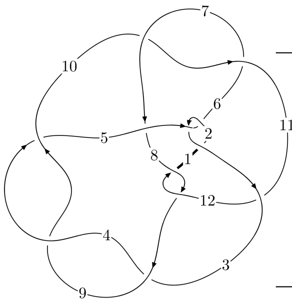
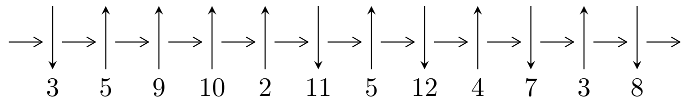
$12n_{0546}$ ($K12n_{0546}$)



A knot diagram[1]

Linearized knot diagam



Solving Sequence

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

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

$$I_1^u = \langle u^{18} - 2u^{17} + \cdots + b - 1,\ -3u^{18} + 5u^{17} + \cdots + 2a + 3,\ u^{19} - 3u^{18} + \cdots + u + 2\rangle$$

$$I_2^u = \langle 3u^9a + 3u^9 + \cdots - a + 7,\ 2u^9a + 3u^9 + \cdots + 3a + 9,$$
$$u^{10} + u^9 - 5u^8 - 4u^7 + 8u^6 + 3u^5 - 5u^4 + 2u^3 + 3u^2 + u - 1\rangle$$

$$I_3^u = \langle -u^7 + 4u^5 - 4u^3 + b,\ u^7 - 3u^5 + u^4 + u^3 - 3u^2 + a + 2u + 1,\ u^8 - 5u^6 + 7u^4 - 2u^2 + 1\rangle$$

* 3 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 47 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.

$\boldsymbol{I_1^u = \langle u^{18}-2u^{17}+\cdots+b-1,\ -3u^{18}+5u^{17}+\cdots+2a+3,\ u^{19}-3u^{18}+\cdots+u+2\rangle}$

(i) Arc colorings

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

$$a_9 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} 1 \\ -u^2 \end{pmatrix}$$

$$a_5 = \begin{pmatrix} u \\ -u^3+u \end{pmatrix}$$

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

$$a_2 = \begin{pmatrix} u^5-2u^3-u \\ -u^7+3u^5-2u^3+u \end{pmatrix}$$

$$a_1 = \begin{pmatrix} -u^9+4u^7-3u^5-2u^3-u \\ u^9-5u^7+7u^5-2u^3+u \end{pmatrix}$$

$$a_{12} = \begin{pmatrix} \frac{3}{2}u^{18}-\frac{5}{2}u^{17}+\cdots-\frac{5}{2}u-\frac{3}{2} \\ -u^{18}+2u^{17}+\cdots+2u+1 \end{pmatrix}$$

$$a_8 = \begin{pmatrix} -\frac{1}{2}u^{18}+\frac{1}{2}u^{17}+\cdots-\frac{1}{2}u+\frac{1}{2} \\ u^{18}-u^{17}+\cdots-2u-1 \end{pmatrix}$$

$$a_7 = \begin{pmatrix} \frac{3}{2}u^{18}-\frac{5}{2}u^{17}+\cdots-\frac{5}{2}u-\frac{3}{2} \\ -2u^{18}+3u^{17}+\cdots+3u+3 \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} -\frac{1}{2}u^{18}+\frac{1}{2}u^{17}+\cdots-\frac{1}{2}u+\frac{1}{2} \\ u^{18}-u^{17}+\cdots-u^2-1 \end{pmatrix}$$

