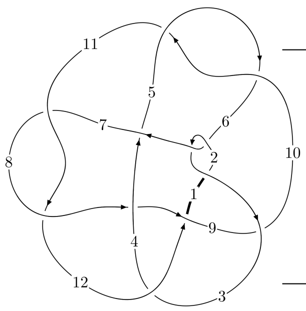
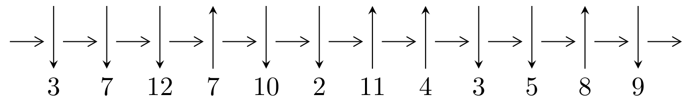
$12n_{0599}$ ($K12n_{0599}$)



A knot diagram[1]

Linearized knot diagam



Solving Sequence

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

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

$$I_1^u = \langle 2.08585 \times 10^{97} u^{41} + 7.14533 \times 10^{97} u^{40} + \cdots + 2.87929 \times 10^{99} b + 1.73918 \times 10^{99},$$
$$5.30575 \times 10^{95} u^{41} + 1.71743 \times 10^{97} u^{40} + \cdots + 1.43964 \times 10^{99} a - 9.16089 \times 10^{98},\ u^{42} + 3u^{41} + \cdots + 64u +$$
$$I_2^u = \langle 4075773832297u^{14} - 2172521972436u^{13} + \cdots + 113159128768910b - 9436584195071,$$
$$12204692706877u^{14} - 2379455879777u^{13} + \cdots + 113159128768910a - 25876335477767,$$
$$u^{15} - 5u^{13} - 10u^{12} - 23u^{11} - 49u^{10} - 54u^9 - 6u^8 - 42u^7 - 27u^6 - 4u^5 + 12u^4 + 20u^3 + 11u^2 + 2u + 1\rangle$$

* 2 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 57 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. $I_1^u = \langle 2.09\times10^{97}u^{41}+7.15\times10^{97}u^{40}+\cdots+2.88\times10^{99}b+1.74\times10^{99},\ 5.31\times10^{95}u^{41}+1.72\times10^{97}u^{40}+\cdots+1.44\times10^{99}a-9.16\times10^{98},\ u^{42}+3u^{41}+\cdots+64u+32\rangle$

