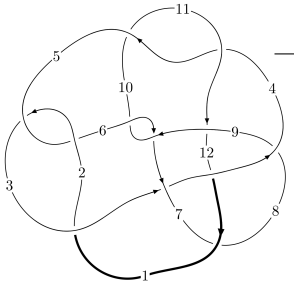
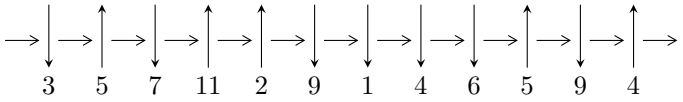
$12n_{0360}$ $(K12n_{0360})$



A knot diagram[1]

Linearized knot diagam



Solving Sequence

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

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

$$I_1^u = \langle -3.17231 \times 10^{41} u^{41} - 1.10310 \times 10^{41} u^{40} + \cdots + 1.27534 \times 10^{41} b - 1.91700 \times 10^{42},$$
$$- 3.79921 \times 10^{42} u^{41} + 1.16103 \times 10^{42} u^{40} + \cdots + 1.27534 \times 10^{41} a - 5.15011 \times 10^{42},\ u^{42} + 4u^{40} + \cdots + 8u +$$
$$I_2^u = \langle -4867u^{17} + 14254u^{16} + \cdots + 1012b + 2283,\ -6343u^{17} + 8982u^{16} + \cdots + 1012a - 18113,$$
$$u^{18} - 3u^{17} + \cdots - 2u + 1 \rangle$$

* 2 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 60 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.

$\boldsymbol{I_1^u = \langle -3.17\times10^{41}u^{41}-1.10\times10^{41}u^{40}+\cdots+1.28\times10^{41}b-1.92\times10^{42},\ -3.80\times10^{42}u^{41}+1.16\times10^{42}u^{40}+\cdots+1.28\times10^{41}a-5.15\times10^{42},\ u^{42}+4u^{40}+\cdots+8u+1\rangle}$

(i) Arc colorings

$$a_2 = \begin{pmatrix} 0 \\ u \end{pmatrix}$$

$$a_6 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$

$$a_5 = \begin{pmatrix} 1 \\ u^2 \end{pmatrix}$$

$$a_3 = \begin{pmatrix} u \\ u^3+u \end{pmatrix}$$

$$a_1 = \begin{pmatrix} u^3 \\ u^5+u^3+u \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} 29.7898u^{41} - 9.10368u^{40} + \cdots + 352.163u + 40.3823 \\ 2.48742u^{41} + 0.864947u^{40} + \cdots + 84.3991u + 15.0313 \end{pmatrix}$$

$$a_4 = \begin{pmatrix} -18.2967u^{41} - 1.79519u^{40} + \cdots - 427.707u - 64.5574 \\ 1.07748u^{41} + 0.260227u^{40} + \cdots + 14.9654u - 0.377505 \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} 26.3588u^{41} - 7.38711u^{40} + \cdots + 310.803u + 34.4547 \\ 2.06799u^{41} + 0.593466u^{40} + \cdots + 74.0976u + 13.3147 \end{pmatrix}$$

$$a_9 = \begin{pmatrix} 28.4268u^{41} - 6.79364u^{40} + \cdots + 384.901u + 47.7694 \\ 2.06799u^{41} + 0.593466u^{40} + \cdots + 74.0976u + 13.3147 \end{pmatrix}$$

$$a_7 = \begin{pmatrix} 8.01480u^{41} - 7.35645u^{40} + \cdots - 49.3603u - 18.0733 \\ 5.08682u^{41} + 0.163226u^{40} + \cdots + 86.5337u + 9.31672 \end{pmatrix}$$

$$a_8 = \begin{pmatrix} 7.63267u^{41} - 7.14139u^{40} + \cdots - 53.0896u - 18.3070 \\ 6.44055u^{41} + 0.639959u^{40} + \cdots + 130.209u + 16.3404 \end{pmatrix}$$

