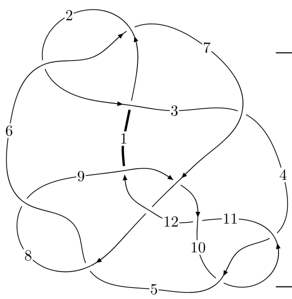
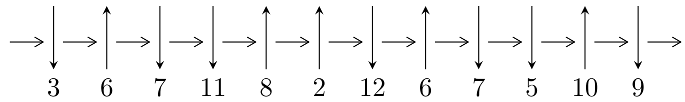
$12n_{0312}$ ($K12n_{0312}$)



A knot diagram[1]

Linearized knot diagam



Solving Sequence

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

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

$$\begin{aligned} I_1^u = \langle & -5.27353 \times 10^{50} u^{39} + 5.95554 \times 10^{50} u^{38} + \cdots + 5.81254 \times 10^{51} b + 4.59993 \times 10^{51}, \\ & 7.75948 \times 10^{50} u^{39} - 3.86755 \times 10^{51} u^{38} + \cdots + 5.81254 \times 10^{51} a - 9.39756 \times 10^{51},\ u^{40} - 2u^{39} + \cdots + 7u + 1 \\ I_2^u = \langle & 2u^{14} - u^{13} + 8u^{12} - 5u^{11} + 19u^{10} - 13u^9 + 27u^8 - 16u^7 + 28u^6 - 9u^5 + 20u^4 + u^3 + 10u^2 + b + 2u + 2, \\ & u^{15} - 2u^{14} + \cdots + a - 2,\ u^{16} - u^{15} + \cdots - u + 1 \rangle \end{aligned}$$

* 2 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 56 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.
$\boldsymbol{I_1^u = \langle -5.27\times10^{50}u^{39}+5.96\times10^{50}u^{38}+\cdots+5.81\times10^{51}b+4.60\times10^{51},\ 7.76\times10^{50}u^{39}-3.87\times10^{51}u^{38}+\cdots+5.81\times10^{51}a-9.40\times10^{51},\ u^{40}-2u^{39}+\cdots+7u+1\rangle}$

