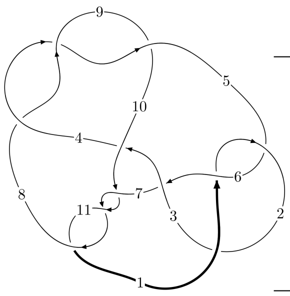
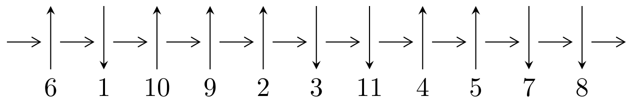
$11a_{88}$ ($K11a_{88}$)



A knot diagram[1]

Linearized knot diagam



Solving Sequence

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

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

$$I_1^u = \langle 3.81735 \times 10^{18} u^{55} - 3.41298 \times 10^{18} u^{54} + \cdots + 7.25836 \times 10^{18} b - 6.54872 \times 10^{18},$$
$$8.54661 \times 10^{18} u^{55} - 1.96112 \times 10^{19} u^{54} + \cdots + 7.25836 \times 10^{18} a - 6.19813 \times 10^{18},\ u^{56} - 2u^{55} + \cdots - 2u + 1$$
$$I_2^u = \langle -au + 3b + a + 2u + 1,\ a^2 + 2au - 7u - 7,\ u^2 + u + 1 \rangle$$
$$I_3^u = \langle b,\ a + u,\ u^2 - u + 1 \rangle$$

* 3 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 62 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.

$\boldsymbol{I_1^u = \langle 3.82\times10^{18}u^{55} - 3.41\times10^{18}u^{54} + \cdots + 7.26\times10^{18}b - 6.55\times10^{18},\ 8.55\times10^{18}u^{55} - 1.96\times10^{19}u^{54} + \cdots + 7.26\times10^{18}a - 6.20\times10^{18},\ u^{56} - 2u^{55} + \cdots - 2u + 1\rangle}$