(i) Arc colorings

$$a_4 = \begin{pmatrix} 0 \\ u \end{pmatrix}$$
$$a_8 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$
$$a_9 = \begin{pmatrix} 1 \\ -u^2 \end{pmatrix}$$
$$a_{12} = \begin{pmatrix} -0.000368546u^{41} - 0.0119295u^{40} + \cdots + 10.1776u + 0.636330 \\ -0.00724434u^{41} - 0.0248163u^{40} + \cdots + 5.49278u - 0.604030 \end{pmatrix}$$
$$a_1 = \begin{pmatrix} 0.00215244u^{41} + 0.000734500u^{40} + \cdots + 3.98031u + 0.893995 \\ -0.00639184u^{41} - 0.0228879u^{40} + \cdots + 5.89992u - 0.440795 \end{pmatrix}$$
$$a_3 = \begin{pmatrix} 0.00520650u^{41} + 0.0133533u^{40} + \cdots + 5.05203u + 1.97585 \\ 0.0108948u^{41} + 0.0265127u^{40} + \cdots + 3.13035u + 0.813921 \end{pmatrix}$$
$$a_{11} = \begin{pmatrix} 0.00687579u^{41} + 0.0128868u^{40} + \cdots + 4.68483u + 1.24036 \\ -0.00724434u^{41} - 0.0248163u^{40} + \cdots + 5.49278u - 0.604030 \end{pmatrix}$$
$$a_7 = \begin{pmatrix} -0.0284111u^{41} - 0.0802538u^{40} + \cdots + 5.73043u + 0.660082 \\ 0.00297602u^{41} + 0.0148436u^{40} + \cdots - 6.80600u + 0.842424 \end{pmatrix}$$
$$a_5 = \begin{pmatrix} 0.00358475u^{41} + 0.0184991u^{40} + \cdots - 1.07592u + 1.21549 \\ 0.0129804u^{41} + 0.0337132u^{40} + \cdots + 2.17091u + 1.68243 \end{pmatrix}$$
$$a_2 = \begin{pmatrix} 0.0241930u^{41} + 0.0654847u^{40} + \cdots + 11.3542u + 2.32053 \\ -0.00534000u^{41} - 0.0268669u^{40} + \cdots + 8.37009u - 1.59602 \end{pmatrix}$$
$$a_6 = \begin{pmatrix} -0.0377424u^{41} - 0.120931u^{40} + \cdots + 1.19694u - 1.53872 \\ -0.0110412u^{41} - 0.0237259u^{40} + \cdots - 0.776747u - 1.63777 \end{pmatrix}$$
$$a_{10} = \begin{pmatrix} 0.0131333u^{41} + 0.0397783u^{40} + \cdots + 8.14332u + 1.94601 \\ -0.00917113u^{41} - 0.0293322u^{40} + \cdots + 2.00016u - 1.60632 \end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= -0.0471714u^{41} - 0.112106u^{40} + \cdots - 28.6268u - 3.86134$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{42} + 64u^{41} + \cdots - 161335u + 1849$
c_2, c_6	$u^{42} + 2u^{41} + \cdots - 601u + 43$
c_3	$u^{42} - 6u^{41} + \cdots + 16u - 1$
c_4	$u^{42} + 12u^{41} + \cdots + 3596u + 676$
c_5, c_{10}	$u^{42} - u^{41} + \cdots - 190u - 43$
c_7, c_{11}	$u^{42} - 3u^{41} + \cdots - 11u - 1$
c_8	$u^{42} - 3u^{41} + \cdots - 64u + 32$
c_9	$u^{42} - u^{41} + \cdots - 2006840u + 356879$
c_{12}	$u^{42} - 29u^{40} + \cdots - 342u - 76$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{42} - 192y^{41} + \cdots - 7743629545y + 3418801$
c_2, c_6	$y^{42} - 64y^{41} + \cdots + 161335y + 1849$
c_3	$y^{42} + 6y^{41} + \cdots - 180y + 1$
c_4	$y^{42} + 2y^{41} + \cdots - 1564952y + 456976$
c_5, c_{10}	$y^{42} + 3y^{41} + \cdots - 31284y + 1849$
c_7, c_{11}	$y^{42} - 37y^{41} + \cdots - 245y + 1$
c_8	$y^{42} + y^{41} + \cdots - 27136y + 1024$
c_9	$y^{42} - 109y^{41} + \cdots - 1736409911214y + 127362620641$
c_{12}	$y^{42} - 58y^{41} + \cdots + 99636y + 5776$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.648045 + 0.762828I$ $a = -0.199463 - 1.026950I$ $b = 0.000607 - 0.888637I$	$-2.26225 + 2.79311I$	$-8.37862 - 3.97835I$
$u = 0.648045 - 0.762828I$ $a = -0.199463 + 1.026950I$ $b = 0.000607 + 0.888637I$	$-2.26225 - 2.79311I$	$-8.37862 + 3.97835I$
$u = 0.462736 + 0.870276I$ $a = 1.082390 + 0.631958I$ $b = 1.380710 - 0.068283I$	$7.99084 - 2.22911I$	$4.00956 + 3.14309I$
$u = 0.462736 - 0.870276I$ $a = 1.082390 - 0.631958I$ $b = 1.380710 + 0.068283I$	$7.99084 + 2.22911I$	$4.00956 - 3.14309I$
$u = -0.371673 + 0.796152I$ $a = 0.020113 + 0.557804I$ $b = -0.222389 + 0.704830I$	$-0.17172 - 1.89179I$	$-2.28677 + 1.75619I$
$u = -0.371673 - 0.796152I$ $a = 0.020113 - 0.557804I$ $b = -0.222389 - 0.704830I$	$-0.17172 + 1.89179I$	$-2.28677 - 1.75619I$
$u = -0.314772 + 0.773309I$ $a = -0.38000 + 1.41391I$ $b = 1.093270 + 0.667135I$	$-10.09930 - 2.74341I$	$-5.66707 + 2.17488I$
