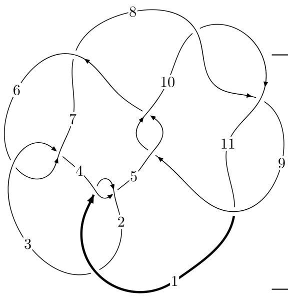
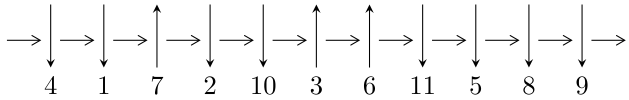
$11a_{22}$ ($K11a_{22}$)



A knot diagram[1]

Linearized knot diagam



Solving Sequence

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

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

$$I_1^u = \langle 2.20922 \times 10^{53} u^{57} + 5.38010 \times 10^{53} u^{56} + \cdots + 1.93523 \times 10^{52} b - 1.93917 \times 10^{54},$$
$$8.75242 \times 10^{53} u^{57} + 2.15695 \times 10^{54} u^{56} + \cdots + 3.87047 \times 10^{52} a - 7.51888 \times 10^{54},\ u^{58} + 2u^{57} + \cdots - 20u +$$
$$I_2^u = \langle -u^2 + b,\ -u^5 + 2u^3 + a - 2u,\ u^6 + u^5 - u^4 - 2u^3 + u + 1 \rangle$$

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

* 3 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 66 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. $\boldsymbol{I^u_1 =}$
$\boldsymbol{\langle 2.21\times10^{53}u^{57}+5.38\times10^{53}u^{56}+\cdots+1.94\times10^{52}b-1.94\times10^{54},\ 8.75\times10^{53}u^{57}+2.16\times10^{54}u^{56}+\cdots+3.87\times10^{52}a-7.52\times10^{54},\ u^{58}+2u^{57}+\cdots-20u+4\rangle}$