(i) Arc colorings

$$a_2 = \begin{pmatrix}1\\0\end{pmatrix}$$
$$a_6 = \begin{pmatrix}0\\u\end{pmatrix}$$
$$a_3 = \begin{pmatrix}1\\-u^2\end{pmatrix}$$
$$a_7 = \begin{pmatrix}u\\u\end{pmatrix}$$
$$a_4 = \begin{pmatrix}u^4+u^2+1\\u^4\end{pmatrix}$$
$$a_9 = \begin{pmatrix}-0.133496u^{39}+0.665380u^{38}+\cdots+15.0043u+1.61677\\0.0907267u^{39}-0.102460u^{38}+\cdots+0.430261u-0.791380\end{pmatrix}$$
$$a_{10} = \begin{pmatrix}-0.224885u^{39}+0.863520u^{38}+\cdots+12.9927u+1.29738\\-0.000662998u^{39}+0.0956792u^{38}+\cdots-1.58129u-1.11078\end{pmatrix}$$
$$a_1 = \begin{pmatrix}u^2+1\\-u^4\end{pmatrix}$$
$$a_8 = \begin{pmatrix}-0.133496u^{39}+0.665380u^{38}+\cdots+15.0043u+1.61677\\-0.100609u^{39}+0.340183u^{38}+\cdots-2.22497u-1.18977\end{pmatrix}$$
$$a_5 = \begin{pmatrix}1.39954u^{39}-3.02014u^{38}+\cdots+26.1706u+4.28089\\0.281992u^{39}-0.623894u^{38}+\cdots+2.36583u+0.204479\end{pmatrix}$$
$$a_{12} = \begin{pmatrix}-0.0433203u^{39}+0.378199u^{38}+\cdots+15.8786u+2.05202\\0.483864u^{39}-1.27646u^{38}+\cdots-0.426089u-1.03092\end{pmatrix}$$
$$a_{11} = \begin{pmatrix}-2.08778u^{39}+5.36211u^{38}+\cdots-10.8586u-2.03985\\-0.147373u^{39}+0.395336u^{38}+\cdots-2.10105u-0.958378\end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= 4.30999u^{39}-10.1429u^{38}+\cdots+42.2706u+1.05077$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{40} + 6u^{39} + \cdots + 23u + 1$
c_2, c_6	$u^{40} - 2u^{39} + \cdots + 7u + 1$
c_3	$u^{40} + 5u^{39} + \cdots + 5688833u + 456713$
c_4, c_{10}	$u^{40} + 13u^{38} + \cdots - 4u + 7$
c_5, c_8	$u^{40} + u^{39} + \cdots + 4497u + 361$
c_7	$u^{40} + 3u^{39} + \cdots - 4u + 1$
c_9	$u^{40} - 5u^{39} + \cdots - 361724u + 608312$
c_{11}	$u^{40} - 26u^{39} + \cdots - 362u + 49$
c_{12}	$u^{40} - u^{39} + \cdots - 3750504u + 772753$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{40} + 66y^{39} + \cdots - 193y + 1$
c_2, c_6	$y^{40} + 6y^{39} + \cdots + 23y + 1$
c_3	$y^{40} + 123y^{39} + \cdots + 6314489480935y + 208586764369$
c_4, c_{10}	$y^{40} + 26y^{39} + \cdots + 362y + 49$
c_5, c_8	$y^{40} - 59y^{39} + \cdots + 134503y + 130321$
c_7	$y^{40} - y^{39} + \cdots + 8y + 1$
c_9	$y^{40} + 53y^{39} + \cdots + 1499383242864y + 370043489344$
c_{11}	$y^{40} - 18y^{39} + \cdots - 40394y + 2401$
c_{12}	$y^{40} + 77y^{39} + \cdots - 906264208390y + 597147199009$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.262608 + 0.958166I$ $a = -0.189880 + 0.941685I$ $b = 0.00591 + 1.77956I$	$-0.43866 + 2.24384I$	$-3.81906 - 5.12194I$
$u = 0.262608 - 0.958166I$ $a = -0.189880 - 0.941685I$ $b = 0.00591 - 1.77956I$	$-0.43866 - 2.24384I$	$-3.81906 + 5.12194I$
$u = 0.926209 + 0.156398I$ $a = 0.217139 + 0.674278I$ $b = 0.392314 - 0.960986I$	$2.50089 + 2.28563I$	$2.12764 - 2.97233I$
$u = 0.926209 - 0.156398I$ $a = 0.217139 - 0.674278I$ $b = 0.392314 + 0.960986I$	$2.50089 - 2.28563I$	$2.12764 + 2.97233I$
$u = -0.415141 + 0.823170I$ $a = -0.510209 - 1.251400I$ $b = 0.404330 - 0.813064I$	$4.59855 + 0.55508I$	$3.65213 + 0.54524I$
$u = -0.415141 - 0.823170I$ $a = -0.510209 + 1.251400I$ $b = 0.404330 + 0.813064I$	$4.59855 - 0.55508I$	$3.65213 - 0.54524I$
$u = -0.709121 + 0.812210I$ $a = 0.656724 + 0.475234I$ $b = 0.73014 + 1.50996I$	$4.83926 - 5.18733I$	$5.25176 + 6.54277I$
$u = -0.709121 - 0.812210I$ $a = 0.656724 - 0.475234I$ $b = 0.73014 - 1.50996I$	$4.83926 + 5.18733I$	$5.25176 - 6.54277I$
$u = 0.319846 + 1.045980I$ $a = 0.260908 + 0.248366I$ $b = -0.336124 - 0.552993I$	$-1.70481 + 5.48650I$	$-4.87092 - 6.70893I$
$u = 0.319846 - 1.045980I$ $a = 0.260908 - 0.248366I$ $b = -0.336124 + 0.552993I$	$-1.70481 - 5.48650I$	$-4.87092 + 6.70893I$

