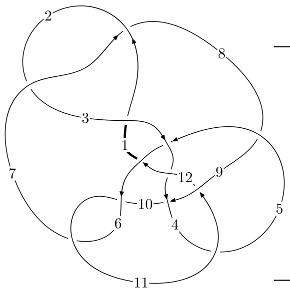
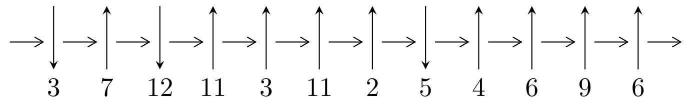
$12n_{0617}$ ($K12n_{0617}$)



A knot diagram[1]

Linearized knot diagam



Solving Sequence

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

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

$$\begin{aligned}
I_1^u = \langle & -4.03528 \times 10^{29} u^{18} + 2.20603 \times 10^{29} u^{17} + \cdots + 1.42881 \times 10^{32} b - 1.94886 \times 10^{32}, \\
& -1.72871 \times 10^{32} u^{18} + 8.76867 \times 10^{31} u^{17} + \cdots + 4.27215 \times 10^{34} a - 1.13938 \times 10^{35}, \\
& u^{19} + 7u^{17} + \cdots + 1241u + 299 \rangle \\
I_2^u = \langle & 341324 u^{18} + 743649 u^{17} + \cdots + 1775197 b - 6939035, \\
& -4528372 u^{18} - 453288 u^{17} + \cdots + 5325591 a - 8838485,\ u^{19} + 9u^{17} + \cdots + 5u - 3 \rangle \\
I_3^u = \langle & b + 1,\ a + u + 1,\ u^2 + u + 1 \rangle
\end{aligned}$$

* 3 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 40 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. $\boldsymbol{I_1^u = \langle -4.04\times 10^{29}u^{18} + 2.21\times 10^{29}u^{17} + \cdots + 1.43\times 10^{32}b - 1.95\times 10^{32},\ -1.73\times 10^{32}u^{18} + 8.77\times 10^{31}u^{17} + \cdots + 4.27\times 10^{34}a - 1.14\times 10^{35},\ u^{19} + 7u^{17} + \cdots + 1241u + 299\rangle}$