$u = -0.314772 - 0.773309I$ $a = -0.38000 - 1.41391I$ $b = 1.093270 - 0.667135I$	$-10.09930 + 2.74341I$	$-5.66707 - 2.17488I$
$u = -1.000680 + 0.665007I$ $a = -0.077148 + 0.584959I$ $b = -1.209930 + 0.230150I$	$2.61996 - 1.17635I$	$-6 - 1.021926 + 0.10I$
$u = -1.000680 - 0.665007I$ $a = -0.077148 - 0.584959I$ $b = -1.209930 - 0.230150I$	$2.61996 + 1.17635I$	$-6 - 1.021926 + 0.10I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.629318+0.386672I$ $a=-1.66190-0.25886I$ $b=\ \ 1.123620-0.203923I$	$-0.311934-0.851962I$	$-4.13073+4.38646I$
$u=-0.629318-0.386672I$ $a=-1.66190+0.25886I$ $b=\ \ 1.123620+0.203923I$	$-0.311934+0.851962I$	$-4.13073-4.38646I$
$u=-0.205200+1.287660I$ $a=\ \ 0.412852-0.718154I$ $b=\ \ 0.200970-0.672153I$	$-2.91171-2.40047I$	$-9.33804+3.58482I$
$u=-0.205200-1.287660I$ $a=\ \ 0.412852+0.718154I$ $b=\ \ 0.200970+0.672153I$	$-2.91171+2.40047I$	$-9.33804-3.58482I$
$u=-0.317104+1.341020I$ $a=-0.596540+0.932678I$ $b=\ \ 0.024355+0.846164I$	$-12.43750+0.62091I$	0
$u=-0.317104-1.341020I$ $a=-0.596540-0.932678I$ $b=\ \ 0.024355-0.846164I$	$-12.43750-0.62091I$	0
$u=-0.443573+0.327558I$ $a=\ \ 0.77751-1.87015I$ $b=-0.326610+0.038977I$	$2.48884-1.59471I$	$3.72664+4.36571I$
$u=-0.443573-0.327558I$ $a=\ \ 0.77751+1.87015I$ $b=-0.326610-0.038977I$	$2.48884+1.59471I$	$3.72664-4.36571I$
$u=-0.049515+0.529296I$ $a=\ \ 2.04051+2.26722I$ $b=-1.299150+0.384278I$	$-8.30711-5.04057I$	$-3.92081+3.17900I$
$u=-0.049515-0.529296I$ $a=\ \ 2.04051-2.26722I$ $b=-1.299150-0.384278I$	$-8.30711+5.04057I$	$-3.92081-3.17900I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 1.23414 + 0.89196I$ $a = -0.182278 + 0.535254I$ $b = 1.38820 + 0.29236I$	$4.93779 + 5.55158I$	0
$u = 1.23414 - 0.89196I$ $a = -0.182278 - 0.535254I$ $b = 1.38820 - 0.29236I$	$4.93779 - 5.55158I$	0
$u = 0.74924 + 1.34147I$ $a = 0.230039 + 0.931808I$ $b = 0.230395 + 0.978898I$	$-12.6753 + 8.4287I$	0
$u = 0.74924 - 1.34147I$ $a = 0.230039 - 0.931808I$ $b = 0.230395 - 0.978898I$	$-12.6753 - 8.4287I$	0
$u = 0.384683 + 0.031619I$ $a = 1.34403 + 0.53921I$ $b = -1.109290 + 0.500907I$	$1.63611 - 2.57651I$	$-5.00070 + 6.84199I$
$u = 0.384683 - 0.031619I$ $a = 1.34403 - 0.53921I$ $b = -1.109290 - 0.500907I$	$1.63611 + 2.57651I$	$-5.00070 - 6.84199I$
$u = -1.28548 + 1.06224I$ $a = 0.087304 - 0.822069I$ $b = 1.298780 - 0.402243I$	$1.80773 - 7.39822I$	0
$u = -1.28548 - 1.06224I$ $a = 0.087304 + 0.822069I$ $b = 1.298780 + 0.402243I$	$1.80773 + 7.39822I$	0
$u = 0.81695 + 1.45625I$ $a = -0.614121 - 0.644235I$ $b = -1.177860 - 0.025942I$	$5.03473 + 1.74643I$	0
$u = 0.81695 - 1.45625I$ $a = -0.614121 + 0.644235I$ $b = -1.177860 + 0.025942I$	$5.03473 - 1.74643I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.270533+0.172470I$ $a=-1.27279+1.50644I$ $b=-1.50571+0.35734I$	$2.32167-2.06853I$	$2.16490-4.78895I$
$u=-0.270533-0.172470I$ $a=-1.27279-1.50644I$ $b=-1.50571-0.35734I$	$2.32167+2.06853I$	$2.16490+4.78895I$
$u=\ \ 0.253217$ $a=\ \ 2.52423$ $b=\ \ 0.315009$	-0.948564	-10.7560
$u=-1.33409+1.57582I$ $a=-0.115373+0.761660I$ $b=-1.43288+0.41746I$	$-7.4115-13.4268I$	0
$u=-1.33409-1.57582I$ $a=-0.115373-0.761660I$ $b=-1.43288-0.41746I$	$-7.4115+13.4268I$	0
$u=\ \ 1.13096+1.81862I$ $a=-0.140526-0.505969I$ $b=-1.38971-0.26319I$	$2.17544+5.80065I$	0
$u=\ \ 1.13096-1.81862I$ $a=-0.140526+0.505969I$ $b=-1.38971+0.26319I$	$2.17544-5.80065I$	0
$u=-2.19471$ $a=\ \ 0.570796$ $b=-1.33714$	-3.13160	0
$u=\ \ 0.90971+2.03841I$ $a=\ \ 0.349021+0.532377I$ $b=\ \ 1.261520+0.388603I$	$-8.60268+3.81146I$	0
$u=\ \ 0.90971-2.03841I$ $a=\ \ 0.349021-0.532377I$ $b=\ \ 1.261520-0.388603I$	$-8.60268-3.81146I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 2.24585$ $a = -0.323672$ $b = 0.0679481$	-7.70072	0
$u = -3.53341$ $a = 0.0214051$ $b = 1.29639$	-3.75495	0