$$a_6 = \begin{pmatrix} -u^9+4u^7-3u^5-2u^3-u \\ u^{11}-5u^9+8u^7-5u^5+3u^3-u \end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= -4u^{18}+4u^{17}+38u^{16}-28u^{15}-150u^{14}+56u^{13}+322u^{12}+22u^{11}-400u^{10}-208u^9+252u^8+260u^7-22u^6-128u^5-46u^4+12u^3+16u^2+12u+10$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{19} + 15u^{18} + \cdots + 5217u - 64$
c_2, c_5	$u^{19} + 3u^{18} + \cdots + 55u - 8$
c_3, c_4, c_9	$u^{19} + 3u^{18} + \cdots + u - 2$
c_6, c_8, c_{10} c_{12}	$u^{19} + 2u^{17} + \cdots - 4u^2 - 1$
c_7, c_{11}	$u^{19} + 4u^{18} + \cdots - 20u + 7$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{19} - 21y^{18} + \cdots + 25516865y - 4096$
c_2, c_5	$y^{19} + 15y^{18} + \cdots + 5217y - 64$
c_3, c_4, c_9	$y^{19} - 21y^{18} + \cdots - 3y - 4$
c_6, c_8, c_{10} c_{12}	$y^{19} + 4y^{18} + \cdots - 8y - 1$
c_7, c_{11}	$y^{19} + 20y^{18} + \cdots - 818y - 49$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = -0.580262 + 0.658546I$ $a = -1.37393 + 1.42710I$ $b = -0.88981 - 1.12332I$	$-6.36763 - 9.41239I$	$2.24569 + 7.34910I$
$u = -0.580262 - 0.658546I$ $a = -1.37393 - 1.42710I$ $b = -0.88981 + 1.12332I$	$-6.36763 + 9.41239I$	$2.24569 - 7.34910I$
$u = -0.430386 + 0.693344I$ $a = 0.0599143 - 0.0949401I$ $b = 0.92934 - 1.06686I$	$-6.81456 + 4.87246I$	$1.03546 - 1.73049I$
$u = -0.430386 - 0.693344I$ $a = 0.0599143 + 0.0949401I$ $b = 0.92934 + 1.06686I$	$-6.81456 - 4.87246I$	$1.03546 + 1.73049I$
$u = 0.736476 + 0.343968I$ $a = -0.27984 - 1.85203I$ $b = -0.603953 + 0.709870I$	$1.05767 + 4.20616I$	$4.94312 - 8.38858I$
$u = 0.736476 - 0.343968I$ $a = -0.27984 + 1.85203I$ $b = -0.603953 - 0.709870I$	$1.05767 - 4.20616I$	$4.94312 + 8.38858I$
$u = -0.609189 + 0.322877I$ $a = 0.730128 - 0.841386I$ $b = -0.206405 + 0.511932I$	$1.17956 - 0.90815I$	$4.85874 + 1.33440I$
$u = -0.609189 - 0.322877I$ $a = 0.730128 + 0.841386I$ $b = -0.206405 - 0.511932I$	$1.17956 + 0.90815I$	$4.85874 - 1.33440I$
$u = -1.39358$ $a = 0.388481$ $b = -0.879243$	3.32984	1.51140
$u = 1.45691 + 0.21847I$ $a = 0.750156 + 0.704154I$ $b = -0.975115 - 0.981574I$	$-0.73866 - 1.59783I$	$4.12138 + 1.54661I$

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 1.45691 - 0.21847I$ $a = 0.750156 - 0.704154I$ $b = -0.975115 + 0.981574I$	$-0.73866 + 1.59783I$	$4.12138 - 1.54661I$
$u = 0.094599 + 0.501708I$ $a = 0.412228 - 0.106777I$ $b = 0.620442 + 0.453397I$	$-0.91663 - 1.23074I$	$-2.16741 + 3.03279I$
$u = 0.094599 - 0.501708I$ $a = 0.412228 + 0.106777I$ $b = 0.620442 - 0.453397I$	$-0.91663 + 1.23074I$	$-2.16741 - 3.03279I$
$u = 1.55341 + 0.21071I$ $a = 0.57402 + 2.23414I$ $b = 0.84741 - 1.16742I$	$0.68963 + 12.60340I$	$5.72673 - 6.88576I$
$u = 1.55341 - 0.21071I$ $a = 0.57402 - 2.23414I$ $b = 0.84741 + 1.16742I$	$0.68963 - 12.60340I$	$5.72673 + 6.88576I$
$u = 1.57600 + 0.10063I$ $a = -0.61810 - 1.45739I$ $b = 0.193132 + 0.647212I$	$8.62226 + 2.51189I$	$5.75786 + 1.20779I$
$u = 1.57600 - 0.10063I$ $a = -0.61810 + 1.45739I$ $b = 0.193132 - 0.647212I$	$8.62226 - 2.51189I$	$5.75786 - 1.20779I$
$u = -1.60077 + 0.07995I$ $a = -0.19881 - 2.15189I$ $b = 0.524578 + 0.835989I$	$9.02564 - 5.69404I$	$7.72276 + 7.13841I$
$u = -1.60077 - 0.07995I$ $a = -0.19881 + 2.15189I$ $b = 0.524578 - 0.835989I$	$9.02564 + 5.69404I$	$7.72276 - 7.13841I$