(i) Arc colorings

$$a_2 = \begin{pmatrix} 0 \\ u \end{pmatrix}$$
$$a_5 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$
$$a_6 = \begin{pmatrix} 1 \\ -u^2 \end{pmatrix}$$
$$a_9 = \begin{pmatrix} -1.17748u^{55} + 2.70188u^{54} + \cdots - 7.40789u + 0.853930 \\ -0.525924u^{55} + 0.470213u^{54} + \cdots + 0.327275u + 0.902232 \end{pmatrix}$$
$$a_{10} = \begin{pmatrix} -1.70341u^{55} + 3.17209u^{54} + \cdots - 7.08061u + 1.75616 \\ -0.525924u^{55} + 0.470213u^{54} + \cdots + 0.327275u + 0.902232 \end{pmatrix}$$
$$a_1 = \begin{pmatrix} -u \\ u^3 + u \end{pmatrix}$$
$$a_3 = \begin{pmatrix} -u^3 \\ u^5 + u^3 + u \end{pmatrix}$$
$$a_7 = \begin{pmatrix} -u^6 - u^4 + 1 \\ u^8 + 2u^6 + 2u^4 \end{pmatrix}$$
$$a_4 = \begin{pmatrix} -0.0147560u^{55} + 0.313638u^{54} + \cdots - 6.67639u + 0.916847 \\ 0.352209u^{55} - 0.918697u^{54} + \cdots + 1.18445u + 1.11145 \end{pmatrix}$$
$$a_8 = \begin{pmatrix} 1.10278u^{55} - 2.44048u^{54} + \cdots + 5.22670u - 1.38381 \\ 0.449311u^{55} - 0.0110571u^{54} + \cdots + 0.457669u - 0.899349 \end{pmatrix}$$
$$a_{11} = \begin{pmatrix} -1.33623u^{55} + 3.16841u^{54} + \cdots - 7.38742u + 1.20484 \\ -0.480366u^{55} + 0.160009u^{54} + \cdots + 0.210912u + 0.917813 \end{pmatrix}$$
$$a_{11} = \begin{pmatrix} -1.33623u^{55} + 3.16841u^{54} + \cdots - 7.38742u + 1.20484 \\ -0.480366u^{55} + 0.160009u^{54} + \cdots + 0.210912u + 0.917813 \end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= -\frac{1098869271074495813 9}{3629180684127117001}u^{55} + \frac{21985136905178948607}{3629180684127117001}u^{54} + \cdots - \frac{18377034251590244150}{3629180684127117001}u + \frac{18266861748021250925}{3629180684127117001}$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1, c_5	$u^{56} - 2u^{55} + \cdots - 2u + 1$
c_2	$u^{56} + 28u^{55} + \cdots + 4u + 1$
c_3	$u^{56} - 3u^{55} + \cdots + 276u + 172$
c_4, c_8, c_9	$u^{56} + u^{55} + \cdots + 12u + 4$
c_6	$u^{56} + 2u^{55} + \cdots + 1554u + 481$
c_7, c_{10}, c_{11}	$u^{56} + 3u^{55} + \cdots - 31u + 7$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_5	$y^{56} + 28y^{55} + \cdots + 4y + 1$
c_2	$y^{56} + 4y^{55} + \cdots + 28y + 1$
c_3	$y^{56} + 9y^{55} + \cdots + 99952y + 29584$
c_4, c_8, c_9	$y^{56} - 51y^{55} + \cdots + 48y + 16$
c_6	$y^{56} - 20y^{55} + \cdots - 456284y + 231361$
c_7, c_{10}, c_{11}	$y^{56} - 53y^{55} + \cdots + 747y + 49$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\text{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.761612+0.706746I$ $a=-2.61065-0.67242I$ $b=1.324630-0.244844I$	$1.58146-5.73177I$	$1.83404+5.79402I$
$u=-0.761612-0.706746I$ $a=-2.61065+0.67242I$ $b=1.324630+0.244844I$	$1.58146+5.73177I$	$1.83404-5.79402I$
$u=0.690346+0.801960I$ $a=0.481692+0.412002I$ $b=-0.066092-0.603875I$	$-2.82580+2.62743I$	$-4.75305-4.09062I$
$u=0.690346-0.801960I$ $a=0.481692-0.412002I$ $b=-0.066092+0.603875I$	$-2.82580-2.62743I$	$-4.75305+4.09062I$