(i) Arc colorings

$$a_3 = \begin{pmatrix}0\\u\end{pmatrix}$$
$$a_6 = \begin{pmatrix}1\\0\end{pmatrix}$$
$$a_7 = \begin{pmatrix}1\\-u^2\end{pmatrix}$$
$$a_4 = \begin{pmatrix}u\\-u^3+u\end{pmatrix}$$
$$a_8 = \begin{pmatrix}-u^2+1\\-u^2\end{pmatrix}$$
$$a_{11} = \begin{pmatrix}-22.6133u^{57}-55.7283u^{56}+\cdots-545.664u+194.263\\-11.4158u^{57}-27.8007u^{56}+\cdots-276.503u+100.203\end{pmatrix}$$
$$a_9 = \begin{pmatrix}-5.51590u^{57}-13.4288u^{56}+\cdots-123.425u+47.3451\\23.7116u^{57}+58.8709u^{56}+\cdots+589.977u-207.708\end{pmatrix}$$
$$a_1 = \begin{pmatrix}-4.78464u^{57}-12.0436u^{56}+\cdots-122.072u+39.9544\\24.1900u^{57}+59.1862u^{56}+\cdots+587.084u-206.905\end{pmatrix}$$
$$a_2 = \begin{pmatrix}-10.8746u^{57}-27.0241u^{56}+\cdots-269.732u+91.6352\\19.4239u^{57}+47.5510u^{56}+\cdots+471.075u-166.426\end{pmatrix}$$
$$a_{10} = \begin{pmatrix}-33.5809u^{57}-82.6520u^{56}+\cdots-817.229u+291.314\\-8.47974u^{57}-20.5966u^{56}+\cdots-205.705u+74.9209\end{pmatrix}$$
$$a_5 = \begin{pmatrix}-28.9747u^{57}-71.2298u^{56}+\cdots-709.155u+246.859\\-17.5651u^{57}-43.1972u^{56}+\cdots-437.372u+153.783\end{pmatrix}$$
$$a_5 = \begin{pmatrix}-28.9747u^{57}-71.2298u^{56}+\cdots-709.155u+246.859\\-17.5651u^{57}-43.1972u^{56}+\cdots-437.372u+153.783\end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= 11.5795u^{57}+27.4881u^{56}+\cdots+286.625u-124.569$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1, c_4	$u^{58} - 4u^{57} + \cdots - 14u + 1$
c_2	$u^{58} + 32u^{57} + \cdots + 94u + 1$
c_3, c_6	$u^{58} - 2u^{57} + \cdots + 20u + 4$
c_5, c_9	$u^{58} + 2u^{57} + \cdots + 128u + 64$
c_7	$u^{58} - 18u^{57} + \cdots - 360u + 16$
c_8, c_{10}, c_{11}	$u^{58} - 8u^{57} + \cdots - 4u + 1$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_4	$y^{58} - 32y^{57} + \cdots - 94y + 1$
c_2	$y^{58} - 8y^{57} + \cdots - 7838y + 1$
c_3, c_6	$y^{58} - 18y^{57} + \cdots - 360y + 16$
c_5, c_9	$y^{58} - 42y^{57} + \cdots - 8192y + 4096$
c_7	$y^{58} + 42y^{57} + \cdots - 33056y + 256$
c_8, c_{10}, c_{11}	$y^{58} - 60y^{57} + \cdots - 36y + 1$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.751278 + 0.687165I$ $a = 0.397223 + 0.633477I$ $b = 0.489389 + 0.795565I$	$-2.18920 + 0.10128I$	$-7.14023 + 0.I$
$u = 0.751278 - 0.687165I$ $a = 0.397223 - 0.633477I$ $b = 0.489389 - 0.795565I$	$-2.18920 - 0.10128I$	$-7.14023 + 0.I$
$u = -0.938205 + 0.408426I$ $a = 0.231074 + 0.260146I$ $b = -0.593325 + 0.623788I$	$1.56893 - 1.49125I$	$1.52605 + 1.85258I$
$u = -0.938205 - 0.408426I$ $a = 0.231074 - 0.260146I$ $b = -0.593325 - 0.623788I$	$1.56893 + 1.49125I$	$1.52605 - 1.85258I$
$u = 0.975459$ $a = -1.52269$ $b = -0.110488$	-8.12166	-10.1040
$u = -1.025320 + 0.037106I$ $a = -0.086100 + 0.547603I$ $b = -0.554847 - 0.036376I$	$2.76529 + 0.01343I$	$-61.057430 + 0.10I$
$u = -1.025320 - 0.037106I$ $a = -0.086100 - 0.547603I$ $b = -0.554847 + 0.036376I$	$2.76529 - 0.01343I$	$-61.057430 + 0.10I$