(i) Arc colorings

$$a_3 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$
$$a_7 = \begin{pmatrix} 0 \\ u \end{pmatrix}$$
$$a_2 = \begin{pmatrix} 1 \\ u^2 \end{pmatrix}$$
$$a_8 = \begin{pmatrix} u \\ u^3 + u \end{pmatrix}$$
$$a_1 = \begin{pmatrix} u^2 + 1 \\ u^2 \end{pmatrix}$$
$$a_{11} = \begin{pmatrix} 0.00404647u^{18} - 0.00205252u^{17} + \cdots + 5.01173u + 2.66701 \\ 0.00282422u^{18} - 0.00154396u^{17} + \cdots + 3.08557u + 1.36397 \end{pmatrix}$$
$$a_6 = \begin{pmatrix} 0.00155291u^{18} - 0.00147152u^{17} + \cdots + 1.33246u + 0.620489 \\ 0.0000864825u^{18} - 0.0000717914u^{17} + \cdots + 0.294414u - 0.189493 \end{pmatrix}$$
$$a_5 = \begin{pmatrix} 0.00146643u^{18} - 0.00139973u^{17} + \cdots + 1.03805u + 0.809982 \\ 0.0000864825u^{18} - 0.0000717914u^{17} + \cdots + 0.294414u - 0.189493 \end{pmatrix}$$
$$a_9 = \begin{pmatrix} 0.000967454u^{18} - 0.000263588u^{17} + \cdots + 2.28928u + 0.510179 \\ -0.00189360u^{18} + 0.00123884u^{17} + \cdots - 1.20770u - 0.672255 \end{pmatrix}$$
$$a_4 = \begin{pmatrix} -0.00114874u^{18} + 0.000504223u^{17} + \cdots - 2.10077u + 0.100181 \\ -0.00200460u^{18} + 0.00203579u^{17} + \cdots - 2.29498u - 0.839146 \end{pmatrix}$$
$$a_{10} = \begin{pmatrix} -0.00755089u^{18} + 0.00505904u^{17} + \cdots - 8.55381u - 3.61658 \\ -0.00579600u^{18} + 0.00405386u^{17} + \cdots - 6.14874u - 2.35891 \end{pmatrix}$$
$$a_{12} = \begin{pmatrix} 0.00349992u^{18} - 0.00250692u^{17} + \cdots + 4.15098u + 2.32935 \\ 0.00305515u^{18} - 0.00208189u^{17} + \cdots + 3.55304u + 1.16410 \end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= 0.0112722u^{18} - 0.00351862u^{17} + \cdots + 14.6963u + 17.4566$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{19} + 14u^{18} + \cdots + 674775u - 89401$
c_2, c_7	$u^{19} + 7u^{17} + \cdots + 1241u - 299$
c_3	$u^{19} - 5u^{18} + \cdots + 393u - 39$
c_4	$u^{19} - 39u^{17} + \cdots - 7472u + 3053$
c_5	$u^{19} - u^{18} + \cdots + 1014u - 111$
c_6, c_{10}	$u^{19} + 3u^{18} + \cdots - 360u + 108$
c_8	$u^{19} - 4u^{18} + \cdots + 783u - 789$
c_9	$u^{19} + u^{18} + \cdots + 3474u + 4197$
c_{11}	$u^{19} + 4u^{18} + \cdots - 12u - 3$
c_{12}	$u^{19} + 23u^{17} + \cdots - 12u - 3$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{19} - 66y^{18} + \cdots + 286804528071y - 7992538801$
c_2, c_7	$y^{19} + 14y^{18} + \cdots + 674775y - 89401$
c_3	$y^{19} + 7y^{18} + \cdots + 57963y - 1521$
c_4	$y^{19} - 78y^{18} + \cdots + 41701500y - 9320809$
c_5	$y^{19} - 47y^{18} + \cdots + 419250y - 12321$
c_6, c_{10}	$y^{19} - 37y^{18} + \cdots - 80568y - 11664$
c_8	$y^{19} - 66y^{18} + \cdots + 164937y - 622521$
c_9	$y^{19} - 47y^{18} + \cdots + 31022328y - 17614809$
c_{11}	$y^{19} - 2y^{18} + \cdots + 156y - 9$
c_{12}	$y^{19} + 46y^{18} + \cdots + 102y - 9$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.791837 + 0.677469I$ $a = -0.619990 + 0.658481I$ $b = -1.173080 - 0.756067I$	$3.59219 - 0.75835I$	$12.53082 - 1.44797I$
$u = 0.791837 - 0.677469I$ $a = -0.619990 - 0.658481I$ $b = -1.173080 + 0.756067I$	$3.59219 + 0.75835I$	$12.53082 + 1.44797I$
$u = 0.668469 + 1.020450I$ $a = 0.517672 - 0.080176I$ $b = 1.98730 + 0.83213I$	$3.00456 + 6.40703I$	$1.37835 - 6.31753I$
$u = 0.668469 - 1.020450I$ $a = 0.517672 + 0.080176I$ $b = 1.98730 - 0.83213I$	$3.00456 - 6.40703I$	$1.37835 + 6.31753I$
$u = -0.709865 + 0.235609I$ $a = -1.24244 + 1.33477I$ $b = -1.233030 + 0.441203I$	$-1.78162 + 2.24100I$	$7.64182 - 5.49504I$
$u = -0.709865 - 0.235609I$ $a = -1.24244 - 1.33477I$ $b = -1.233030 - 0.441203I$	$-1.78162 - 2.24100I$	$7.64182 + 5.49504I$
$u = -0.443396 + 0.513943I$ $a = 0.464073 - 0.228663I$ $b = 0.114778 - 0.413169I$	$0.81666 - 1.62841I$	$5.50356 + 4.37919I$
$u = -0.443396 - 0.513943I$ $a = 0.464073 + 0.228663I$ $b = 0.114778 + 0.413169I$	$0.81666 + 1.62841I$	$5.50356 - 4.37919I$
$u = 0.220968 + 1.307740I$ $a = 0.559258 + 0.670454I$ $b = -0.221871 + 0.268759I$	$-5.42189 - 4.80173I$	$4.68015 + 6.13601I$
$u = 0.220968 - 1.307740I$ $a = 0.559258 - 0.670454I$ $b = -0.221871 - 0.268759I$	$-5.42189 + 4.80173I$	$4.68015 - 6.13601I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 1.34390$ $a = -1.75903$ $b = -1.60303$	7.99042	38.4260
$u = -0.387274$ $a = 1.08970$ $b = 0.460660$	0.789923	12.9890
$u = 0.04812 + 2.23479I$ $a = 0.270283 - 0.668799I$ $b = 0.626673 + 0.094069I$	$-8.32137 + 0.26499I$	$5.83131 - 0.13665I$
$u = 0.04812 - 2.23479I$ $a = 0.270283 + 0.668799I$ $b = 0.626673 - 0.094069I$	$-8.32137 - 0.26499I$	$5.83131 + 0.13665I$
$u = -1.37830 + 2.10976I$ $a = -1.085980 - 0.344467I$ $b = -1.96178 + 0.21547I$	$16.1957 - 11.9447I$	$6.54103 + 4.41921I$
$u = -1.37830 - 2.10976I$ $a = -1.085980 + 0.344467I$ $b = -1.96178 - 0.21547I$	$16.1957 + 11.9447I$	$6.54103 - 4.41921I$
$u = -1.31382 + 2.41201I$ $a = 1.051960 + 0.419604I$ $b = 1.94078 - 0.12636I$	$16.2683 - 3.2857I$	$6.98967 + 0.65186I$
$u = -1.31382 - 2.41201I$ $a = 1.051960 - 0.419604I$ $b = 1.94078 + 0.12636I$	$16.2683 + 3.2857I$	$6.98967 - 0.65186I$
$u = 3.27534$ $a = 1.42832$ $b = 1.98283$	11.6017	8.39160

