a = 0.283506 + 0.301159I$ $b = 0.177288 + 0.107732I$	$-0.18821 + 3.22155I$	$0.22182 - 9.88990I$
$u = 0.561613 - 0.609285I$ $a = 0.283506 - 0.301159I$ $b = 0.177288 - 0.107732I$	$-0.18821 - 3.22155I$	$0.22182 + 9.88990I$
$u = 0.236983 + 1.152610I$ $a = 0.515739 + 0.748797I$ $b = 1.131300 - 0.506978I$	$-1.41186 + 2.56239I$	0
$u = 0.236983 - 1.152610I$ $a = 0.515739 - 0.748797I$ $b = 1.131300 + 0.506978I$	$-1.41186 - 2.56239I$	0

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.679423 + 0.455165I$ $a = -1.58385 - 1.13509I$ $b = 0.366509 + 0.385296I$	$-6.34508 - 3.77283I$	$-4.72884 + 3.96733I$
$u = -0.679423 - 0.455165I$ $a = -1.58385 + 1.13509I$ $b = 0.366509 - 0.385296I$	$-6.34508 + 3.77283I$	$-4.72884 - 3.96733I$
$u = -0.640093 + 0.500351I$ $a = 1.67652 + 1.12666I$ $b = -0.94179 - 1.13103I$	$-6.52207 - 0.60653I$	$-5.07523 + 2.49392I$
$u = -0.640093 - 0.500351I$ $a = 1.67652 - 1.12666I$ $b = -0.94179 + 1.13103I$	$-6.52207 + 0.60653I$	$-5.07523 - 2.49392I$
$u = -0.708133 + 0.388182I$ $a = -1.33746 - 1.33573I$ $b = 0.90008 + 1.37571I$	$-2.10088 - 5.47985I$	$-0.81647 + 5.41146I$
$u = -0.708133 - 0.388182I$ $a = -1.33746 + 1.33573I$ $b = 0.90008 - 1.37571I$	$-2.10088 + 5.47985I$	$-0.81647 - 5.41146I$
$u = -0.550906 + 0.548792I$ $a = 1.53049 + 0.91002I$ $b = -0.231683 - 0.023654I$	$-2.76018 + 1.24868I$	$-2.45680 + 0.23951I$
$u = -0.550906 - 0.548792I$ $a = 1.53049 - 0.91002I$ $b = -0.231683 + 0.023654I$	$-2.76018 - 1.24868I$	$-2.45680 - 0.23951I$
$u = -0.086880 + 1.268120I$ $a = 0.059220 + 0.170114I$ $b = 1.95815 + 1.14512I$	$0.081517 + 1.100590I$	0
$u = -0.086880 - 1.268120I$ $a = 0.059220 - 0.170114I$ $b = 1.95815 - 1.14512I$	$0.081517 - 1.100590I$	0

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.222821 + 1.287610I$ $a = -0.70821 + 2.27425I$ $b = 2.58514 - 0.05556I$	$-4.30040 + 3.00237I$	0
$u = 0.222821 - 1.287610I$ $a = -0.70821 - 2.27425I$ $b = 2.58514 + 0.05556I$	$-4.30040 - 3.00237I$	0
$u = 0.045291 + 1.336850I$ $a = -0.200212 - 0.862703I$ $b = -0.322922 + 0.424548I$	$-4.94061 + 0.29567I$	0
$u = 0.045291 - 1.336850I$ $a = -0.200212 + 0.862703I$ $b = -0.322922 - 0.424548I$	$-4.94061 - 0.29567I$	0
$u = -0.120353 + 1.342440I$ $a = 0.1148610 + 0.0757838I$ $b = -2.37287 - 1.45094I$	$-0.65798 - 4.90905I$	0
$u = -0.120353 - 1.342440I$ $a = 0.1148610 - 0.0757838I$ $b = -2.37287 + 1.45094I$	$-0.65798 + 4.90905I$	0
$u = 0.403137 + 1.291980I$ $a = -0.494203 - 0.685022I$ $b = -0.690162 + 0.956126I$	$-3.12056 + 5.51965I$	0
$u = 0.403137 - 1.291980I$ $a = -0.494203 + 0.685022I$ $b = -0.690162 - 0.956126I$	$-3.12056 - 5.51965I$	0
$u = 0.596526 + 0.197093I$ $a = 0.751854 + 0.525078I$ $b = -0.421332 - 0.698708I$	$1.36345 + 0.70118I$	$5.37506 - 2.07743I$
$u = 0.596526 - 0.197093I$ $a = 0.751854 - 0.525078I$ $b = -0.421332 + 0.698708I$	$1.36345 - 0.70118I$	$5.37506 + 2.07743I$