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.751933 + 0.494508I$ $a = 1.392250 + 0.221845I$ $b = 0.514073 - 0.795694I$	$1.51098 + 1.78901I$	$0.82025 - 3.56687I$
$u = 0.751933 - 0.494508I$ $a = 1.392250 - 0.221845I$ $b = 0.514073 + 0.795694I$	$1.51098 - 1.78901I$	$0.82025 + 3.56687I$
$u = -0.297122 + 0.826943I$ $a = -0.493050 + 0.530886I$ $b = -0.409100 - 0.824445I$	$-2.88688 - 1.42829I$	$-8.07911 - 0.82991I$
$u = -0.297122 - 0.826943I$ $a = -0.493050 - 0.530886I$ $b = -0.409100 + 0.824445I$	$-2.88688 + 1.42829I$	$-8.07911 + 0.82991I$
$u = 0.294371 + 0.826929I$ $a = 0.378431 + 0.565801I$ $b = 0.768928 + 0.890271I$	$-0.24576 + 1.84711I$	$-2.38841 - 3.47069I$
$u = 0.294371 - 0.826929I$ $a = 0.378431 - 0.565801I$ $b = 0.768928 - 0.890271I$	$-0.24576 - 1.84711I$	$-2.38841 + 3.47069I$
$u = -1.054610 + 0.435101I$ $a = -1.58864 + 0.59883I$ $b = -0.25725 - 1.66736I$	$4.29616 - 5.85650I$	$5.18701 + 8.29672I$
$u = -1.054610 - 0.435101I$ $a = -1.58864 - 0.59883I$ $b = -0.25725 + 1.66736I$	$4.29616 + 5.85650I$	$5.18701 - 8.29672I$
$u = 0.454261 + 1.183960I$ $a = 0.032608 + 0.790796I$ $b = 0.87425 + 1.29247I$	$-0.78848 + 2.37152I$	$-2.00000 + 0.I$
$u = 0.454261 - 1.183960I$ $a = 0.032608 - 0.790796I$ $b = 0.87425 - 1.29247I$	$-0.78848 - 2.37152I$	$-2.00000 + 0.I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 1.12042 + 0.91969I$ $a = -1.129020 + 0.673147I$ $b = -0.30929 + 1.59265I$	$16.0958 + 2.3517I$	0
$u = 1.12042 - 0.91969I$ $a = -1.129020 - 0.673147I$ $b = -0.30929 - 1.59265I$	$16.0958 - 2.3517I$	0
$u = -1.04883 + 1.00662I$ $a = -0.943173 - 0.988165I$ $b = 0.16566 - 1.65850I$	$11.50030 + 0.22277I$	0
$u = -1.04883 - 1.00662I$ $a = -0.943173 + 0.988165I$ $b = 0.16566 + 1.65850I$	$11.50030 - 0.22277I$	0
$u = -1.01766 + 1.04986I$ $a = 1.113840 + 0.762342I$ $b = 0.69672 + 2.05244I$	$11.34810 - 7.79886I$	0
$u = -1.01766 - 1.04986I$ $a = 1.113840 - 0.762342I$ $b = 0.69672 - 2.05244I$	$11.34810 + 7.79886I$	0
$u = -0.407119 + 0.328791I$ $a = 1.96312 + 0.79373I$ $b = 1.54195 - 0.43951I$	$1.42527 - 5.22858I$	$-1.53718 + 8.98097I$
$u = -0.407119 - 0.328791I$ $a = 1.96312 - 0.79373I$ $b = 1.54195 + 0.43951I$	$1.42527 + 5.22858I$	$-1.53718 - 8.98097I$
$u = -0.87350 + 1.19690I$ $a = -0.196741 + 0.749309I$ $b = -2.00712 + 0.06148I$	$0.46508 - 3.72342I$	0
$u = -0.87350 - 1.19690I$ $a = -0.196741 - 0.749309I$ $b = -2.00712 - 0.06148I$	$0.46508 + 3.72342I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.96551 + 1.14045I$ $a = 0.808271 - 0.969514I$ $b = 0.22694 - 1.92160I$	$15.3328 + 5.2849I$	0
$u = 0.96551 - 1.14045I$ $a = 0.808271 + 0.969514I$ $b = 0.22694 + 1.92160I$	$15.3328 - 5.2849I$	0
$u = -0.455563 + 0.075943I$ $a = -3.41002 + 0.16418I$ $b = -0.022227 - 0.704888I$	$4.54784 + 1.17562I$	$6.58243 - 1.22324I$
$u = -0.455563 - 0.075943I$ $a = -3.41002 - 0.16418I$ $b = -0.022227 + 0.704888I$	$4.54784 - 1.17562I$	$6.58243 + 1.22324I$
$u = 1.03222 + 1.17188I$ $a = -1.053170 + 0.792325I$ $b = -0.64032 + 2.51487I$	$15.1921 + 13.6048I$	0
$u = 1.03222 - 1.17188I$ $a = -1.053170 - 0.792325I$ $b = -0.64032 - 2.51487I$	$15.1921 - 13.6048I$	0
$u = 1.22561 + 0.99201I$ $a = 1.019900 - 0.871315I$ $b = -0.68980 - 1.82950I$	$15.9053 - 5.4238I$	0
$u = 1.22561 - 0.99201I$ $a = 1.019900 + 0.871315I$ $b = -0.68980 + 1.82950I$	$15.9053 + 5.4238I$	0
$u = -0.074323 + 0.230026I$ $a = -0.32928 + 2.47850I$ $b = -1.149970 - 0.375487I$	$-1.50780 - 0.09249I$	$-7.98485 - 1.09942I$
$u = -0.074323 - 0.230026I$ $a = -0.32928 - 2.47850I$ $b = -1.149970 + 0.375487I$	$-1.50780 + 0.09249I$	$-7.98485 + 1.09942I$