II.

$\boldsymbol{I_2^u = \langle 3.41\times 10^5 u^{18} + 7.44\times 10^5 u^{17} + \cdots + 1.78\times 10^6 b - 6.94\times 10^6,\ -4.53\times 10^6 u^{18} - 4.53\times 10^5 u^{17} + \cdots + 5.33\times 10^6 a - 8.84\times 10^6,\ u^{19} + 9u^{17} + \cdots + 5u - 3\rangle}$

(i) Arc colorings

$$a_3 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$

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

$$a_2 = \begin{pmatrix} 1 \\ u^2 \end{pmatrix}$$

$$a_8 = \begin{pmatrix} u \\ u^3 + u \end{pmatrix}$$

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

$$a_{11} = \begin{pmatrix} 0.850304u^{18} + 0.0851151u^{17} + \cdots - 12.4234u + 1.65963 \\ -0.192274u^{18} - 0.418911u^{17} + \cdots - 5.06973u + 3.90888 \end{pmatrix}$$

$$a_6 = \begin{pmatrix} -1.28785u^{18} - 0.428274u^{17} + \cdots + 8.62193u + 0.381312 \\ -0.543496u^{18} + 0.141234u^{17} + \cdots + 4.84292u - 1.96536 \end{pmatrix}$$

$$a_5 = \begin{pmatrix} -0.744352u^{18} - 0.569507u^{17} + \cdots + 3.77902u + 2.34667 \\ -0.543496u^{18} + 0.141234u^{17} + \cdots + 4.84292u - 1.96536 \end{pmatrix}$$

$$a_9 = \begin{pmatrix} 1.33678u^{18} + 0.0558727u^{17} + \cdots - 10.8180u + 4.84550 \\ -0.392077u^{18} + 0.00853821u^{17} + \cdots + 3.50128u + 1.73453 \end{pmatrix}$$

$$a_4 = \begin{pmatrix} -0.774842u^{18} - 0.604057u^{17} + \cdots + 6.25830u - 0.275189 \\ 0.00405983u^{18} + 0.179806u^{17} + \cdots + 5.94869u - 2.53039 \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} 0.598889u^{18} - 0.135703u^{17} + \cdots - 12.8058u + 3.66527 \\ -0.567102u^{18} - 0.369487u^{17} + \cdots - 1.56347u + 2.36723 \end{pmatrix}$$

$$a_{12} = \begin{pmatrix} 0.658741u^{18} + 0.00570697u^{17} + \cdots - 4.71566u + 1.45371 \\ 0.422567u^{18} + 0.0260112u^{17} + \cdots - 5.98056u + 0.887322 \end{pmatrix}$$