$u=0.451244+0.989156I$ $a=0.050142-0.437553I$ $b=-0.542520+0.123434I$	$-0.57122+2.77824I$	$2.95589-4.20688I$
$u=0.451244-0.989156I$ $a=0.050142+0.437553I$ $b=-0.542520-0.123434I$	$-0.57122-2.77824I$	$2.95589+4.20688I$
$u=0.853869+0.316506I$ $a=-2.36674-0.45164I$ $b=1.40459-0.32683I$	$-0.70521-8.81361I$	$1.89048+4.78995I$
$u=0.853869-0.316506I$ $a=-2.36674+0.45164I$ $b=1.40459+0.32683I$	$-0.70521+8.81361I$	$1.89048-4.78995I$
$u=-0.569045+0.945562I$ $a=-2.02662-1.07884I$ $b=1.411350+0.084042I$	$5.37458-1.80246I$	$7.34576+2.56666I$
$u=-0.569045-0.945562I$ $a=-2.02662+1.07884I$ $b=1.411350-0.084042I$	$5.37458+1.80246I$	$7.34576-2.56666I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = -0.631832 + 0.630832I$ $a = 2.75595 + 1.02264I$ $b = -1.399300 + 0.140066I$	$6.29507 - 2.91322I$	$8.51117 + 4.03861I$
$u = -0.631832 - 0.630832I$ $a = 2.75595 - 1.02264I$ $b = -1.399300 - 0.140066I$	$6.29507 + 2.91322I$	$8.51117 - 4.03861I$
$u = -0.829870 + 0.241336I$ $a = 0.509900 + 0.334719I$ $b = -0.240288 - 0.794736I$	$-5.93188 + 4.75475I$	$-2.47991 - 3.65893I$
$u = -0.829870 - 0.241336I$ $a = 0.509900 - 0.334719I$ $b = -0.240288 + 0.794736I$	$-5.93188 - 4.75475I$	$-2.47991 + 3.65893I$
$u = 0.374837 + 1.075050I$ $a = -0.490885 - 0.409888I$ $b = -1.087140 + 0.111404I$	$-0.27332 + 2.70620I$	0
$u = 0.374837 - 1.075050I$ $a = -0.490885 + 0.409888I$ $b = -1.087140 - 0.111404I$	$-0.27332 - 2.70620I$	0
$u = 0.268445 + 1.111910I$ $a = 0.146715 - 0.451206I$ $b = 1.272610 - 0.252980I$	$0.50238 - 1.98879I$	0
$u = 0.268445 - 1.111910I$ $a = 0.146715 + 0.451206I$ $b = 1.272610 + 0.252980I$	$0.50238 + 1.98879I$	0
$u = -0.385295 + 1.082820I$ $a = -0.468644 - 1.033150I$ $b = -0.004875 - 0.663333I$	$-3.45328 - 1.33657I$	0
$u = -0.385295 - 1.082820I$ $a = -0.468644 + 1.033150I$ $b = -0.004875 + 0.663333I$	$-3.45328 + 1.33657I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.698151 + 0.927977I$ $a = 1.99746 + 0.91434I$ $b = -1.275360 - 0.207940I$	$0.926044 + 0.238949I$	0
$u = -0.698151 - 0.927977I$ $a = 1.99746 - 0.91434I$ $b = -1.275360 + 0.207940I$	$0.926044 - 0.238949I$	0
$u = -0.459731 + 1.077510I$ $a = 1.83760 + 1.09993I$ $b = -1.55132 - 0.05064I$	$1.33205 - 3.50361I$	0
$u = -0.459731 - 1.077510I$ $a = 1.83760 - 1.09993I$ $b = -1.55132 + 0.05064I$	$1.33205 + 3.50361I$	0
$u = 0.743330 + 0.310940I$ $a = 2.16703 + 0.83141I$ $b = -1.369280 + 0.248755I$	$4.80088 - 4.79415I$	$6.07434 + 4.15713I$
$u = 0.743330 - 0.310940I$ $a = 2.16703 - 0.83141I$ $b = -1.369280 - 0.248755I$	$4.80088 + 4.79415I$	$6.07434 - 4.15713I$
$u = 0.491299 + 1.104420I$ $a = 0.51919 - 2.24490I$ $b = -1.281970 - 0.243617I$	$0.50012 + 4.58916I$	0
$u = 0.491299 - 1.104420I$ $a = 0.51919 + 2.24490I$ $b = -1.281970 + 0.243617I$	$0.50012 - 4.58916I$	0
$u = -0.278365 + 0.729460I$ $a = 0.896209 - 1.073100I$ $b = -0.259021 - 0.390087I$	$-1.99309 - 1.19360I$	$-4.63700 - 2.51647I$
$u = -0.278365 - 0.729460I$ $a = 0.896209 + 1.073100I$ $b = -0.259021 + 0.390087I$	$-1.99309 + 1.19360I$	$-4.63700 + 2.51647I$