II.

$$\boldsymbol{I^u_2 = \langle 2u^{14} - u^{13} + \cdots + b + 2,\ u^{15} - 2u^{14} + \cdots + a - 2,\ u^{16} - u^{15} + \cdots - u + 1\rangle}$$

(i) Arc colorings

$$a_2 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$
$$a_6 = \begin{pmatrix} 0 \\ u \end{pmatrix}$$
$$a_3 = \begin{pmatrix} 1 \\ -u^2 \end{pmatrix}$$
$$a_7 = \begin{pmatrix} u \\ u \end{pmatrix}$$
$$a_4 = \begin{pmatrix} u^4 + u^2 + 1 \\ u^4 \end{pmatrix}$$
$$a_9 = \begin{pmatrix} -u^{15} + 2u^{14} + \cdots - 7u + 2 \\ -2u^{14} + u^{13} + \cdots - 2u - 2 \end{pmatrix}$$
$$a_{10} = \begin{pmatrix} -u^{14} - 4u^{12} + \cdots - 3u - 1 \\ u^{15} - 5u^{14} + \cdots + 2u - 5 \end{pmatrix}$$
$$a_1 = \begin{pmatrix} u^2 + 1 \\ -u^4 \end{pmatrix}$$
$$a_8 = \begin{pmatrix} -u^{15} + 2u^{14} + \cdots - 7u + 2 \\ -3u^{14} + 2u^{13} + \cdots - 15u^2 - 3 \end{pmatrix}$$
$$a_5 = \begin{pmatrix} 2u^{15} - 5u^{14} + \cdots + 11u - 5 \\ -2u^{15} + 4u^{14} + \cdots - 3u + 4 \end{pmatrix}$$
$$a_{12} = \begin{pmatrix} u^{15} + 4u^{13} + \cdots + u + 5 \\ u^{14} + 4u^{12} + \cdots + 13u^2 + 4 \end{pmatrix}$$
$$a_{11} = \begin{pmatrix} 6u^{15} - 4u^{14} + \cdots + 8u + 4 \\ 5u^{15} - 7u^{14} + \cdots + 11u - 5 \end{pmatrix}$$