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.117312 + 1.368590I$ $a = 0.561185 - 1.109220I$ $b = -3.04338 + 0.04770I$	$-6.00610 + 2.39609I$	0
$u = 0.117312 - 1.368590I$ $a = 0.561185 + 1.109220I$ $b = -3.04338 - 0.04770I$	$-6.00610 - 2.39609I$	0
$u = 0.203162 + 1.375440I$ $a = -0.469730 + 0.300689I$ $b = -0.058931 + 0.766086I$	$-3.65451 + 3.54341I$	0
$u = 0.203162 - 1.375440I$ $a = -0.469730 - 0.300689I$ $b = -0.058931 - 0.766086I$	$-3.65451 - 3.54341I$	0
$u = 0.608391$ $a = 5.71602$ $b = -3.05948$	-0.276662	-47.3490
$u = -0.26697 + 1.46380I$ $a = -0.075844 + 1.074870I$ $b = -2.17970 - 2.22655I$	$-8.06847 - 9.04274I$	0
$u = -0.26697 - 1.46380I$ $a = -0.075844 - 1.074870I$ $b = -2.17970 + 2.22655I$	$-8.06847 + 9.04274I$	0
$u = -0.18633 + 1.48277I$ $a = -0.255172 - 0.913294I$ $b = 0.40684 + 1.63138I$	$-9.29015 - 1.40800I$	0
$u = -0.18633 - 1.48277I$ $a = -0.255172 + 0.913294I$ $b = 0.40684 - 1.63138I$	$-9.29015 + 1.40800I$	0
$u = -0.24427 + 1.48405I$ $a = 0.129853 + 1.010100I$ $b = -0.43559 - 1.87912I$	$-12.6206 - 7.1463I$	0

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.24427 - 1.48405I$ $a = 0.129853 - 1.010100I$ $b = -0.43559 + 1.87912I$	$-12.6206 + 7.1463I$	0
$u = -0.22098 + 1.49116I$ $a = -0.269071 - 1.035350I$ $b = 2.54361 + 2.25570I$	$-12.97630 - 3.73907I$	0
$u = -0.22098 - 1.49116I$ $a = -0.269071 + 1.035350I$ $b = 2.54361 - 2.25570I$	$-12.97630 + 3.73907I$	0
$u = -0.30297 + 1.47888I$ $a = 0.215622 - 1.288750I$ $b = 1.97823 + 2.43175I$	$-11.8373 - 14.8592I$	0
$u = -0.30297 - 1.47888I$ $a = 0.215622 + 1.288750I$ $b = 1.97823 - 2.43175I$	$-11.8373 + 14.8592I$	0
$u = 0.20848 + 1.51432I$ $a = -0.210573 - 0.018611I$ $b = 0.793889 - 0.374873I$	$-7.05949 + 6.12156I$	0
$u = 0.20848 - 1.51432I$ $a = -0.210573 + 0.018611I$ $b = 0.793889 + 0.374873I$	$-7.05949 - 6.12156I$	0
$u = -0.14867 + 1.55204I$ $a = 0.439962 + 0.955922I$ $b = -0.73812 - 1.45641I$	$-14.2294 + 3.2886I$	0
$u = -0.14867 - 1.55204I$ $a = 0.439962 - 0.955922I$ $b = -0.73812 + 1.45641I$	$-14.2294 - 3.2886I$	0
$u = -0.436472 + 0.052368I$ $a = -0.264450 + 0.059841I$ $b = 0.14420 + 1.41205I$	$3.76413 - 2.96919I$	$-10.33792 + 6.38001I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.436472 - 0.052368I$ $a = -0.264450 - 0.059841I$ $b = 0.14420 - 1.41205I$	$3.76413 + 2.96919I$	$-10.33792 - 6.38001I$
$u = 0.350769 + 0.150602I$ $a = -3.77033 - 1.02650I$ $b = 1.286240 + 0.476185I$	$-1.153000 + 0.650417I$	$-5.27115 + 2.78805I$
$u = 0.350769 - 0.150602I$ $a = -3.77033 + 1.02650I$ $b = 1.286240 - 0.476185I$	$-1.153000 - 0.650417I$	$-5.27115 - 2.78805I$
$u = -0.0936295$ $a = 5.63764$ $b = 0.400918$	-1.01364	-10.3540

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

(i) Arc colorings

$$a_9 = \begin{pmatrix} 0 \\ u \end{pmatrix}$$
$$a_{11} = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$
$$a_{12} = \begin{pmatrix} 1 \\ -u^2 \end{pmatrix}$$
$$a_8 = \begin{pmatrix} -u \\ u^2 - u + 1 \end{pmatrix}$$
$$a_1 = \begin{pmatrix} u^2 + 1 \\ -u^2 + u - 1 \end{pmatrix}$$
$$a_4 = \begin{pmatrix} a \\ -au + u^2 - a \end{pmatrix}$$
$$a_7 = \begin{pmatrix} -u^2 - 1 \\ u^2 - u + 1 \end{pmatrix}$$
$$a_3 = \begin{pmatrix} -u^2a + au - a + u \\ -au \end{pmatrix}$$
$$a_6 = \begin{pmatrix} 0 \\ au - u^2 - a + 2u - 2 \end{pmatrix}$$
$$a_5 = \begin{pmatrix} 0 \\ au - u^2 - a + 2u - 2 \end{pmatrix}$$
$$a_2 = \begin{pmatrix} -u^2a + au - a + u \\ -2u^2 + 2u - 2 \end{pmatrix}$$
$$a_{10} = \begin{pmatrix} 0 \\ u \end{pmatrix}$$