$u = 0.141484 + 1.046590I$ $a = 1.95002 - 0.42418I$ $b = 0.327448 - 0.475424I$	$-6.51259 - 2.28009I$	$-10.96046 + 3.19134I$
$u = 0.141484 - 1.046590I$ $a = 1.95002 + 0.42418I$ $b = 0.327448 + 0.475424I$	$-6.51259 + 2.28009I$	$-10.96046 - 3.19134I$
$u = -0.907614 + 0.233881I$ $a = 0.452411 + 0.038868I$ $b = 1.68026 - 1.11227I$	$-1.05945 - 3.12017I$	$-5.50127 + 4.47326I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.907614 - 0.233881I$ $a = 0.452411 - 0.038868I$ $b = 1.68026 + 1.11227I$	$-1.05945 + 3.12017I$	$-5.50127 - 4.47326I$
$u = -0.766366 + 0.768934I$ $a = 0.43828 + 2.14321I$ $b = -1.37901 + 2.34528I$	$-13.34930 - 0.72037I$	$-12.98227 + 3.28415I$
$u = -0.766366 - 0.768934I$ $a = 0.43828 - 2.14321I$ $b = -1.37901 - 2.34528I$	$-13.34930 + 0.72037I$	$-12.98227 - 3.28415I$
$u = 1.056160 + 0.263793I$ $a = -0.226907 - 0.684770I$ $b = -0.294684 - 0.046749I$	$2.08472 + 4.56768I$	$0. - 7.20311I$
$u = 1.056160 - 0.263793I$ $a = -0.226907 + 0.684770I$ $b = -0.294684 + 0.046749I$	$2.08472 - 4.56768I$	$0. + 7.20311I$
$u = -0.816044 + 0.752910I$ $a = -1.43375 - 0.08308I$ $b = -0.202312 - 0.820966I$	$-5.71379 - 1.22939I$	0
$u = -0.816044 - 0.752910I$ $a = -1.43375 + 0.08308I$ $b = -0.202312 + 0.820966I$	$-5.71379 + 1.22939I$	0
$u = 0.531681 + 0.702789I$ $a = 1.041460 - 0.332937I$ $b = 0.178506 - 0.656257I$	$-2.16889 - 1.07216I$	$-4.64986 + 0.67610I$
$u = 0.531681 - 0.702789I$ $a = 1.041460 + 0.332937I$ $b = 0.178506 + 0.656257I$	$-2.16889 + 1.07216I$	$-4.64986 - 0.67610I$
$u = -0.871904 + 0.708903I$ $a = -1.62017 - 1.84549I$ $b = 0.60927 - 2.97487I$	$-3.98695 - 2.71614I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = -0.871904 - 0.708903I$ $a = -1.62017 + 1.84549I$ $b = 0.60927 + 2.97487I$	$-3.98695 + 2.71614I$	0
$u = 0.646879 + 0.932661I$ $a = 1.23701 - 2.00036I$ $b = -0.50044 - 2.21446I$	$-9.34785 - 3.11893I$	0
$u = 0.646879 - 0.932661I$ $a = 1.23701 + 2.00036I$ $b = -0.50044 + 2.21446I$	$-9.34785 + 3.11893I$	0
$u = 0.786683 + 0.828955I$ $a = -2.61581 + 2.03754I$ $b = -0.16255 + 3.14290I$	$-7.78075 - 1.40297I$	0
$u = 0.786683 - 0.828955I$ $a = -2.61581 - 2.03754I$ $b = -0.16255 - 3.14290I$	$-7.78075 + 1.40297I$	0
$u = -0.733599 + 0.883254I$ $a = 0.012106 - 0.387354I$ $b = 0.049160 - 0.756342I$	$-5.55187 + 4.00580I$	0
$u = -0.733599 - 0.883254I$ $a = 0.012106 + 0.387354I$ $b = 0.049160 + 0.756342I$	$-5.55187 - 4.00580I$	0
$u = 0.844172 + 0.085017I$ $a = 0.986920 + 0.702481I$ $b = 1.49717 - 0.05675I$	$-0.629418 + 0.623631I$	$-5.36343 - 3.54196I$
$u = 0.844172 - 0.085017I$ $a = 0.986920 - 0.702481I$ $b = 1.49717 + 0.05675I$	$-0.629418 - 0.623631I$	$-5.36343 + 3.54196I$
$u = 0.959680 + 0.687124I$ $a = -0.783612 + 0.016039I$ $b = 0.095816 + 0.597900I$	$-1.54879 + 5.22529I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.959680 - 0.687124I$ $a = -0.783612 - 0.016039I$ $b = 0.095816 - 0.597900I$	$-1.54879 - 5.22529I$	0