II.

$$I_2^u = \langle 3u^9a+3u^9+\cdots-a+7,\ 2u^9a+3u^9+\cdots+3a+9,\ u^{10}+u^9+\cdots+u-1\rangle$$

(i) Arc colorings

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

$$a_9 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} 1 \\ -u^2 \end{pmatrix}$$

$$a_5 = \begin{pmatrix} u \\ -u^3+u \end{pmatrix}$$

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

$$a_2 = \begin{pmatrix} u^5-2u^3-u \\ -u^7+3u^5-2u^3+u \end{pmatrix}$$

$$a_1 = \begin{pmatrix} -u^9+4u^7-3u^5-2u^3-u \\ u^9-5u^7+7u^5-2u^3+u \end{pmatrix}$$

$$a_{12} = \begin{pmatrix} a \\ -\frac{3}{8}u^9a-\frac{3}{8}u^9+\cdots+\frac{1}{8}a-\frac{7}{8} \end{pmatrix}$$

$$a_8 = \begin{pmatrix} -\frac{3}{8}u^9a-\frac{3}{8}u^9+\cdots-\frac{7}{8}a-\frac{23}{8} \\ -\frac{3}{8}u^9a-\frac{3}{8}u^9+\cdots+\frac{1}{8}a+\frac{9}{8} \end{pmatrix}$$

$$a_7 = \begin{pmatrix} -2u^9-2u^8+8u^7+8u^6-8u^5-8u^4+2u^3+u^2-a-6u-3 \\ -\frac{3}{8}u^9a+\frac{13}{8}u^9+\cdots+\frac{1}{8}a-\frac{7}{8} \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} \frac{3}{8}u^9a+\frac{3}{8}u^9+\cdots+\frac{7}{8}a-\frac{1}{8} \\ -\frac{3}{4}u^9a-\frac{3}{4}u^9+\cdots+\frac{1}{4}a-\frac{3}{4} \end{pmatrix}$$