(ii) Obstruction class $= 1$

(iii) Cusp Shapes $= -\frac{7917565}{1775197}u^{18} - \frac{841506}{1775197}u^{17} + \cdots + \frac{16153658}{1775197}u + \frac{29863827}{1775197}$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{19} - 18u^{18} + \cdots - 125u + 9$
c_2	$u^{19} + 9u^{17} + \cdots + 5u - 3$
c_3	$u^{19} + 4u^{18} + \cdots - 2u - 1$
c_4	$u^{19} + 2u^{18} + \cdots + 2u - 3$
c_5	$u^{19} - 7u^{18} + \cdots + 2u - 1$
c_6	$u^{19} + u^{18} + \cdots - 2u + 1$
c_7	$u^{19} + 9u^{17} + \cdots + 5u + 3$
c_8	$u^{19} - 5u^{18} + \cdots + 290u - 139$
c_9	$u^{19} - 5u^{18} + \cdots - 10u^2 - 1$
c_{10}	$u^{19} - u^{18} + \cdots - 2u - 1$
c_{11}	$u^{19} - 6u^{18} + \cdots - 2u + 1$
c_{12}	$u^{19} + 2u^{18} + \cdots + 102u - 29$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{19} - 34y^{18} + \cdots + 343y - 81$
c_2, c_7	$y^{19} + 18y^{18} + \cdots - 125y - 9$
c_3	$y^{19} + 8y^{18} + \cdots - 10y - 1$
c_4	$y^{19} - 2y^{18} + \cdots + 28y - 9$
c_5	$y^{19} - 3y^{18} + \cdots + 2y - 1$
c_6, c_{10}	$y^{19} + y^{18} + \cdots + 2y - 1$
c_8	$y^{19} - 25y^{18} + \cdots - 100492y - 19321$
c_9	$y^{19} - 19y^{18} + \cdots - 20y - 1$
c_{11}	$y^{19} + 2y^{18} + \cdots + 8y - 1$
c_{12}	$y^{19} + 30y^{18} + \cdots + 3270y - 841$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.120264 + 0.951026I$ $a = -1.298530 - 0.086419I$ $b = -0.796550 + 0.567431I$	$-2.83073 + 0.47879I$	$6.36948 + 1.61646I$
$u = 0.120264 - 0.951026I$ $a = -1.298530 + 0.086419I$ $b = -0.796550 - 0.567431I$	$-2.83073 - 0.47879I$	$6.36948 - 1.61646I$
$u = -0.309080 + 0.822665I$ $a = -1.231090 + 0.430785I$ $b = -1.51871 + 0.39241I$	$-2.40859 + 1.79507I$	$-0.97377 - 1.20868I$
$u = -0.309080 - 0.822665I$ $a = -1.231090 - 0.430785I$ $b = -1.51871 - 0.39241I$	$-2.40859 - 1.79507I$	$-0.97377 + 1.20868I$
$u = -0.565790 + 0.993465I$ $a = 0.464701 + 0.325729I$ $b = 2.41965 - 0.62277I$	$3.48186 - 6.48285I$	$17.9524 + 9.5212I$
$u = -0.565790 - 0.993465I$ $a = 0.464701 - 0.325729I$ $b = 2.41965 + 0.62277I$	$3.48186 + 6.48285I$	$17.9524 - 9.5212I$
$u = -0.724005 + 1.005750I$ $a = -0.318967 - 0.481555I$ $b = -1.82441 + 0.68066I$	$3.49084 + 1.72012I$	$11.46074 - 5.25453I$
$u = -0.724005 - 1.005750I$ $a = -0.318967 + 0.481555I$ $b = -1.82441 - 0.68066I$	$3.49084 - 1.72012I$	$11.46074 + 5.25453I$
$u = 0.463872 + 0.485503I$ $a = 1.86693 + 1.26312I$ $b = 0.693431 - 0.123308I$	$-3.85974 + 5.13272I$	$7.67492 - 5.46593I$
$u = 0.463872 - 0.485503I$ $a = 1.86693 - 1.26312I$ $b = 0.693431 + 0.123308I$	$-3.85974 - 5.13272I$	$7.67492 + 5.46593I$