$u = -0.925912 + 0.732408I$ $a = 0.191499 - 1.003200I$ $b = 0.468873 - 1.260970I$	$-5.37580 - 4.41103I$	0
$u = -0.925912 - 0.732408I$ $a = 0.191499 + 1.003200I$ $b = 0.468873 + 1.260970I$	$-5.37580 + 4.41103I$	0
$u = 1.032960 + 0.608744I$ $a = 0.192674 - 0.762403I$ $b = -0.660062 - 1.066530I$	$-0.69171 + 6.13139I$	0
$u = 1.032960 - 0.608744I$ $a = 0.192674 + 0.762403I$ $b = -0.660062 + 1.066530I$	$-0.69171 - 6.13139I$	0
$u = -0.970390 + 0.723923I$ $a = 1.94328 + 0.72453I$ $b = 0.47039 + 2.60152I$	$-12.71920 - 4.94560I$	0
$u = -0.970390 - 0.723923I$ $a = 1.94328 - 0.72453I$ $b = 0.47039 - 2.60152I$	$-12.71920 + 4.94560I$	0
$u = 0.971435 + 0.767699I$ $a = -1.37396 + 2.61714I$ $b = 0.85784 + 3.57871I$	$-7.20694 + 7.37757I$	0
$u = 0.971435 - 0.767699I$ $a = -1.37396 - 2.61714I$ $b = 0.85784 - 3.57871I$	$-7.20694 - 7.37757I$	0
$u = -0.749801 + 1.013650I$ $a = 1.42076 + 2.51991I$ $b = -0.31957 + 2.79288I$	$-12.3578 + 7.9362I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.749801-1.013650I$ $a=\ \ 1.42076-2.51991I$ $b=-0.31957-2.79288I$	$-12.3578-7.9362I$	0
$u=-1.260080+0.222648I$ $a=-1.043850+0.235063I$ $b=-1.069910+0.809848I$	$-1.33556-1.90763I$	0
$u=-1.260080-0.222648I$ $a=-1.043850-0.235063I$ $b=-1.069910-0.809848I$	$-1.33556+1.90763I$	0
$u=-1.021410+0.771092I$ $a=-0.608745-0.376035I$ $b=\ \ 0.332932-0.745316I$	$-4.65387-10.14070I$	0
$u=-1.021410-0.771092I$ $a=-0.608745+0.376035I$ $b=\ \ 0.332932+0.745316I$	$-4.65387+10.14070I$	0
$u=\ \ 0.117607+0.695097I$ $a=\ \ 0.967277-0.036072I$ $b=\ \ 0.433545+0.151204I$	$-1.14303-1.20148I$	$-5.78859+5.55533I$
$u=\ \ 0.117607-0.695097I$ $a=\ \ 0.967277+0.036072I$ $b=\ \ 0.433545-0.151204I$	$-1.14303+1.20148I$	$-5.78859-5.55533I$
$u=\ \ 1.249040+0.401910I$ $a=-0.605347-0.578787I$ $b=-0.98878-1.48797I$	$-2.57248+7.45358I$	0
$u=\ \ 1.249040-0.401910I$ $a=-0.605347+0.578787I$ $b=-0.98878+1.48797I$	$-2.57248-7.45358I$	0
$u=\ \ 1.073950+0.758891I$ $a=\ \ 1.50409-1.45263I$ $b=\ \ 0.04645-2.93251I$	$-8.03060+9.32855I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 1.073950 - 0.758891I$ $a = 1.50409 + 1.45263I$ $b = 0.04645 + 2.93251I$	$-8.03060 - 9.32855I$	0
$u = -1.082250 + 0.829438I$ $a = 1.77158 + 1.93052I$ $b = 0.11809 + 3.30285I$	$-11.2723 - 14.6533I$	0
$u = -1.082250 - 0.829438I$ $a = 1.77158 - 1.93052I$ $b = 0.11809 - 3.30285I$	$-11.2723 + 14.6533I$	0
$u = -0.209439 + 0.468075I$ $a = -5.64495 + 2.38701I$ $b = -0.441139 - 0.581010I$	$-3.24157 + 0.49714I$	$-10.0374 + 15.0443I$
$u = -0.209439 - 0.468075I$ $a = -5.64495 - 2.38701I$ $b = -0.441139 + 0.581010I$	$-3.24157 - 0.49714I$	$-10.0374 - 15.0443I$
$u = 0.471619$ $a = 3.18461$ $b = -0.472950$	-2.28699	3.94780
$u = 0.459325$ $a = -0.198494$ $b = -2.04304$	-10.2057	4.64730
$u = 0.324240$ $a = 1.64764$ $b = 0.649452$	-1.11333	-8.96690