$$a_6 = \begin{pmatrix} -u^9+4u^7-3u^5-2u^3-u \\ u^9-u^8-4u^7+5u^6+3u^5-7u^4+2u^3+2u^2+u-1 \end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= 4u^8-20u^6+28u^4-4u^3-8u^2+8u+10$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$(u^{10}+13u^9+\cdots-7u+1)^2$
c_2, c_5	$(u^{10}+u^9+7u^8+6u^7+16u^6+11u^5+13u^4+6u^3+3u^2+u-1)^2$
c_3, c_4, c_9	$(u^{10}-u^9-5u^8+4u^7+8u^6-3u^5-5u^4-2u^3+3u^2-u-1)^2$
c_6, c_8, c_{10} c_{12}	$u^{20}+u^{19}+\cdots-u+2$
c_7, c_{11}	$u^{20}+u^{19}+\cdots+637u+1708$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$(y^{10} - 31y^9 + \cdots - 107y + 1)^2$
c_2, c_5	$(y^{10} + 13y^9 + \cdots - 7y + 1)^2$
c_3, c_4, c_9	$(y^{10} - 11y^9 + \cdots - 7y + 1)^2$
c_6, c_8, c_{10} c_{12}	$y^{20} + 7y^{19} + \cdots + 35y + 4$
c_7, c_{11}	$y^{20} - y^{19} + \cdots - 641473y + 2917264$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_2^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.510102 + 0.680941I$ $a = 1.03901 + 0.99672I$ $b = 1.030620 - 0.877048I$	$-7.43042 + 2.28632I$	$0.39779 - 2.91176I$
$u = 0.510102 + 0.680941I$ $a = 0.139978 - 0.495824I$ $b = -1.064860 - 0.795059I$	$-7.43042 + 2.28632I$	$0.39779 - 2.91176I$
$u = 0.510102 - 0.680941I$ $a = 1.03901 - 0.99672I$ $b = 1.030620 + 0.877048I$	$-7.43042 - 2.28632I$	$0.39779 + 2.91176I$
$u = 0.510102 - 0.680941I$ $a = 0.139978 + 0.495824I$ $b = -1.064860 + 0.795059I$	$-7.43042 - 2.28632I$	$0.39779 + 2.91176I$
$u = -0.449833 + 0.459351I$ $a = -0.646997 - 0.974683I$ $b = -0.210455 - 0.300293I$	$1.43061 - 1.60532I$	$0.94346 + 5.03395I$
$u = -0.449833 + 0.459351I$ $a = 1.22866 - 0.93250I$ $b = 0.057050 + 1.133970I$	$1.43061 - 1.60532I$	$0.94346 + 5.03395I$
$u = -0.449833 - 0.459351I$ $a = -0.646997 + 0.974683I$ $b = -0.210455 + 0.300293I$	$1.43061 + 1.60532I$	$0.94346 - 5.03395I$
$u = -0.449833 - 0.459351I$ $a = 1.22866 + 0.93250I$ $b = 0.057050 - 1.133970I$	$1.43061 + 1.60532I$	$0.94346 - 5.03395I$
$u = 1.50079 + 0.11328I$ $a = 0.415489 - 0.034479I$ $b = 0.528203 - 0.415736I$	$7.87146 + 3.55946I$	$5.64226 - 4.06361I$
$u = 1.50079 + 0.11328I$ $a = -0.70682 - 2.20481I$ $b = -0.107369 + 1.258670I$	$7.87146 + 3.55946I$	$5.64226 - 4.06361I$

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 1.50079 - 0.11328I$ $a = 0.415489 + 0.034479I$ $b = 0.528203 + 0.415736I$	$7.87146 - 3.55946I$	$5.64226 + 4.06361I$
$u = 1.50079 - 0.11328I$ $a = -0.70682 + 2.20481I$ $b = -0.107369 - 1.258670I$	$7.87146 - 3.55946I$	$5.64226 + 4.06361I$
$u = -1.50960$ $a = 0.93389 + 2.29683I$ $b = 0.317795 - 1.141480I$	10.4232	10.0490
$u = -1.50960$ $a = 0.93389 - 2.29683I$ $b = 0.317795 + 1.141480I$	10.4232	10.0490
$u = -1.51481 + 0.22020I$ $a = -0.956858 + 0.125386I$ $b = 1.093790 - 0.701969I$	$-0.80829 - 5.55652I$	$3.79190 + 2.88175I$
$u = -1.51481 + 0.22020I$ $a = -0.21158 + 1.73958I$ $b = -0.985922 - 0.960677I$	$-0.80829 - 5.55652I$	$3.79190 + 2.88175I$
$u = -1.51481 - 0.22020I$ $a = -0.956858 - 0.125386I$ $b = 1.093790 + 0.701969I$	$-0.80829 + 5.55652I$	$3.79190 - 2.88175I$
$u = -1.51481 - 0.22020I$ $a = -0.21158 - 1.73958I$ $b = -0.985922 + 0.960677I$	$-0.80829 + 5.55652I$	$3.79190 - 2.88175I$
$u = 0.417104$ $a = -2.73478 + 2.69676I$ $b = -0.158842 - 1.037160I$	3.89939	12.4010
$u = 0.417104$ $a = -2.73478 - 2.69676I$ $b = -0.158842 + 1.037160I$	3.89939	12.4010