$$a_{12} = \begin{pmatrix} 19.0918u^{41} + 7.25817u^{40} + \cdots + 568.854u + 93.4086 \\ -1.69590u^{41} + 4.74779u^{40} + \cdots + 94.9034u + 19.8886 \end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= 29.4758u^{41} - 5.89551u^{40} + \cdots + 439.594u + 56.8690$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{42}+8u^{41}+\cdots+14u+1$
c_2, c_5	$u^{42}+4u^{40}+\cdots+8u+1$
c_3	$u^{42}+u^{41}+\cdots+15u+1$
c_4, c_{10}	$u^{42}-3u^{40}+\cdots+3884u+653$
c_6, c_9	$u^{42}-2u^{41}+\cdots-1450u+2881$
c_7, c_{11}	$u^{42}-2u^{41}+\cdots+102u+116$
c_8	$u^{42}+29u^{40}+\cdots-3172u+968$
c_{12}	$u^{42}+u^{41}+\cdots+8821u+713$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{42} + 60y^{41} + \cdots + 106y + 1$
c_2, c_5	$y^{42} + 8y^{41} + \cdots + 14y + 1$
c_3	$y^{42} + 7y^{41} + \cdots + 461y + 1$
c_4, c_{10}	$y^{42} - 6y^{41} + \cdots - 6058384y + 426409$
c_6, c_9	$y^{42} + 54y^{41} + \cdots + 123416908y + 8300161$
c_7, c_{11}	$y^{42} + 50y^{41} + \cdots + 280292y + 13456$
c_8	$y^{42} + 58y^{41} + \cdots - 12741008y + 937024$
c_{12}	$y^{42} - 59y^{41} + \cdots - 9108213y + 508369$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.401386+0.907950I$ $a=-1.30994+2.33702I$ $b=\ \ 1.61047-0.43509I$	$5.91077+1.27313I$	$0.461828+0.968619I$
$u=-0.401386-0.907950I$ $a=-1.30994-2.33702I$ $b=\ \ 1.61047+0.43509I$	$5.91077-1.27313I$	$0.461828-0.968619I$
$u=-0.482655+0.905869I$ $a=\ \ 1.53119+1.57511I$ $b=\ \ 0.357628-1.155570I$	$-3.09049-4.22260I$	$-5.14689+7.39649I$
$u=-0.482655-0.905869I$ $a=\ \ 1.53119-1.57511I$ $b=\ \ 0.357628+1.155570I$	$-3.09049+4.22260I$	$-5.14689-7.39649I$
$u=-0.703951+0.646413I$ $a=\ \ 0.097005-0.274142I$ $b=\ \ 1.35281-0.45723I$	$7.00024-5.59064I$	$1.86038+6.99102I$
$u=-0.703951-0.646413I$ $a=\ \ 0.097005+0.274142I$ $b=\ \ 1.35281+0.45723I$	$7.00024+5.59064I$	$1.86038-6.99102I$
$u=\ \ 0.284092+1.017050I$ $a=-0.211153-0.796137I$ $b=\ \ 0.270228+0.532970I$	$-0.93324+2.30287I$	$0.55695-5.43151I$
$u=\ \ 0.284092-1.017050I$ $a=-0.211153+0.796137I$ $b=\ \ 0.270228-0.532970I$	$-0.93324-2.30287I$	$0.55695+5.43151I$
$u=-0.344707+1.010570I$ $a=-0.70988-2.54288I$ $b=-1.04250+1.60858I$	$-3.88818-1.43090I$	$-6.13404-0.44141I$
$u=-0.344707-1.010570I$ $a=-0.70988+2.54288I$ $b=-1.04250-1.60858I$	$-3.88818+1.43090I$	$-6.13404+0.44141I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.334236 + 0.869539I$ $a = 0.19107 + 1.40502I$ $b = -0.253907 + 0.343667I$	$2.57400 + 3.84916I$	$-2.94638 - 4.40988I$
$u = 0.334236 - 0.869539I$ $a = 0.19107 - 1.40502I$ $b = -0.253907 - 0.343667I$	$2.57400 - 3.84916I$	$-2.94638 + 4.40988I$
$u = 1.081170 + 0.341257I$ $a = -0.0779258 - 0.1028190I$ $b = -1.014370 - 0.665967I$	$6.88916 + 0.77238I$	$3.82875 + 0.50165I$
$u = 1.081170 - 0.341257I$ $a = -0.0779258 + 0.1028190I$ $b = -1.014370 + 0.665967I$	$6.88916 - 0.77238I$	$3.82875 - 0.50165I$
$u = 0.593161 + 0.466185I$ $a = -0.477779 + 0.366692I$ $b = 0.331918 + 0.155382I$	$0.97092 + 1.12729I$	$3.41044 - 3.72299I$