II.

$\boldsymbol{I_2^u = \langle 4.08\times 10^{12}u^{14} - 2.17\times 10^{12}u^{13} + \cdots + 1.13\times 10^{13}b - 9.44\times 10^{12},\ 1.22\times 10^{13}u^{14} - 2.38\times 10^{12}u^{13} + \cdots + 1.13\times 10^{13}a - 2.59\times 10^{13},\ u^{15} - 5u^{13} + \cdots + 2u + 1\rangle}$

(i) Arc colorings

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

$$a_8 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$

$$a_9 = \begin{pmatrix} 1 \\ -u^2 \end{pmatrix}$$

$$a_{12} = \begin{pmatrix} -1.07854u^{14} + 0.210275u^{13} + \cdots - 6.56711u + 2.28672 \\ -0.360181u^{14} + 0.191988u^{13} + \cdots + 0.0721482u + 0.833922 \end{pmatrix}$$

$$a_1 = \begin{pmatrix} -0.806967u^{14} + 0.0658041u^{13} + \cdots - 7.29725u + 1.66307 \\ -0.308908u^{14} + 0.126579u^{13} + \cdots + 0.0547816u + 0.689450 \end{pmatrix}$$

$$a_3 = \begin{pmatrix} 0.426151u^{14} + 0.510477u^{13} + \cdots + 15.5167u + 6.16385 \\ 0.467779u^{14} + 0.114972u^{13} + \cdots + 7.73906u + 1.62977 \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} -0.718362u^{14} + 0.0182870u^{13} + \cdots - 6.63926u + 1.45280 \\ -0.360181u^{14} + 0.191988u^{13} + \cdots + 0.0721482u + 0.833922 \end{pmatrix}$$

$$a_7 = \begin{pmatrix} -1.47573u^{14} + 0.316511u^{13} + \cdots - 8.51856u + 2.54844 \\ -0.154046u^{14} + 0.151268u^{13} + \cdots + 0.936513u + 1.93108 \end{pmatrix}$$

$$a_5 = \begin{pmatrix} 0.420096u^{14} + 0.903948u^{13} + \cdots + 23.2129u + 9.22115 \\ 0.610929u^{14} + 0.339885u^{13} + \cdots + 12.1399u + 2.27431 \end{pmatrix}$$

$$a_2 = \begin{pmatrix} -1.10086u^{14} + 0.660424u^{13} + \cdots + 4.24610u + 8.58306 \\ -0.103998u^{14} + 0.391996u^{13} + \cdots + 7.60146u + 2.75811 \end{pmatrix}$$

$$a_6 = \begin{pmatrix} 0.394864u^{14} - 0.515063u^{13} + \cdots - 7.27332u - 5.30627 \\ -0.411913u^{14} - 0.0161825u^{13} + \cdots - 6.23025u - 2.14792 \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} 3.56778u^{14} - 0.0378933u^{13} + \cdots + 31.8302u - 0.00774955 \\ 0.910294u^{14} - 0.145683u^{13} + \cdots + 4.90300u - 2.39025 \end{pmatrix}$$