(ii) Obstruction class $= 1$

(iii) Cusp Shapes $= -14u^{15} + 22u^{14} - 69u^{13} + 102u^{12} - 195u^{11} + 266u^{10} - 354u^9 + 393u^8 - 428u^7 + 384u^6 - 338u^5 + 239u^4 - 155u^3 + 106u^2 - 38u + 19$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{16} - 9u^{15} + \cdots - 11u + 1$
c_2	$u^{16} - u^{15} + \cdots - u + 1$
c_3	$u^{16} - 2u^{15} + \cdots + u + 1$
c_4	$u^{16} + u^{15} + \cdots + 3u^2 + 1$
c_5	$u^{16} - 6u^{14} + \cdots + u + 1$
c_6	$u^{16} + u^{15} + \cdots + u + 1$
c_7	$u^{16} + 2u^{15} + \cdots + 2u + 1$
c_8	$u^{16} - 6u^{14} + \cdots - u + 1$
c_9	$u^{16} + 4u^{15} + \cdots + 6u + 1$
c_{10}	$u^{16} - u^{15} + \cdots + 3u^2 + 1$
c_{11}	$u^{16} - 9u^{15} + \cdots - 6u + 1$
c_{12}	$u^{16} - 2u^{15} + \cdots - 2u + 1$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{16} + 5y^{15} + \cdots - 5y + 1$
c_2, c_6	$y^{16} + 9y^{15} + \cdots + 11y + 1$
c_3	$y^{16} - 2y^{15} + \cdots + 23y + 1$
c_4, c_{10}	$y^{16} + 9y^{15} + \cdots + 6y + 1$
c_5, c_8	$y^{16} - 12y^{15} + \cdots - 17y + 1$
c_7	$y^{16} - 6y^{15} + \cdots - 12y + 1$
c_9	$y^{16} + 4y^{15} + \cdots - 2y + 1$
c_{11}	$y^{16} + y^{15} + \cdots + 2y + 1$
c_{12}	$y^{16} - 12y^{15} + \cdots - 6y + 1$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.929391 + 0.578619I$ $a = 1.120080 + 0.128738I$ $b = 0.91178 - 1.33839I$	$3.21916 + 5.01414I$	$0.26989 - 5.16816I$
$u = 0.929391 - 0.578619I$ $a = 1.120080 - 0.128738I$ $b = 0.91178 + 1.33839I$	$3.21916 - 5.01414I$	$0.26989 + 5.16816I$
$u = -0.451615 + 1.007870I$ $a = 0.338249 + 0.437888I$ $b = 0.231634 - 0.176676I$	$-2.35639 - 2.66812I$	$-6.05034 + 3.60958I$
$u = -0.451615 - 1.007870I$ $a = 0.338249 - 0.437888I$ $b = 0.231634 + 0.176676I$	$-2.35639 + 2.66812I$	$-6.05034 - 3.60958I$
$u = 0.396309 + 1.073370I$ $a = -0.565280 + 0.711972I$ $b = -1.052300 + 0.412205I$	$-0.63819 + 7.12816I$	$-3.20870 - 8.22524I$
$u = 0.396309 - 1.073370I$ $a = -0.565280 - 0.711972I$ $b = -1.052300 - 0.412205I$	$-0.63819 - 7.12816I$	$-3.20870 + 8.22524I$
$u = -0.462450 + 0.682292I$ $a = -0.332664 - 0.550280I$ $b = -0.85241 - 1.25415I$	$-1.24504 - 1.12270I$	$-5.33111 + 3.33125I$
$u = -0.462450 - 0.682292I$ $a = -0.332664 + 0.550280I$ $b = -0.85241 + 1.25415I$	$-1.24504 + 1.12270I$	$-5.33111 - 3.33125I$
$u = 0.255308 + 0.671839I$ $a = -0.033499 - 1.285680I$ $b = 0.94036 - 1.49852I$	$0.99305 - 4.20394I$	$-1.88003 + 3.39974I$
$u = 0.255308 - 0.671839I$ $a = -0.033499 + 1.285680I$ $b = 0.94036 + 1.49852I$	$0.99305 + 4.20394I$	$-1.88003 - 3.39974I$