III. $\boldsymbol{I^u_3 =}$
$\boldsymbol{\langle -u^7+4u^5-4u^3+b,\ u^7-3u^5+u^4+u^3-3u^2+a+2u+1,\ u^8-5u^6+7u^4-2u^2+1\rangle}$

(i) Arc colorings

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

$$a_9 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} 1 \\ -u^2 \end{pmatrix}$$

$$a_5 = \begin{pmatrix} u \\ -u^3 + u \end{pmatrix}$$

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

$$a_2 = \begin{pmatrix} u^5 - 2u^3 - u \\ -u^7 + 3u^5 - 2u^3 + u \end{pmatrix}$$

$$a_1 = \begin{pmatrix} -u^7 + 4u^5 - 4u^3 \\ 0 \end{pmatrix}$$

$$a_{12} = \begin{pmatrix} -u^7 + 3u^5 - u^4 - u^3 + 3u^2 - 2u - 1 \\ u^7 - 4u^5 + 4u^3 \end{pmatrix}$$

$$a_8 = \begin{pmatrix} u^6 - 4u^4 - u^3 + 4u^2 + 2u - 1 \\ 1 \end{pmatrix}$$

$$a_7 = \begin{pmatrix} u^7 - 3u^5 - u^4 + u^3 + 3u^2 + 2u - 1 \\ -u^7 + u^6 + 2u^5 - 3u^4 + u^2 + u \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} u^6 - 4u^4 + u^3 + 4u^2 - 2u - 1 \\ -u^6 - u^5 + 3u^4 + 2u^3 - u^2 \end{pmatrix}$$

$$a_6 = \begin{pmatrix} u^7 - 4u^5 + 4u^3 \\ -u^7 + 3u^5 - 2u^3 + u \end{pmatrix}$$

(ii) Obstruction class $= 1$

(iii) Cusp Shapes $= -4u^6 + 16u^4 - 16u^2 + 12$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$(u^4 - u^3 + 3u^2 - 2u + 1)^2$
c_2	$(u^4 - u^3 + u^2 + 1)^2$
c_3, c_4, c_9	$u^8 - 5u^6 + 7u^4 - 2u^2 + 1$
c_5	$(u^4 + u^3 + u^2 + 1)^2$
c_6, c_8, c_{10} c_{12}	$(u^2 + 1)^4$
c_7	$u^8 - 6u^7 + 20u^6 - 52u^5 + 97u^4 - 112u^3 + 87u^2 - 62u + 29$
c_{11}	$u^8 + 6u^7 + 20u^6 + 52u^5 + 97u^4 + 112u^3 + 87u^2 + 62u + 29$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$(y^4+5y^3+7y^2+2y+1)^2$
c_2, c_5	$(y^4+y^3+3y^2+2y+1)^2$
c_3, c_4, c_9	$(y^4-5y^3+7y^2-2y+1)^2$
c_6, c_8, c_{10} c_{12}	$(y+1)^8$
c_7, c_{11}	$y^8+4y^7-30y^6+6y^5+555y^4-954y^3-693y^2+1202y+841$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_3^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.506844 + 0.395123I$ $a = -1.77461 + 0.07756I$ $b = 1.000000I$	$3.07886 + 1.41510I$	$8.17326 - 4.90874I$
$u = 0.506844 - 0.395123I$ $a = -1.77461 - 0.07756I$ $b = -1.000000I$	$3.07886 - 1.41510I$	$8.17326 + 4.90874I$
$u = -0.506844 + 0.395123I$ $a = 0.67976 - 2.16419I$ $b = 1.000000I$	$3.07886 - 1.41510I$	$8.17326 + 4.90874I$
$u = -0.506844 - 0.395123I$ $a = 0.67976 + 2.16419I$ $b = -1.000000I$	$3.07886 + 1.41510I$	$8.17326 - 4.90874I$
$u = 1.55249 + 0.10488I$ $a = -0.09378 - 2.54234I$ $b = 1.000000I$	$10.08060 + 3.16396I$	$11.82674 - 2.56480I$
$u = 1.55249 - 0.10488I$ $a = -0.09378 + 2.54234I$ $b = -1.000000I$	$10.08060 - 3.16396I$	$11.82674 + 2.56480I$
$u = -1.55249 + 0.10488I$ $a = 1.18862 - 1.37103I$ $b = 1.000000I$	$10.08060 - 3.16396I$	$11.82674 + 2.56480I$
$u = -1.55249 - 0.10488I$ $a = 1.18862 + 1.37103I$ $b = -1.000000I$	$10.08060 + 3.16396I$	$11.82674 - 2.56480I$