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.089855 + 1.336230I$ $a = -0.632293 + 0.749086I$ $b = -1.53550 - 0.37470I$	$-0.69955 + 3.25819I$	$5.31453 - 5.59109I$
$u = 0.089855 - 1.336230I$ $a = -0.632293 - 0.749086I$ $b = -1.53550 + 0.37470I$	$-0.69955 - 3.25819I$	$5.31453 + 5.59109I$
$u = 1.39341$ $a = 1.71022$ $b = 1.63158$	7.82904	-11.7070
$u = -0.11696 + 1.47623I$ $a = -0.271822 + 0.210703I$ $b = 0.092197 + 0.445873I$	$-5.77761 - 3.98981I$	$1.124365 - 0.741804I$
$u = -0.11696 - 1.47623I$ $a = -0.271822 - 0.210703I$ $b = 0.092197 - 0.445873I$	$-5.77761 + 3.98981I$	$1.124365 + 0.741804I$
$u = 0.147710 + 0.491095I$ $a = -0.00567 - 1.87177I$ $b = 1.138500 + 0.167993I$	$2.46837 - 2.43749I$	$10.16983 + 4.01127I$
$u = 0.147710 - 0.491095I$ $a = -0.00567 + 1.87177I$ $b = 1.138500 - 0.167993I$	$2.46837 + 2.43749I$	$10.16983 - 4.01127I$
$u = 0.19742 + 1.78925I$ $a = 0.404951 + 0.383658I$ $b = 0.515604 - 0.393143I$	$-9.29391 - 1.41791I$	$-0.23891 + 4.94600I$
$u = 0.19742 - 1.78925I$ $a = 0.404951 - 0.383658I$ $b = 0.515604 + 0.393143I$	$-9.29391 + 1.41791I$	$-0.23891 - 4.94600I$

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

(i) Arc colorings

$$a_3 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$
$$a_7 = \begin{pmatrix} 0 \\ u \end{pmatrix}$$
$$a_2 = \begin{pmatrix} 1 \\ -u-1 \end{pmatrix}$$
$$a_8 = \begin{pmatrix} u \\ u+1 \end{pmatrix}$$
$$a_1 = \begin{pmatrix} -u \\ -u-1 \end{pmatrix}$$
$$a_{11} = \begin{pmatrix} -u-1 \\ -1 \end{pmatrix}$$
$$a_6 = \begin{pmatrix} u+1 \\ u+1 \end{pmatrix}$$
$$a_5 = \begin{pmatrix} 0 \\ u+1 \end{pmatrix}$$
$$a_9 = \begin{pmatrix} u \\ 0 \end{pmatrix}$$
$$a_4 = \begin{pmatrix} 1 \\ 1 \end{pmatrix}$$
$$a_{10} = \begin{pmatrix} 0 \\ -u \end{pmatrix}$$
$$a_{12} = \begin{pmatrix} 0 \\ -1 \end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= 4u+5$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1, c_4, c_5 c_9, c_{12}	$u^2 + u + 1$
c_2, c_7, c_{11}	$u^2 - u + 1$
c_3, c_6, c_8 c_{10}	$(u + 1)^2$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_2, c_4 c_5, c_7, c_9 c_{11}, c_{12}	$y^2 + y + 1$
c_3, c_6, c_8 c_{10}	$(y-1)^2$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_3^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.500000 + 0.866025I$ $a = -0.500000 - 0.866025I$ $b = -1.00000$	$-1.64493 - 2.02988I$	$3.00000 + 3.46410I$
$u = -0.500000 - 0.866025I$ $a = -0.500000 + 0.866025I$ $b = -1.00000$	$-1.64493 + 2.02988I$	$3.00000 - 3.46410I$

