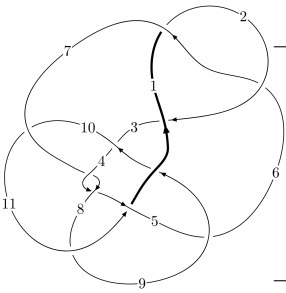
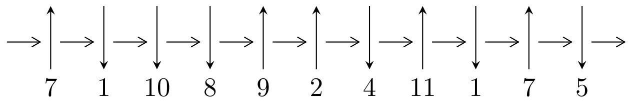
$11n_{128}$ ($K11n_{128}$)



A knot diagram[1]

Linearized knot diagam



Solving Sequence

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

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

$$I_1^u = \langle 9.89687 \times 10^{16} u^{31} - 1.71588 \times 10^{17} u^{30} + \cdots + 5.00890 \times 10^{17} b - 1.23096 \times 10^{18},$$
$$2.33797 \times 10^{16} u^{31} + 9.75324 \times 10^{17} u^{30} + \cdots + 5.00890 \times 10^{17} a + 3.69251 \times 10^{18},\ u^{32} - u^{31} + \cdots - 12u + 1$$
$$I_2^u = \langle -7u^{10} - 4u^9 + 22u^8 - 29u^6 + 17u^5 + 14u^4 - 7u^3 + 3u^2 + 13b - 9u - 1,$$
$$17u^{10} + 6u^9 - 59u^8 + 26u^7 + 63u^6 - 71u^5 + 18u^4 + 17u^3 - 50u^2 + 39a + 59u - 31,$$
$$u^{11} - 4u^9 + u^8 + 6u^7 - 4u^6 - 3u^5 + 4u^4 - u^3 + u^2 + u - 3\rangle$$

* 2 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 43 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.

$\boldsymbol{I_1^u = \langle 9.90 \times 10^{16} u^{31} - 1.72 \times 10^{17} u^{30} + \cdots + 5.01 \times 10^{17} b - 1.23 \times 10^{18},\ 2.34 \times 10^{16} u^{31} + 9.75 \times 10^{17} u^{30} + \cdots + 5.01 \times 10^{17} a + 3.69 \times 10^{18},\ u^{32} - u^{31} + \cdots - 12u + 1 \rangle}$

(i) Arc colorings

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

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

$$a_4 = \begin{pmatrix} 1 \\ -u^2 \end{pmatrix}$$

$$a_1 = \begin{pmatrix} -0.0466763u^{31} - 1.94718u^{30} + \cdots + 64.5722u - 7.37190 \\ -0.197586u^{31} + 0.342566u^{30} + \cdots - 13.4573u + 2.45755 \end{pmatrix}$$

$$a_7 = \begin{pmatrix} u \\ -u^3 + u \end{pmatrix}$$

$$a_2 = \begin{pmatrix} -0.590773u^{31} - 1.76202u^{30} + \cdots + 59.4915u - 6.72272 \\ -0.199663u^{31} + 0.213550u^{30} + \cdots - 14.7748u + 2.74780 \end{pmatrix}$$

$$a_3 = \begin{pmatrix} 4.28025u^{31} + 0.484730u^{30} + \cdots + 54.0490u - 3.93592 \\ -2.66133u^{31} - 0.797429u^{30} + \cdots - 30.9601u + 3.50979 \end{pmatrix}$$

$$a_6 = \begin{pmatrix} -1.93811u^{31} - 0.942980u^{30} + \cdots - 25.2538u + 6.08360 \\ 1.07477u^{31} + 0.752123u^{30} + \cdots + 0.523274u + 0.239711 \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} -0.244262u^{31} - 1.60461u^{30} + \cdots + 51.1148u - 4.91435 \\ -0.197586u^{31} + 0.342566u^{30} + \cdots - 13.4573u + 2.45755 \end{pmatrix}$$