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.502022 + 1.112160I$ $a = 0.985384 + 0.850050I$ $b = -0.199636 + 0.712351I$	$-2.59517 - 6.04162I$	0
$u = -0.502022 - 1.112160I$ $a = 0.985384 - 0.850050I$ $b = -0.199636 - 0.712351I$	$-2.59517 + 6.04162I$	0
$u = 0.764797 + 0.121262I$ $a = 1.42719 + 0.09783I$ $b = -0.889806 - 0.402045I$	$-3.86656 - 0.41270I$	$-0.197348 - 0.929430I$
$u = 0.764797 - 0.121262I$ $a = 1.42719 - 0.09783I$ $b = -0.889806 + 0.402045I$	$-3.86656 + 0.41270I$	$-0.197348 + 0.929430I$
$u = 0.218016 + 1.217340I$ $a = 0.398270 + 0.377014I$ $b = -1.357810 + 0.368437I$	$-5.76926 - 5.58643I$	0
$u = 0.218016 - 1.217340I$ $a = 0.398270 - 0.377014I$ $b = -1.357810 - 0.368437I$	$-5.76926 + 5.58643I$	0
$u = -0.287537 + 1.214310I$ $a = 0.204967 + 0.561724I$ $b = 0.159869 + 0.851956I$	$-10.53930 + 1.20311I$	0
$u = -0.287537 - 1.214310I$ $a = 0.204967 - 0.561724I$ $b = 0.159869 - 0.851956I$	$-10.53930 - 1.20311I$	0
$u = 0.364658 + 1.197690I$ $a = -0.622424 + 1.025440I$ $b = 1.042020 + 0.460884I$	$-7.81847 + 3.46546I$	0
$u = 0.364658 - 1.197690I$ $a = -0.622424 - 1.025440I$ $b = 1.042020 - 0.460884I$	$-7.81847 - 3.46546I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.553003 + 1.128780I$ $a = -1.31357 + 2.28219I$ $b = 1.377580 + 0.293281I$	$2.40647 + 9.70272I$	0
$u = 0.553003 - 1.128780I$ $a = -1.31357 - 2.28219I$ $b = 1.377580 - 0.293281I$	$2.40647 - 9.70272I$	0
$u = 0.501395 + 1.168450I$ $a = -0.103705 + 0.434801I$ $b = 0.861654 - 0.536583I$	$-6.88232 + 5.05308I$	0
$u = 0.501395 - 1.168450I$ $a = -0.103705 - 0.434801I$ $b = 0.861654 + 0.536583I$	$-6.88232 - 5.05308I$	0
$u = 0.442137 + 0.560010I$ $a = -0.812619 + 0.111492I$ $b = 0.366660 + 0.363322I$	$0.730759 + 1.016190I$	$5.20362 - 4.92767I$
$u = 0.442137 - 0.560010I$ $a = -0.812619 - 0.111492I$ $b = 0.366660 - 0.363322I$	$0.730759 - 1.016190I$	$5.20362 + 4.92767I$
$u = -0.554081 + 1.174850I$ $a = -1.075370 - 0.533382I$ $b = 0.284145 - 0.839978I$	$-8.70986 - 9.86105I$	0
$u = -0.554081 - 1.174850I$ $a = -1.075370 + 0.533382I$ $b = 0.284145 + 0.839978I$	$-8.70986 + 9.86105I$	0
$u = 0.589077 + 1.163720I$ $a = 1.67040 - 1.98061I$ $b = -1.43155 - 0.34420I$	$-3.2473 + 14.1444I$	0
$u = 0.589077 - 1.163720I$ $a = 1.67040 + 1.98061I$ $b = -1.43155 + 0.34420I$	$-3.2473 - 14.1444I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.604383 + 0.247576I$ $a = -0.549400 + 0.155635I$ $b = 0.196990 + 0.593586I$	$-0.16557 + 1.66732I$	$1.05437 - 4.59670I$
$u = -0.604383 - 0.247576I$ $a = -0.549400 - 0.155635I$ $b = 0.196990 - 0.593586I$	$-0.16557 - 1.66732I$	$1.05437 + 4.59670I$
$u = 0.558020 + 0.203304I$ $a = -1.14181 - 1.13686I$ $b = 1.302810 - 0.128993I$	$2.93700 - 0.37083I$	$3.52953 - 0.41815I$
$u = 0.558020 - 0.203304I$ $a = -1.14181 + 1.13686I$ $b = 1.302810 + 0.128993I$	$2.93700 + 0.37083I$	$3.52953 + 0.41815I$
$u = -0.302548 + 0.409621I$ $a = -3.46567 - 2.43013I$ $b = 1.45106 - 0.06557I$	$3.41711 - 0.18501I$	$2.17012 - 1.34687I$
$u = -0.302548 - 0.409621I$ $a = -3.46567 + 2.43013I$ $b = 1.45106 + 0.06557I$	$3.41711 + 0.18501I$	$2.17012 + 1.34687I$