(ii) Obstruction class $= 1$

(iii) Cusp Shapes

$= \frac{9101535523664}{11315912876891}u^{14} - \frac{12950974574918}{11315912876891}u^{13} + \cdots - \frac{21645969002451}{11315912876891}u + \frac{1008303706222}{11315912876891}$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{15} - 15u^{14} + \cdots + 7u - 1$
c_2	$u^{15} - 3u^{14} + \cdots + 3u - 1$
c_3	$u^{15} + 5u^{14} + \cdots + 2u + 1$
c_4	$u^{15} + u^{14} + \cdots - 4u - 1$
c_5	$u^{15} + 6u^{13} + \cdots - 2u - 1$
c_6	$u^{15} + 3u^{14} + \cdots + 3u + 1$
c_7	$u^{15} - 8u^{13} + \cdots - u + 1$
c_8	$u^{15} - 5u^{13} + \cdots + 2u + 1$
c_9	$u^{15} - 14u^{13} + \cdots - 4u + 1$
c_{10}	$u^{15} + 6u^{13} + \cdots - 2u + 1$
c_{11}	$u^{15} - 8u^{13} + \cdots - u - 1$
c_{12}	$u^{15} - u^{14} + \cdots - 3u + 1$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{15} - 51y^{14} + \cdots - 5y - 1$
c_2, c_6	$y^{15} - 15y^{14} + \cdots + 7y - 1$
c_3	$y^{15} + 7y^{14} + \cdots - 6y - 1$
c_4	$y^{15} - 13y^{14} + \cdots - 24y - 1$
c_5, c_{10}	$y^{15} + 12y^{14} + \cdots + 2y - 1$
c_7, c_{11}	$y^{15} - 16y^{14} + \cdots - 5y - 1$
c_8	$y^{15} - 10y^{14} + \cdots - 18y - 1$
c_9	$y^{15} - 28y^{14} + \cdots - 16y - 1$
c_{12}	$y^{15} - 13y^{14} + \cdots + 19y - 1$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.596659 + 0.827825I$ $a = -0.045120 - 0.883234I$ $b = -0.238789 - 0.780455I$	$-0.66784 + 2.86329I$	$-4.86388 - 6.69106I$
$u = 0.596659 - 0.827825I$ $a = -0.045120 + 0.883234I$ $b = -0.238789 + 0.780455I$	$-0.66784 - 2.86329I$	$-4.86388 + 6.69106I$
$u = 0.755283$ $a = 1.45281$ $b = -1.12652$	0.321895	0.516880
$u = -0.184311 + 0.678178I$ $a = 1.60231 - 0.96713I$ $b = -0.042454 - 0.389554I$	$1.84141 - 1.47317I$	$-9.34491 + 1.31525I$
$u = -0.184311 - 0.678178I$ $a = 1.60231 + 0.96713I$ $b = -0.042454 + 0.389554I$	$1.84141 + 1.47317I$	$-9.34491 - 1.31525I$
$u = -0.604205 + 0.216942I$ $a = -0.229198 + 0.703203I$ $b = -1.41923 + 0.52118I$	$2.36544 - 2.52653I$	$5.67594 + 10.87302I$
$u = -0.604205 - 0.216942I$ $a = -0.229198 - 0.703203I$ $b = -1.41923 - 0.52118I$	$2.36544 + 2.52653I$	$5.67594 - 10.87302I$
$u = 0.004697 + 0.321783I$ $a = 4.20961 - 1.65523I$ $b = 1.356600 + 0.159175I$	$6.44360 + 0.56743I$	$-0.903335 - 0.669018I$
$u = 0.004697 - 0.321783I$ $a = 4.20961 + 1.65523I$ $b = 1.356600 - 0.159175I$	$6.44360 - 0.56743I$	$-0.903335 + 0.669018I$
$u = -1.32947 + 1.11212I$ $a = -0.095911 - 0.699773I$ $b = 1.38775 - 0.28744I$	$4.46896 - 6.63905I$	$-0.81267 + 7.15016I$