IV. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1	$(u^2+u+1)(u^{19}-18u^{18}+\cdots-125u+9)$ $\cdot(u^{19}+14u^{18}+\cdots+674775u-89401)$
c_2	$(u^2-u+1)(u^{19}+7u^{17}+\cdots+1241u-299)(u^{19}+9u^{17}+\cdots+5u-3)$
c_3	$((u+1)^2)(u^{19}-5u^{18}+\cdots+393u-39)(u^{19}+4u^{18}+\cdots-2u-1)$
c_4	$(u^2+u+1)(u^{19}-39u^{17}+\cdots-7472u+3053)$ $\cdot(u^{19}+2u^{18}+\cdots+2u-3)$
c_5	$(u^2+u+1)(u^{19}-7u^{18}+\cdots+2u-1)(u^{19}-u^{18}+\cdots+1014u-111)$
c_6	$((u+1)^2)(u^{19}+u^{18}+\cdots-2u+1)(u^{19}+3u^{18}+\cdots-360u+108)$
c_7	$(u^2-u+1)(u^{19}+7u^{17}+\cdots+1241u-299)(u^{19}+9u^{17}+\cdots+5u+3)$
c_8	$((u+1)^2)(u^{19}-5u^{18}+\cdots+290u-139)$ $\cdot(u^{19}-4u^{18}+\cdots+783u-789)$
c_9	$(u^2+u+1)(u^{19}-5u^{18}+\cdots-10u^2-1)$ $\cdot(u^{19}+u^{18}+\cdots+3474u+4197)$
c_{10}	$((u+1)^2)(u^{19}-u^{18}+\cdots-2u-1)(u^{19}+3u^{18}+\cdots-360u+108)$
c_{11}	$(u^2-u+1)(u^{19}-6u^{18}+\cdots-2u+1)(u^{19}+4u^{18}+\cdots-12u-3)$
c_{12}	$(u^2+u+1)(u^{19}+23u^{17}+\cdots-12u-3)(u^{19}+2u^{18}+\cdots+102u-29)$

V. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1	$(y^2+y+1)(y^{19}-66y^{18}+\cdots+2.86805\times10^{11}y-7.99254\times10^{9})$ $\cdot\,(y^{19}-34y^{18}+\cdots+343y-81)$
c_2, c_7	$(y^2+y+1)(y^{19}+14y^{18}+\cdots+674775y-89401)$ $\cdot\,(y^{19}+18y^{18}+\cdots-125y-9)$
c_3	$((y-1)^2)(y^{19}+7y^{18}+\cdots+57963y-1521)$ $\cdot\,(y^{19}+8y^{18}+\cdots-10y-1)$
c_4	$(y^2+y+1)(y^{19}-78y^{18}+\cdots+4.17015\times10^{7}y-9320809)$ $\cdot\,(y^{19}-2y^{18}+\cdots+28y-9)$
c_5	$(y^2+y+1)(y^{19}-47y^{18}+\cdots+419250y-12321)$ $\cdot\,(y^{19}-3y^{18}+\cdots+2y-1)$
c_6, c_{10}	$((y-1)^2)(y^{19}-37y^{18}+\cdots-80568y-11664)$ $\cdot\,(y^{19}+y^{18}+\cdots+2y-1)$
c_8	$((y-1)^2)(y^{19}-66y^{18}+\cdots+164937y-622521)$ $\cdot\,(y^{19}-25y^{18}+\cdots-100492y-19321)$
c_9	$(y^2+y+1)(y^{19}-47y^{18}+\cdots+3.10223\times10^{7}y-1.76148\times10^{7})$ $\cdot\,(y^{19}-19y^{18}+\cdots-20y-1)$
c_{11}	$(y^2+y+1)(y^{19}-2y^{18}+\cdots+156y-9)(y^{19}+2y^{18}+\cdots+8y-1)$
c_{12}	$(y^2+y+1)(y^{19}+30y^{18}+\cdots+3270y-841)$ $\cdot\,(y^{19}+46y^{18}+\cdots+102y-9)$