II. $\boldsymbol{I_2^u = \langle -au + 3b + a + 2u + 1,\ a^2 + 2au - 7u - 7,\ u^2 + u + 1 \rangle}$

(i) Arc colorings

$$a_2 = \begin{pmatrix} 0 \\ u \end{pmatrix}$$
$$a_5 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$
$$a_6 = \begin{pmatrix} 1 \\ u+1 \end{pmatrix}$$
$$a_9 = \begin{pmatrix} a \\ \frac{1}{3}au - \frac{1}{3}a - \frac{2}{3}u - \frac{1}{3} \end{pmatrix}$$
$$a_{10} = \begin{pmatrix} \frac{1}{3}au + \frac{2}{3}a - \frac{2}{3}u - \frac{1}{3} \\ \frac{1}{3}au - \frac{1}{3}a - \frac{2}{3}u - \frac{1}{3} \end{pmatrix}$$
$$a_1 = \begin{pmatrix} -u \\ u+1 \end{pmatrix}$$
$$a_3 = \begin{pmatrix} -1 \\ 0 \end{pmatrix}$$
$$a_7 = \begin{pmatrix} -u \\ u+1 \end{pmatrix}$$
$$a_4 = \begin{pmatrix} \frac{2}{3}au + \frac{1}{3}a - \frac{7}{3}u - \frac{11}{3} \\ 2 \end{pmatrix}$$
$$a_8 = \begin{pmatrix} -\frac{1}{3}au - \frac{2}{3}a + \frac{2}{3}u + \frac{1}{3} \\ -\frac{1}{3}au + \frac{1}{3}a + \frac{2}{3}u + \frac{1}{3} \end{pmatrix}$$
$$a_{11} = \begin{pmatrix} \frac{1}{3}au + \frac{2}{3}a - \frac{5}{3}u - \frac{1}{3} \\ \frac{1}{3}au - \frac{1}{3}a + \frac{1}{3}u + \frac{2}{3} \end{pmatrix}$$
$$a_{11} = \begin{pmatrix} \frac{1}{3}au + \frac{2}{3}a - \frac{5}{3}u - \frac{1}{3} \\ \frac{1}{3}au - \frac{1}{3}a + \frac{1}{3}u + \frac{2}{3} \end{pmatrix}$$

(ii) Obstruction class $= 1$

(iii) Cusp Shapes $= 4u + 4$

(iv) u-Polynomials at the component

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

(v) Riley Polynomials at the component

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

(vi) Complex Volumes and Cusp Shapes

Solutions to I_2^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.500000 + 0.866025I$ $a = -1.62132 - 2.09077I$ $b = 1.41421$	$3.28987 - 2.02988I$	$2.00000 + 3.46410I$
$u = -0.500000 + 0.866025I$ $a = 2.62132 + 0.35872I$ $b = -1.41421$	$3.28987 - 2.02988I$	$2.00000 + 3.46410I$
$u = -0.500000 - 0.866025I$ $a = -1.62132 + 2.09077I$ $b = 1.41421$	$3.28987 + 2.02988I$	$2.00000 - 3.46410I$
$u = -0.500000 - 0.866025I$ $a = 2.62132 - 0.35872I$ $b = -1.41421$	$3.28987 + 2.02988I$	$2.00000 - 3.46410I$

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

(i) Arc colorings

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

(ii) Obstruction class $= 1$

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

(iv) u-Polynomials at the component

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

(v) Riley Polynomials at the component

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

(vi) Complex Volumes and Cusp Shapes

Solutions to I_3^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.500000 + 0.866025I$ $a = -0.500000 - 0.866025I$ $b = 0$	$-1.64493 + 2.02988I$	$0. - 3.46410I$
$u = 0.500000 - 0.866025I$ $a = -0.500000 + 0.866025I$ $b = 0$	$-1.64493 - 2.02988I$	$0. + 3.46410I$

IV. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1	$((u^2-u+1)^2)(u^2+u+1)(u^{56}-2u^{55}+\cdots-2u+1)$
c_2	$((u^2+u+1)^3)(u^{56}+28u^{55}+\cdots+4u+1)$
c_3	$u^2(u^2-2)^2(u^{56}-3u^{55}+\cdots+276u+172)$
c_4, c_8, c_9	$u^2(u^2-2)^2(u^{56}+u^{55}+\cdots+12u+4)$
c_5	$(u^2-u+1)(u^2+u+1)^2(u^{56}-2u^{55}+\cdots-2u+1)$
c_6	$((u^2-u+1)^2)(u^2+u+1)(u^{56}+2u^{55}+\cdots+1554u+481)$
c_7	$((u-1)^2)(u+1)^4(u^{56}+3u^{55}+\cdots-31u+7)$
c_{10}, c_{11}	$((u-1)^4)(u+1)^2(u^{56}+3u^{55}+\cdots-31u+7)$

V. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1, c_5	$((y^2+y+1)^3)(y^{56}+28y^{55}+\cdots+4y+1)$
c_2	$((y^2+y+1)^3)(y^{56}+4y^{55}+\cdots+28y+1)$
c_3	$y^2(y-2)^4(y^{56}+9y^{55}+\cdots+99952y+29584)$
c_4, c_8, c_9	$y^2(y-2)^4(y^{56}-51y^{55}+\cdots+48y+16)$
c_6	$((y^2+y+1)^3)(y^{56}-20y^{55}+\cdots-456284y+231361)$
c_7, c_{10}, c_{11}	$((y-1)^6)(y^{56}-53y^{55}+\cdots+747y+49)$