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -1.32947 - 1.11212I$ $a = -0.095911 + 0.699773I$ $b = 1.38775 + 0.28744I$	$4.46896 + 6.63905I$	$-0.81267 - 7.15016I$
$u = 0.37677 + 1.72909I$ $a = -0.714436 - 0.247634I$ $b = -1.335870 - 0.137594I$	$6.08786 + 3.33489I$	$0.87409 - 4.16417I$
$u = 0.37677 - 1.72909I$ $a = -0.714436 + 0.247634I$ $b = -1.335870 + 0.137594I$	$6.08786 - 3.33489I$	$0.87409 + 4.16417I$
$u = -1.88197$ $a = 0.330680$ $b = 0.443370$	-7.37862	3.59810
$u = 3.40639$ $a = -0.237996$ $b = 1.26711$	-4.41331	-11.3650

III. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1	$(u^{15}-15u^{14}+\cdots+7u-1)(u^{42}+64u^{41}+\cdots-161335u+1849)$
c_2	$(u^{15}-3u^{14}+\cdots+3u-1)(u^{42}+2u^{41}+\cdots-601u+43)$
c_3	$(u^{15}+5u^{14}+\cdots+2u+1)(u^{42}-6u^{41}+\cdots+16u-1)$
c_4	$(u^{15}+u^{14}+\cdots-4u-1)(u^{42}+12u^{41}+\cdots+3596u+676)$
c_5	$(u^{15}+6u^{13}+\cdots-2u-1)(u^{42}-u^{41}+\cdots-190u-43)$
c_6	$(u^{15}+3u^{14}+\cdots+3u+1)(u^{42}+2u^{41}+\cdots-601u+43)$
c_7	$(u^{15}-8u^{13}+\cdots-u+1)(u^{42}-3u^{41}+\cdots-11u-1)$
c_8	$(u^{15}-5u^{13}+\cdots+2u+1)(u^{42}-3u^{41}+\cdots-64u+32)$
c_9	$(u^{15}-14u^{13}+\cdots-4u+1)(u^{42}-u^{41}+\cdots-2006840u+356879)$
c_{10}	$(u^{15}+6u^{13}+\cdots-2u+1)(u^{42}-u^{41}+\cdots-190u-43)$
c_{11}	$(u^{15}-8u^{13}+\cdots-u-1)(u^{42}-3u^{41}+\cdots-11u-1)$
c_{12}	$(u^{15}-u^{14}+\cdots-3u+1)(u^{42}-29u^{40}+\cdots-342u-76)$

IV. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1	$(y^{15} - 51y^{14} + \cdots - 5y - 1)$ $\cdot (y^{42} - 192y^{41} + \cdots - 7743629545y + 3418801)$
c_2, c_6	$(y^{15} - 15y^{14} + \cdots + 7y - 1)(y^{42} - 64y^{41} + \cdots + 161335y + 1849)$
c_3	$(y^{15} + 7y^{14} + \cdots - 6y - 1)(y^{42} + 6y^{41} + \cdots - 180y + 1)$
c_4	$(y^{15} - 13y^{14} + \cdots - 24y - 1)(y^{42} + 2y^{41} + \cdots - 1564952y + 456976)$
c_5, c_{10}	$(y^{15} + 12y^{14} + \cdots + 2y - 1)(y^{42} + 3y^{41} + \cdots - 31284y + 1849)$
c_7, c_{11}	$(y^{15} - 16y^{14} + \cdots - 5y - 1)(y^{42} - 37y^{41} + \cdots - 245y + 1)$
c_8	$(y^{15} - 10y^{14} + \cdots - 18y - 1)(y^{42} + y^{41} + \cdots - 27136y + 1024)$
c_9	$(y^{15} - 28y^{14} + \cdots - 16y - 1)$ $\cdot (y^{42} - 109y^{41} + \cdots - 1736409911214y + 127362620641)$
c_{12}	$(y^{15} - 13y^{14} + \cdots + 19y - 1)(y^{42} - 58y^{41} + \cdots + 99636y + 5776)$