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

(i) Arc colorings

$$a_3 = \begin{pmatrix} 0 \\ u \end{pmatrix}$$

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

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

$$a_4 = \begin{pmatrix} u \\ -u^3 + u \end{pmatrix}$$

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

$$a_{11} = \begin{pmatrix} u^5 - 2u^3 + 2u \\ u^2 \end{pmatrix}$$

$$a_9 = \begin{pmatrix} u^5 - 2u^3 - u^2 + 2u + 1 \\ 0 \end{pmatrix}$$

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

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

$$a_{10} = \begin{pmatrix} u^5 - 2u^3 - u^2 + 2u + 1 \\ 0 \end{pmatrix}$$

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

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

(ii) Obstruction class $= 1$

(iii) Cusp Shapes $= -u^5 - 5u^4 + u^3 + 7u^2 + 4u - 12$

(iv) u-Polynomials at the component

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

(v) Riley Polynomials at the component

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

(vi) Complex Volumes and Cusp Shapes

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 1.002190 + 0.295542I$ $a = 0.686453 + 0.095369I$ $b = 0.917045 + 0.592379I$	$0.245672 + 0.924305I$	$-3.44826 - 0.47256I$
$u = 1.002190 - 0.295542I$ $a = 0.686453 - 0.095369I$ $b = 0.917045 - 0.592379I$	$0.245672 - 0.924305I$	$-3.44826 + 0.47256I$
$u = -0.428243 + 0.664531I$ $a = -1.91924 + 0.88792I$ $b = -0.258209 - 0.569162I$	$-3.53554 + 0.92430I$	$-13.66012 - 2.42665I$
$u = -0.428243 - 0.664531I$ $a = -1.91924 - 0.88792I$ $b = -0.258209 + 0.569162I$	$-3.53554 - 0.92430I$	$-13.66012 + 2.42665I$
$u = -1.073950 + 0.558752I$ $a = 0.232786 - 0.641391I$ $b = 0.84116 - 1.20014I$	$-1.64493 - 5.69302I$	$-8.89162 + 3.92918I$
$u = -1.073950 - 0.558752I$ $a = 0.232786 + 0.641391I$ $b = 0.84116 + 1.20014I$	$-1.64493 + 5.69302I$	$-8.89162 - 3.92918I$

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

(i) Arc colorings

$$a_3 = \begin{pmatrix} v \\ 0 \end{pmatrix}$$

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

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

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

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

$$a_{11} = \begin{pmatrix} 0 \\ -v-2 \end{pmatrix}$$

$$a_9 = \begin{pmatrix} 1 \\ v+3 \end{pmatrix}$$

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

$$a_2 = \begin{pmatrix} 2v+2 \\ v+3 \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} -v-2 \\ -v-2 \end{pmatrix}$$

$$a_5 = \begin{pmatrix} -v-2 \\ -v-3 \end{pmatrix}$$

$$a_5 = \begin{pmatrix} -v-2 \\ -v-3 \end{pmatrix}$$

(ii) Obstruction class $= 1$

(iii) Cusp Shapes $= -21$

(iv) u-Polynomials at the component

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

(v) Riley Polynomials at the component

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

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^v	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$v = -0.381966$ $a = 0$ $b = -1.61803$	-10.5276	-21.0000
$v = -2.61803$ $a = 0$ $b = 0.618034$	-2.63189	-21.0000

IV. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1	$((u-1)^2)(u^6+u^5+\cdots+u+1)(u^{58}-4u^{57}+\cdots-14u+1)$
c_2	$(u+1)^2(u^6+3u^5+5u^4+4u^3+2u^2+u+1)$ $\cdot(u^{58}+32u^{57}+\cdots+94u+1)$
c_3	$u^2(u^6-u^5+\cdots-u+1)(u^{58}-2u^{57}+\cdots+20u+4)$
c_4	$((u+1)^2)(u^6-u^5+\cdots-u+1)(u^{58}-4u^{57}+\cdots-14u+1)$
c_5	$u^6(u^2+u-1)(u^{58}+2u^{57}+\cdots+128u+64)$
c_6	$u^2(u^6+u^5+\cdots+u+1)(u^{58}-2u^{57}+\cdots+20u+4)$
c_7	$u^2(u^6-3u^5+\cdots-u+1)(u^{58}-18u^{57}+\cdots-360u+16)$
c_8	$((u-1)^6)(u^2+u-1)(u^{58}-8u^{57}+\cdots-4u+1)$
c_9	$u^6(u^2-u-1)(u^{58}+2u^{57}+\cdots+128u+64)$
c_{10}, c_{11}	$((u+1)^6)(u^2-u-1)(u^{58}-8u^{57}+\cdots-4u+1)$

V. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1, c_4	$(y-1)^2(y^6-3y^5+5y^4-4y^3+2y^2-y+1)$ $\cdot(y^{58}-32y^{57}+\cdots-94y+1)$
c_2	$((y-1)^2)(y^6+y^5+\cdots+3y+1)(y^{58}-8y^{57}+\cdots-7838y+1)$
c_3, c_6	$y^2(y^6-3y^5+\cdots-y+1)(y^{58}-18y^{57}+\cdots-360y+16)$
c_5, c_9	$y^6(y^2-3y+1)(y^{58}-42y^{57}+\cdots-8192y+4096)$
c_7	$y^2(y^6+y^5+\cdots+3y+1)(y^{58}+42y^{57}+\cdots-33056y+256)$
c_8, c_{10}, c_{11}	$((y-1)^6)(y^2-3y+1)(y^{58}-60y^{57}+\cdots-36y+1)$