$u = 0.593161 - 0.466185I$ $a = -0.477779 - 0.366692I$ $b = 0.331918 - 0.155382I$	$0.97092 - 1.12729I$	$3.41044 + 3.72299I$
$u = -0.960756 + 0.862418I$ $a = 0.263391 - 0.247533I$ $b = 0.906451 - 0.144108I$	$8.16534 + 0.62011I$	0
$u = -0.960756 - 0.862418I$ $a = 0.263391 + 0.247533I$ $b = 0.906451 + 0.144108I$	$8.16534 - 0.62011I$	0
$u = 1.030270 + 0.851389I$ $a = 1.050060 - 0.637282I$ $b = 3.02403 + 0.18691I$	$15.8428 + 3.0373I$	0
$u = 1.030270 - 0.851389I$ $a = 1.050060 + 0.637282I$ $b = 3.02403 - 0.18691I$	$15.8428 - 3.0373I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.881885+1.024300I$ $a=\ \ 0.065443+1.314000I$ $b=\ \ 1.116300+0.121744I$	$7.64407-7.40138I$	0
$u=-0.881885-1.024300I$ $a=\ \ 0.065443-1.314000I$ $b=\ \ 1.116300-0.121744I$	$7.64407+7.40138I$	0
$u=-0.258984+0.576790I$ $a=\ \ 0.28812-1.63058I$ $b=-1.042850-0.283492I$	$-1.89277-0.93054I$	$-0.64123-5.03409I$
$u=-0.258984-0.576790I$ $a=\ \ 0.28812+1.63058I$ $b=-1.042850+0.283492I$	$-1.89277+0.93054I$	$-0.64123+5.03409I$
$u=\ \ 0.889913+1.082940I$ $a=\ \ 0.32129-2.34661I$ $b=\ \ 3.16294-0.04261I$	$15.0651+4.0075I$	0
$u=\ \ 0.889913-1.082940I$ $a=\ \ 0.32129+2.34661I$ $b=\ \ 3.16294+0.04261I$	$15.0651-4.0075I$	0
$u=-1.10926+0.89934I$ $a=-0.999768-0.372325I$ $b=-2.69091+0.68963I$	$16.3728+6.2095I$	0
$u=-1.10926-0.89934I$ $a=-0.999768+0.372325I$ $b=-2.69091-0.68963I$	$16.3728-6.2095I$	0
$u=\ \ 1.08343+0.95036I$ $a=-0.278099-0.106243I$ $b=-0.808505-0.423181I$	$6.49243+3.66353I$	0
$u=\ \ 1.08343-0.95036I$ $a=-0.278099+0.106243I$ $b=-0.808505+0.423181I$	$6.49243-3.66353I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.59894 + 1.32646I$ $a = 0.840675 + 0.936960I$ $b = -1.74794 + 0.20763I$	$3.56306 + 5.56643I$	0
$u = 0.59894 - 1.32646I$ $a = 0.840675 - 0.936960I$ $b = -1.74794 - 0.20763I$	$3.56306 - 5.56643I$	0
$u = -0.95393 + 1.10294I$ $a = -0.08765 - 1.98339I$ $b = -2.77311 - 0.59101I$	$15.6580 - 13.6964I$	0
$u = -0.95393 - 1.10294I$ $a = -0.08765 + 1.98339I$ $b = -2.77311 + 0.59101I$	$15.6580 + 13.6964I$	0
$u = 1.03091 + 1.03246I$ $a = -0.171963 + 0.984513I$ $b = -1.270640 + 0.340074I$	$6.22484 + 3.97881I$	0
$u = 1.03091 - 1.03246I$ $a = -0.171963 - 0.984513I$ $b = -1.270640 - 0.340074I$	$6.22484 - 3.97881I$	0
$u = -0.373093 + 0.258025I$ $a = -1.14452 - 1.54216I$ $b = -0.465004 - 1.176860I$	$-1.61522 - 1.51020I$	$-1.99512 + 5.26674I$
$u = -0.373093 - 0.258025I$ $a = -1.14452 + 1.54216I$ $b = -0.465004 + 1.176860I$	$-1.61522 + 1.51020I$	$-1.99512 - 5.26674I$
$u = -0.179315 + 0.403078I$ $a = 0.716711 - 0.420282I$ $b = -0.586881 + 0.899608I$	$-1.85309 + 1.18150I$	$0.81194 + 1.42321I$
$u = -0.179315 - 0.403078I$ $a = 0.716711 + 0.420282I$ $b = -0.586881 - 0.899608I$	$-1.85309 - 1.18150I$	$0.81194 - 1.42321I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.276210+0.334239I$		
$a=-0.89628+5.44219I$	$5.10998-3.43817I$	$2.08715+8.85459I$
$b=\ \ 0.563842+0.807265I$		
$u=-0.276210-0.334239I$		
$a=-0.89628-5.44219I$	$5.10998+3.43817I$	$2.08715-8.85459I$
$b=\ \ 0.563842-0.807265I$		