$$a_9 = \begin{pmatrix} 3.39545u^{31} - 1.12542u^{30} + \cdots + 65.7600u - 9.37715 \\ 0.771918u^{31} - 0.0178954u^{30} + \cdots + 15.0150u - 1.00246 \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} 0.828985u^{31} - 1.68179u^{30} + \cdots + 60.1743u - 5.88389 \\ -0.589274u^{31} + 0.367301u^{30} + \cdots - 15.2775u + 2.48408 \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} 0.828985u^{31} - 1.68179u^{30} + \cdots + 60.1743u - 5.88389 \\ -0.589274u^{31} + 0.367301u^{30} + \cdots - 15.2775u + 2.48408 \end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= -\frac{1330608910123401616}{500890495867945381}u^{31} + \frac{476105635560304404}{500890495867945381}u^{30} + \cdots - \frac{2768958472090494721 2}{500890495867945381}u + \frac{917819854187100340}{500890495867945381}$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1, c_6	$u^{32} + u^{31} + \cdots - 20u + 1$
c_2	$u^{32} + 47u^{31} + \cdots - 80u + 1$
c_3	$u^{32} - 28u^{30} + \cdots + 154u + 43$
c_4, c_7	$u^{32} + u^{31} + \cdots + 12u + 1$
c_5	$u^{32} - 2u^{31} + \cdots + 2606u + 1291$
c_8	$u^{32} + 9u^{31} + \cdots + 26u + 1$
c_9	$u^{32} + 4u^{31} + \cdots - 2696u + 589$
c_{10}	$u^{32} - 3u^{31} + \cdots - 7138u + 3929$
c_{11}	$u^{32} + 2u^{31} + \cdots + 34u + 19$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_6	$y^{32} + 47y^{31} + \cdots - 80y + 1$
c_2	$y^{32} - 117y^{31} + \cdots + 5428y + 1$
c_3	$y^{32} - 56y^{31} + \cdots + 323982y + 1849$
c_4, c_7	$y^{32} - 25y^{31} + \cdots - 34y + 1$
c_5	$y^{32} + 24y^{31} + \cdots + 12176136y + 1666681$
c_8	$y^{32} + 9y^{31} + \cdots - 248y + 1$
c_9	$y^{32} - 62y^{31} + \cdots + 1792760y + 346921$
c_{10}	$y^{32} + 37y^{31} + \cdots + 205149034y + 15437041$
c_{11}	$y^{32} - 10y^{31} + \cdots - 3322y + 361$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.138542 + 1.056330I$ $a = -0.033005 - 0.199971I$ $b = 0.733437 + 0.365394I$	$-1.06384 - 2.01989I$	$-6.33778 + 3.45023I$
$u = 0.138542 - 1.056330I$ $a = -0.033005 + 0.199971I$ $b = 0.733437 - 0.365394I$	$-1.06384 + 2.01989I$	$-6.33778 - 3.45023I$
$u = -0.170624 + 1.162780I$ $a = 0.216364 + 0.079987I$ $b = -1.081780 + 0.698388I$	$-11.45540 + 6.47625I$	$-4.15728 - 4.26891I$
$u = -0.170624 - 1.162780I$ $a = 0.216364 - 0.079987I$ $b = -1.081780 - 0.698388I$	$-11.45540 - 6.47625I$	$-4.15728 + 4.26891I$
$u = 1.195330 + 0.230217I$ $a = -1.244340 - 0.038979I$ $b = 1.100620 + 0.617950I$	$-2.64686 - 1.18437I$	$-3.89291 + 0.66467I$
$u = 1.195330 - 0.230217I$ $a = -1.244340 + 0.038979I$ $b = 1.100620 - 0.617950I$	$-2.64686 + 1.18437I$	$-3.89291 - 0.66467I$
$u = 1.219350 + 0.077393I$ $a = 1.81848 + 0.38645I$ $b = -1.37078 - 1.24326I$	$-4.27477 - 2.33689I$	$-7.63645 + 2.31412I$
$u = 1.219350 - 0.077393I$ $a = 1.81848 - 0.38645I$ $b = -1.37078 + 1.24326I$	$-4.27477 + 2.33689I$	$-7.63645 - 2.31412I$