(ii) Obstruction class $= 1$

(iii) Cusp Shapes $= -6u^2a + 2au + 2u^2 + a - 3u + 10$

(iv) u-Polynomials at the component

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

(v) Riley Polynomials at the component

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

(vi) Complex Volumes and Cusp Shapes

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.215080 + 1.307140I$ $a = -0.500000 - 0.424452I$ $b = -1.60964 + 1.73159I$	$5.65624I$	$0.00556 - 7.25775I$
$u = 0.215080 + 1.307140I$ $a = -1.16236 + 0.98673I$ $b = 1.039800 + 0.882689I$	$-4.13758 + 2.82812I$	$-6.47655 + 9.33882I$
$u = 0.215080 - 1.307140I$ $a = -0.500000 + 0.424452I$ $b = -1.60964 - 1.73159I$	$-5.65624I$	$0.00556 + 7.25775I$
$u = 0.215080 - 1.307140I$ $a = -1.16236 - 0.98673I$ $b = 1.039800 - 0.882689I$	$-4.13758 - 2.82812I$	$-6.47655 - 9.33882I$
$u = 0.569840$ $a = 0.162359 + 0.986732I$ $b = 0.06984 - 1.54901I$	$4.13758 + 2.82812I$	$8.97099 + 0.18883I$
$u = 0.569840$ $a = 0.162359 - 0.986732I$ $b = 0.06984 + 1.54901I$	$4.13758 - 2.82812I$	$8.97099 - 0.18883I$

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

(i) Arc colorings

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

(ii) Obstruction class $= 1$

(iii) Cusp Shapes $= 4u^2 - 3u + 4$

(iv) u-Polynomials at the component

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

(v) Riley Polynomials at the component

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

(vi) Complex Volumes and Cusp Shapes

Solutions to I_3^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.215080 + 1.307140I$ $a = 0.337641 + 0.562280I$ $b = 1.44728 - 1.86942I$	0	$-3.29468 - 1.67231I$
$u = 0.215080 - 1.307140I$ $a = 0.337641 - 0.562280I$ $b = 1.44728 + 1.86942I$	0	$-3.29468 + 1.67231I$
$u = 0.569840$ $a = 2.32472$ $b = -0.894558$	0	3.58940

IV. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1	$((u^3-u^2+2u-1)^3)(u^{54}+32u^{53}+\cdots+u+1)$
c_2	$((u^3+u^2-1)^3)(u^{54}-4u^{53}+\cdots-7u+1)$
c_3	$((u^3-u^2+2u-1)^3)(u^{54}-4u^{53}+\cdots+5u-1)$
c_4	$((u^3-u^2+1)^3)(u^{54}-4u^{53}+\cdots-7u+1)$
c_5, c_9	$u^9(u^{54}+3u^{53}+\cdots+1024u+512)$
c_6	$((u^3+u^2+2u+1)^3)(u^{54}-4u^{53}+\cdots+5u-1)$
c_7	$((u^3-u^2+1)^3)(u^{54}-4u^{53}+\cdots-37353u-3137)$
c_8	$((u^3+u^2+2u+1)^3)(u^{54}+4u^{53}+\cdots-13u-1)$
c_{10}	$((u^3-u^2+1)^3)(u^{54}+8u^{53}+\cdots-5325u+99)$
c_{11}, c_{12}	$((u^3-u^2+2u-1)^3)(u^{54}+4u^{53}+\cdots-13u-1)$

V. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1	$((y^3+3y^2+2y-1)^3)(y^{54}-16y^{53}+\cdots+283y+1)$
c_2, c_4	$((y^3-y^2+2y-1)^3)(y^{54}-32y^{53}+\cdots-y+1)$
c_3, c_6	$((y^3+3y^2+2y-1)^3)(y^{54}+12y^{53}+\cdots-y+1)$
c_5, c_9	$y^9(y^{54}-49y^{53}+\cdots-9830400y+262144)$
c_7	$((y^3-y^2+2y-1)^3)(y^{54}+20y^{53}+\cdots-1.17386\times 10^9y+9840769)$
c_8, c_{11}, c_{12}	$((y^3+3y^2+2y-1)^3)(y^{54}+52y^{53}+\cdots-133y+1)$
c_{10}	$((y^3-y^2+2y-1)^3)(y^{54}+48y^{53}+\cdots-31673313y+9801)$