Solutions to I_2^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.485789 + 1.201540I$ $a = -0.150894 + 1.067090I$ $b = 0.29348 + 1.84901I$	$0.487588 + 0.633074I$	$-0.204988 - 0.217129I$
$u = 0.485789 - 1.201540I$ $a = -0.150894 - 1.067090I$ $b = 0.29348 - 1.84901I$	$0.487588 - 0.633074I$	$-0.204988 + 0.217129I$
$u = 0.030701 + 0.695739I$ $a = -0.07548 - 2.07079I$ $b = 0.336792 - 0.535431I$	$3.73407 + 1.39379I$	$-4.07877 - 4.94416I$
$u = 0.030701 - 0.695739I$ $a = -0.07548 + 2.07079I$ $b = 0.336792 + 0.535431I$	$3.73407 - 1.39379I$	$-4.07877 + 4.94416I$
$u = -0.683433 + 1.166390I$ $a = -0.300514 + 0.906230I$ $b = -1.80932 + 0.74833I$	$-0.90438 - 3.31503I$	$-5.01594 + 7.05179I$
$u = -0.683433 - 1.166390I$ $a = -0.300514 - 0.906230I$ $b = -1.80932 - 0.74833I$	$-0.90438 + 3.31503I$	$-5.01594 - 7.05179I$

III. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1	$(u^{16} - 9u^{15} + \cdots - 11u + 1)(u^{40} + 6u^{39} + \cdots + 23u + 1)$
c_2	$(u^{16} - u^{15} + \cdots - u + 1)(u^{40} - 2u^{39} + \cdots + 7u + 1)$
c_3	$(u^{16} - 2u^{15} + \cdots + u + 1)(u^{40} + 5u^{39} + \cdots + 5688833u + 456713)$
c_4	$(u^{16} + u^{15} + \cdots + 3u^2 + 1)(u^{40} + 13u^{38} + \cdots - 4u + 7)$
c_5	$(u^{16} - 6u^{14} + \cdots + u + 1)(u^{40} + u^{39} + \cdots + 4497u + 361)$
c_6	$(u^{16} + u^{15} + \cdots + u + 1)(u^{40} - 2u^{39} + \cdots + 7u + 1)$
c_7	$(u^{16} + 2u^{15} + \cdots + 2u + 1)(u^{40} + 3u^{39} + \cdots - 4u + 1)$
c_8	$(u^{16} - 6u^{14} + \cdots - u + 1)(u^{40} + u^{39} + \cdots + 4497u + 361)$
c_9	$(u^{16} + 4u^{15} + \cdots + 6u + 1)(u^{40} - 5u^{39} + \cdots - 361724u + 608312)$
c_{10}	$(u^{16} - u^{15} + \cdots + 3u^2 + 1)(u^{40} + 13u^{38} + \cdots - 4u + 7)$
c_{11}	$(u^{16} - 9u^{15} + \cdots - 6u + 1)(u^{40} - 26u^{39} + \cdots - 362u + 49)$
c_{12}	$(u^{16} - 2u^{15} + \cdots - 2u + 1)(u^{40} - u^{39} + \cdots - 3750504u + 772753)$

IV. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1	$(y^{16}+5y^{15}+\cdots-5y+1)(y^{40}+66y^{39}+\cdots-193y+1)$
c_2, c_6	$(y^{16}+9y^{15}+\cdots+11y+1)(y^{40}+6y^{39}+\cdots+23y+1)$
c_3	$(y^{16}-2y^{15}+\cdots+23y+1)$ $\cdot(y^{40}+123y^{39}+\cdots+6314489480935y+208586764369)$
c_4, c_{10}	$(y^{16}+9y^{15}+\cdots+6y+1)(y^{40}+26y^{39}+\cdots+362y+49)$
c_5, c_8	$(y^{16}-12y^{15}+\cdots-17y+1)(y^{40}-59y^{39}+\cdots+134503y+130321)$
c_7	$(y^{16}-6y^{15}+\cdots-12y+1)(y^{40}-y^{39}+\cdots+8y+1)$
c_9	$(y^{16}+4y^{15}+\cdots-2y+1)$ $\cdot(y^{40}+53y^{39}+\cdots+1499383242864y+370043489344)$
c_{11}	$(y^{16}+y^{15}+\cdots+2y+1)(y^{40}-18y^{39}+\cdots-40394y+2401)$
c_{12}	$(y^{16}-12y^{15}+\cdots-6y+1)$ $\cdot(y^{40}+77y^{39}+\cdots-906264208390y+597147199009)$