$u = -1.223500 + 0.038660I$ $a = 1.51818 - 0.66151I$ $b = -0.815453 - 0.142941I$	$-5.17336 + 1.79108I$	$-9.36406 - 4.29945I$
$u = -1.223500 - 0.038660I$ $a = 1.51818 + 0.66151I$ $b = -0.815453 + 0.142941I$	$-5.17336 - 1.79108I$	$-9.36406 + 4.29945I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.535771 + 0.550945I$ $a = -0.124257 - 0.519984I$ $b = 0.049461 + 0.604800I$	$-0.34099 - 1.52893I$	$-0.59741 + 5.96300I$
$u = 0.535771 - 0.550945I$ $a = -0.124257 + 0.519984I$ $b = 0.049461 - 0.604800I$	$-0.34099 + 1.52893I$	$-0.59741 - 5.96300I$
$u = -1.197230 + 0.303844I$ $a = -1.37383 - 0.46524I$ $b = 0.874051 - 0.767936I$	$-1.91400 + 4.83866I$	$-2.54787 - 6.95016I$
$u = -1.197230 - 0.303844I$ $a = -1.37383 + 0.46524I$ $b = 0.874051 + 0.767936I$	$-1.91400 - 4.83866I$	$-2.54787 + 6.95016I$
$u = 1.224970 + 0.159550I$ $a = -2.65656 - 0.99246I$ $b = 0.670400 + 0.174363I$	$-13.62100 - 1.88059I$	$-11.51732 + 4.17618I$
$u = 1.224970 - 0.159550I$ $a = -2.65656 + 0.99246I$ $b = 0.670400 - 0.174363I$	$-13.62100 + 1.88059I$	$-11.51732 - 4.17618I$
$u = -1.295740 + 0.161402I$ $a = -1.07414 - 1.17404I$ $b = 1.19979 + 1.83348I$	$-14.4931 + 2.6399I$	$-9.17083 - 2.92028I$
$u = -1.295740 - 0.161402I$ $a = -1.07414 + 1.17404I$ $b = 1.19979 - 1.83348I$	$-14.4931 - 2.6399I$	$-9.17083 + 2.92028I$
$u = -0.162858 + 0.639240I$ $a = -0.550882 - 0.448237I$ $b = -0.529074 - 0.422527I$	$1.26710 - 1.27122I$	$4.54373 + 1.02158I$
$u = -0.162858 - 0.639240I$ $a = -0.550882 + 0.448237I$ $b = -0.529074 + 0.422527I$	$1.26710 + 1.27122I$	$4.54373 - 1.02158I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = -1.36987 + 0.42119I$ $a = 1.53053 - 0.02391I$ $b = -1.37290 + 0.81577I$	$-5.87267 + 7.08941I$	$-7.09677 - 5.04780I$
$u = -1.36987 - 0.42119I$ $a = 1.53053 + 0.02391I$ $b = -1.37290 - 0.81577I$	$-5.87267 - 7.08941I$	$-7.09677 + 5.04780I$
$u = 1.34905 + 0.49788I$ $a = 0.892282 - 0.609676I$ $b = -0.839959 - 0.308002I$	$-5.07213 - 3.71163I$	$-7.67058 + 3.05284I$
$u = 1.34905 - 0.49788I$ $a = 0.892282 + 0.609676I$ $b = -0.839959 + 0.308002I$	$-5.07213 + 3.71163I$	$-7.67058 - 3.05284I$
$u = 0.082800 + 0.471723I$ $a = 2.20738 + 1.65765I$ $b = -0.762439 + 0.930035I$	$-10.18920 - 0.37972I$	$-2.16269 - 0.17573I$
$u = 0.082800 - 0.471723I$ $a = 2.20738 - 1.65765I$ $b = -0.762439 - 0.930035I$	$-10.18920 + 0.37972I$	$-2.16269 + 0.17573I$
$u = 1.44332 + 0.48895I$ $a = -1.65118 + 0.16077I$ $b = 1.38562 + 0.96493I$	$-16.5743 - 12.2619I$	$-6.15908 + 5.48895I$
$u = 1.44332 - 0.48895I$ $a = -1.65118 - 0.16077I$ $b = 1.38562 - 0.96493I$	$-16.5743 + 12.2619I$	$-6.15908 - 5.48895I$
$u = -1.43379 + 0.69251I$ $a = -0.605697 - 0.669783I$ $b = 1.042800 + 0.178645I$	$-15.2091 + 0.2793I$	$-8.54524 + 0.I$
$u = -1.43379 - 0.69251I$ $a = -0.605697 + 0.669783I$ $b = 1.042800 - 0.178645I$	$-15.2091 - 0.2793I$	$-8.54524 + 0.I$

	Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u =$	$0.164476 + 0.076390I$		
$a =$	$1.63068 + 3.68897I$	$-1.10961 + 1.48762I$	$-5.18747 - 2.41383I$
$b =$	$0.716191 - 0.638089I$		
$u =$	$0.164476 - 0.076390I$		
$a =$	$1.63068 - 3.68897I$	$-1.10961 - 1.48762I$	$-5.18747 + 2.41383I$
$b =$	$0.716191 + 0.638089I$		

II. $I_2^u = \langle -7u^{10} - 4u^9 + \cdots + 13b - 1,\ 17u^{10} + 6u^9 + \cdots + 39a - 31,\ u^{11} - 4u^9 + \cdots + u - 3 \rangle$

(i) Arc colorings

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

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

$$a_4 = \begin{pmatrix} 1 \\ -u^2 \end{pmatrix}$$

$$a_1 = \begin{pmatrix} -0.435897u^{10} - 0.153846u^9 + \cdots - 1.51282u + 0.794872 \\ 0.538462u^{10} + 0.307692u^9 + \cdots + 0.692308u + 0.0769231 \end{pmatrix}$$

$$a_7 = \begin{pmatrix} u \\ -u^3 + u \end{pmatrix}$$

$$a_2 = \begin{pmatrix} 0.487179u^{10} - 0.769231u^9 + \cdots + 1.10256u - 0.358974 \\ 0.384615u^{10} + 0.0769231u^9 + \cdots - 0.0769231u + 0.769231 \end{pmatrix}$$

$$a_3 = \begin{pmatrix} 1.12821u^{10} - 1.30769u^9 + \cdots + 4.97436u - 3.41026 \\ -0.153846u^{10} + 0.769231u^9 + \cdots - 1.76923u + 2.69231 \end{pmatrix}$$

$$a_6 = \begin{pmatrix} -0.641026u^{10} + 0.538462u^9 + \cdots - 1.87179u + 2.05128 \\ -0.461538u^{10} + 0.307692u^9 + \cdots - 1.30769u + 1.07692 \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} 0.102564u^{10} + 0.153846u^9 + \cdots - 0.820513u + 0.871795 \\ 0.538462u^{10} + 0.307692u^9 + \cdots + 0.692308u + 0.0769231 \end{pmatrix}$$

$$a_9 = \begin{pmatrix} -0.205128u^{10} + 0.692308u^9 + \cdots - 0.358974u + 0.256410 \\ -0.461538u^{10} + 0.307692u^9 + \cdots - 0.307692u + 0.0769231 \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} -0.897436u^{10} + 0.153846u^9 + \cdots - 2.82051u + 0.871795 \\ 0.538462u^{10} + 0.307692u^9 + \cdots + 1.69231u + 0.0769231 \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} -0.897436u^{10} + 0.153846u^9 + \cdots - 2.82051u + 0.871795 \\ 0.538462u^{10} + 0.307692u^9 + \cdots + 1.69231u + 0.0769231 \end{pmatrix}$$