IV. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1	$((u^4 - u^3 + 3u^2 - 2u + 1)^2)(u^{10} + 13u^9 + \cdots - 7u + 1)^2$ $\cdot (u^{19} + 15u^{18} + \cdots + 5217u - 64)$
c_2	$(u^4 - u^3 + u^2 + 1)^2$ $\cdot (u^{10} + u^9 + 7u^8 + 6u^7 + 16u^6 + 11u^5 + 13u^4 + 6u^3 + 3u^2 + u - 1)^2$ $\cdot (u^{19} + 3u^{18} + \cdots + 55u - 8)$
c_3, c_4, c_9	$(u^8 - 5u^6 + 7u^4 - 2u^2 + 1)$ $\cdot (u^{10} - u^9 - 5u^8 + 4u^7 + 8u^6 - 3u^5 - 5u^4 - 2u^3 + 3u^2 - u - 1)^2$ $\cdot (u^{19} + 3u^{18} + \cdots + u - 2)$
c_5	$(u^4 + u^3 + u^2 + 1)^2$ $\cdot (u^{10} + u^9 + 7u^8 + 6u^7 + 16u^6 + 11u^5 + 13u^4 + 6u^3 + 3u^2 + u - 1)^2$ $\cdot (u^{19} + 3u^{18} + \cdots + 55u - 8)$
c_6, c_8, c_{10} c_{12}	$((u^2 + 1)^4)(u^{19} + 2u^{17} + \cdots - 4u^2 - 1)(u^{20} + u^{19} + \cdots - u + 2)$
c_7	$(u^8 - 6u^7 + 20u^6 - 52u^5 + 97u^4 - 112u^3 + 87u^2 - 62u + 29)$ $\cdot (u^{19} + 4u^{18} + \cdots - 20u + 7)(u^{20} + u^{19} + \cdots + 637u + 1708)$
c_{11}	$(u^8 + 6u^7 + 20u^6 + 52u^5 + 97u^4 + 112u^3 + 87u^2 + 62u + 29)$ $\cdot (u^{19} + 4u^{18} + \cdots - 20u + 7)(u^{20} + u^{19} + \cdots + 637u + 1708)$

V. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1	$((y^4+5y^3+7y^2+2y+1)^2)(y^{10}-31y^9+\cdots-107y+1)^2$ $\cdot(y^{19}-21y^{18}+\cdots+25516865y-4096)$
c_2, c_5	$((y^4+y^3+3y^2+2y+1)^2)(y^{10}+13y^9+\cdots-7y+1)^2$ $\cdot(y^{19}+15y^{18}+\cdots+5217y-64)$
c_3, c_4, c_9	$((y^4-5y^3+7y^2-2y+1)^2)(y^{10}-11y^9+\cdots-7y+1)^2$ $\cdot(y^{19}-21y^{18}+\cdots-3y-4)$
c_6, c_8, c_{10} c_{12}	$((y+1)^8)(y^{19}+4y^{18}+\cdots-8y-1)(y^{20}+7y^{19}+\cdots+35y+4)$
c_7, c_{11}	$(y^8+4y^7-30y^6+6y^5+555y^4-954y^3-693y^2+1202y+841)$ $\cdot(y^{19}+20y^{18}+\cdots-818y-49)$ $\cdot(y^{20}-y^{19}+\cdots-641473y+2917264)$