(ii) Obstruction class $= 1$

(iii) Cusp Shapes
$= -\frac{25}{13}u^{10} - \frac{5}{13}u^9 + \frac{73}{13}u^8 - u^7 - \frac{85}{13}u^6 + \frac{57}{13}u^5 + \frac{63}{13}u^4 - \frac{38}{13}u^3 - \frac{32}{13}u^2 - \frac{8}{13}u - \frac{63}{13}$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{11}+6u^9+13u^7+15u^5+u^4+9u^3+2u^2+3u+1$
c_2	$u^{11}+12u^{10}+\cdots+5u-1$
c_3	$u^{11}-u^{10}-3u^9-3u^8+u^7+7u^6+12u^5+15u^4+11u^3+7u^2+3u+1$
c_4	$u^{11}-4u^9+u^8+6u^7-4u^6-3u^5+4u^4-u^3+u^2+u-3$
c_5	$u^{11}-u^{10}+u^9-u^8+4u^7+u^5-4u^4+2u^3+u-1$
c_6	$u^{11}+6u^9+13u^7+15u^5-u^4+9u^3-2u^2+3u-1$
c_7	$u^{11}-4u^9-u^8+6u^7+4u^6-3u^5-4u^4-u^3-u^2+u+3$
c_8	$u^{11}+2u^{10}+u^9-4u^8-6u^7-2u^6+9u^5+13u^4+9u^3+2u^2-u-1$
c_9	$u^{11}-9u^{10}+\cdots+17u-3$
c_{10}	$u^{11}+2u^{10}+5u^9+4u^8+u^7-u^6-6u^5+4u^4-2u^3+3u^2-3u+1$
c_{11}	$u^{11}+u^{10}+2u^8+4u^7+u^6+4u^4+u^3+u^2+u+1$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_6	$y^{11} + 12y^{10} + \cdots + 5y - 1$
c_2	$y^{11} - 20y^{10} + \cdots + 121y - 1$
c_3	$y^{11} - 7y^{10} + \cdots - 5y - 1$
c_4, c_7	$y^{11} - 8y^{10} + \cdots + 7y - 9$
c_5	$y^{11} + y^{10} + 7y^9 + 9y^8 + 14y^7 + 6y^6 + 17y^5 - 6y^4 + 6y^3 - 4y^2 + y - 1$
c_8	$y^{11} - 2y^{10} + 5y^9 - 2y^8 + 4y^7 + 43y^5 + 5y^4 + 7y^3 + 4y^2 + 5y - 1$
c_9	$y^{11} - 9y^{10} + \cdots - 35y - 9$
c_{10}	$y^{11} + 6y^{10} + 11y^9 - 14y^8 - 71y^7 - 83y^6 - 18y^5 + 18y^3 - 5y^2 + 3y - 1$
c_{11}	$y^{11} - y^{10} + 4y^9 - 6y^8 + 6y^7 - 17y^6 - 6y^5 - 14y^4 - 9y^3 - 7y^2 - y - 1$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.704223 + 0.799205I$ $a = 0.198244 + 0.688371I$ $b = 0.482497 - 0.432213I$	$-0.834177 - 0.664427I$	$-5.62999 - 1.84817I$
$u = 0.704223 - 0.799205I$ $a = 0.198244 - 0.688371I$ $b = 0.482497 + 0.432213I$	$-0.834177 + 0.664427I$	$-5.62999 + 1.84817I$
$u = -1.113080 + 0.252147I$ $a = 1.50946 + 0.63887I$ $b = -0.266277 - 0.765184I$	$-12.65170 + 1.14869I$	$-5.06516 + 0.05051I$
$u = -1.113080 - 0.252147I$ $a = 1.50946 - 0.63887I$ $b = -0.266277 + 0.765184I$	$-12.65170 - 1.14869I$	$-5.06516 - 0.05051I$
$u = 1.130350 + 0.302780I$ $a = 0.836611 + 0.061028I$ $b = -0.722191 - 1.091390I$	$-2.43632 - 3.36377I$	$-4.69391 + 3.63598I$
$u = 1.130350 - 0.302780I$ $a = 0.836611 - 0.061028I$ $b = -0.722191 + 1.091390I$	$-2.43632 + 3.36377I$	$-4.69391 - 3.63598I$
$u = -0.064226 + 0.786482I$ $a = 0.158980 - 0.213232I$ $b = -0.735500 - 0.606796I$	$0.44585 - 2.19055I$	$-0.27735 + 4.50255I$
$u = -0.064226 - 0.786482I$ $a = 0.158980 + 0.213232I$ $b = -0.735500 + 0.606796I$	$0.44585 + 2.19055I$	$-0.27735 - 4.50255I$
$u = 1.29327$ $a = -1.68071$ $b = 1.36323$	-4.68995	-8.42500
$u = -1.303900 + 0.374956I$ $a = -1.69628 - 0.11240I$ $b = 1.059850 - 0.766199I$	$-3.56282 + 6.44913I$	$-4.62110 - 5.90724I$

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -1.303900 - 0.374956I$		
$a = -1.69628 + 0.11240I$	$-3.56282 - 6.44913I$	$-4.62110 + 5.90724I$
$b = 1.059850 + 0.766199I$		

III. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1	$(u^{11}+6u^9+13u^7+15u^5+u^4+9u^3+2u^2+3u+1)$ $\cdot(u^{32}+u^{31}+\cdots-20u+1)$
c_2	$(u^{11}+12u^{10}+\cdots+5u-1)(u^{32}+47u^{31}+\cdots-80u+1)$
c_3	$(u^{11}-u^{10}-3u^9-3u^8+u^7+7u^6+12u^5+15u^4+11u^3+7u^2+3u+1)$ $\cdot(u^{32}-28u^{30}+\cdots+154u+43)$
c_4	$(u^{11}-4u^9+u^8+6u^7-4u^6-3u^5+4u^4-u^3+u^2+u-3)$ $\cdot(u^{32}+u^{31}+\cdots+12u+1)$
c_5	$(u^{11}-u^{10}+u^9-u^8+4u^7+u^5-4u^4+2u^3+u-1)$ $\cdot(u^{32}-2u^{31}+\cdots+2606u+1291)$
c_6	$(u^{11}+6u^9+13u^7+15u^5-u^4+9u^3-2u^2+3u-1)$ $\cdot(u^{32}+u^{31}+\cdots-20u+1)$
c_7	$(u^{11}-4u^9-u^8+6u^7+4u^6-3u^5-4u^4-u^3-u^2+u+3)$ $\cdot(u^{32}+u^{31}+\cdots+12u+1)$
c_8	$(u^{11}+2u^{10}+u^9-4u^8-6u^7-2u^6+9u^5+13u^4+9u^3+2u^2-u-1)$ $\cdot(u^{32}+9u^{31}+\cdots+26u+1)$
c_9	$(u^{11}-9u^{10}+\cdots+17u-3)(u^{32}+4u^{31}+\cdots-2696u+589)$
c_{10}	$(u^{11}+2u^{10}+5u^9+4u^8+u^7-u^6-6u^5+4u^4-2u^3+3u^2-3u+1)$ $\cdot(u^{32}-3u^{31}+\cdots-7138u+3929)$
c_{11}	$(u^{11}+u^{10}+2u^8+4u^7+u^6+4u^4+u^3+u^2+u+1)$ $\cdot(u^{32}+2u^{31}+\cdots+34u+19)$

IV. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1, c_6	$(y^{11} + 12y^{10} + \cdots + 5y - 1)(y^{32} + 47y^{31} + \cdots - 80y + 1)$
c_2	$(y^{11} - 20y^{10} + \cdots + 121y - 1)(y^{32} - 117y^{31} + \cdots + 5428y + 1)$
c_3	$(y^{11} - 7y^{10} + \cdots - 5y - 1)(y^{32} - 56y^{31} + \cdots + 323982y + 1849)$
c_4, c_7	$(y^{11} - 8y^{10} + \cdots + 7y - 9)(y^{32} - 25y^{31} + \cdots - 34y + 1)$
c_5	$(y^{11} + y^{10} + 7y^9 + 9y^8 + 14y^7 + 6y^6 + 17y^5 - 6y^4 + 6y^3 - 4y^2 + y - 1)$ $\cdot (y^{32} + 24y^{31} + \cdots + 12176136y + 1666681)$
c_8	$(y^{11} - 2y^{10} + 5y^9 - 2y^8 + 4y^7 + 43y^5 + 5y^4 + 7y^3 + 4y^2 + 5y - 1)$ $\cdot (y^{32} + 9y^{31} + \cdots - 248y + 1)$
c_9	$(y^{11} - 9y^{10} + \cdots - 35y - 9)(y^{32} - 62y^{31} + \cdots + 1792760y + 346921)$
c_{10}	$(y^{11} + 6y^{10} + 11y^9 - 14y^8 - 71y^7 - 83y^6 - 18y^5 + 18y^3 - 5y^2 + 3y - 1)$ $\cdot (y^{32} + 37y^{31} + \cdots + 205149034y + 15437041)$
c_{11}	$(y^{11} - y^{10} + 4y^9 - 6y^8 + 6y^7 - 17y^6 - 6y^5 - 14y^4 - 9y^3 - 7y^2 - y - 1)$ $\cdot (y^{32} - 10y^{31} + \cdots - 3322y + 361)$