II. $\boldsymbol{I_2^u = \langle -4867u^{17} + 14254u^{16} + \cdots + 1012b + 2283,\ -6343u^{17} + 8982u^{16} + \cdots + 1012a - 18113,\ u^{18} - 3u^{17} + \cdots - 2u + 1\rangle}$

(i) Arc colorings

$$a_2 = \begin{pmatrix} 0 \\ u \end{pmatrix}$$

$$a_6 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$

$$a_5 = \begin{pmatrix} 1 \\ u^2 \end{pmatrix}$$

$$a_3 = \begin{pmatrix} u \\ u^3 + u \end{pmatrix}$$

$$a_1 = \begin{pmatrix} u^3 \\ u^5 + u^3 + u \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} 6.26779u^{17} - 8.87549u^{16} + \cdots - 5.28162u + 17.8982 \\ 4.80929u^{17} - 14.0850u^{16} + \cdots + 12.3113u - 2.25593 \end{pmatrix}$$

$$a_4 = \begin{pmatrix} -0.265810u^{17} - 6.61067u^{16} + \cdots + 16.6670u - 18.5484 \\ -3.83103u^{17} + 13.4328u^{16} + \cdots - 22.5504u + 8.40810 \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} 2.98715u^{17} - 2.83992u^{16} + \cdots - 4.00494u + 10.2263 \\ 4.74605u^{17} - 12.5277u^{16} + \cdots + 7.97925u + 1.55040 \end{pmatrix}$$

$$a_9 = \begin{pmatrix} 7.73320u^{17} - 15.3676u^{16} + \cdots + 3.97431u + 11.7767 \\ 4.74605u^{17} - 12.5277u^{16} + \cdots + 7.97925u + 1.55040 \end{pmatrix}$$

$$a_7 = \begin{pmatrix} -11.2737u^{17} + 34.3340u^{16} + \cdots - 42.8745u + 11.0524 \\ -0.487154u^{17} + 5.83992u^{16} + \cdots - 20.4951u + 12.2737 \end{pmatrix}$$

$$a_8 = \begin{pmatrix} -12.6947u^{17} + 37.8874u^{16} + \cdots - 45.9595u + 10.5445 \\ 2.59783u^{17} - 3.06522u^{16} + \cdots - 9.92391u + 10.3152 \end{pmatrix}$$

$$a_{12} = \begin{pmatrix} -3.87253u^{17} + 24.6423u^{16} + \cdots - 46.6433u + 37.0623 \\ 5.80929u^{17} - 17.0850u^{16} + \cdots + 20.3113u - 4.25593 \end{pmatrix}$$

(ii) Obstruction class $= 1$

(iii) Cusp Shapes $= -\frac{9044}{253}u^{17} + \frac{28784}{253}u^{16} + \cdots - \frac{39132}{253}u + \frac{7280}{253}$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{18} - 7u^{17} + \cdots - 14u + 1$
c_2	$u^{18} + 3u^{17} + \cdots + 2u + 1$
c_3	$u^{18} - 3u^{16} + \cdots - 3u + 1$
c_4	$u^{18} - u^{17} + \cdots - 2u + 1$
c_5	$u^{18} - 3u^{17} + \cdots - 2u + 1$
c_6	$u^{18} - u^{17} + \cdots + 4u^2 + 1$
c_7	$u^{18} - 3u^{17} + \cdots - 10u + 4$
c_8	$u^{18} + u^{17} + \cdots + 76u + 57$
c_9	$u^{18} + u^{17} + \cdots + 4u^2 + 1$
c_{10}	$u^{18} + u^{17} + \cdots + 2u + 1$
c_{11}	$u^{18} + 3u^{17} + \cdots + 10u + 4$
c_{12}	$u^{18} - 6u^{16} + \cdots - 11u + 1$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{18} + 15y^{17} + \cdots - 18y + 1$
c_2, c_5	$y^{18} + 7y^{17} + \cdots + 14y + 1$
c_3	$y^{18} - 6y^{17} + \cdots + 5y + 1$
c_4, c_{10}	$y^{18} + 13y^{17} + \cdots + 8y + 1$
c_6, c_9	$y^{18} + 13y^{17} + \cdots + 8y + 1$
c_7, c_{11}	$y^{18} + 17y^{17} + \cdots + 132y + 16$
c_8	$y^{18} + 9y^{17} + \cdots + 9386y + 3249$
c_{12}	$y^{18} - 12y^{17} + \cdots - 81y + 1$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.240870+0.978943I$ $a=-1.25541-2.83197I$ $b=-0.21177+1.92601I$	$-3.86342-2.53444I$	$-6.00075+4.97918I$
$u=-0.240870-0.978943I$ $a=-1.25541+2.83197I$ $b=-0.21177-1.92601I$	$-3.86342+2.53444I$	$-6.00075-4.97918I$
$u=-0.765621+0.606358I$ $a=0.278651+1.280040I$ $b=1.24023+1.62359I$	$0.23703-1.69228I$	$0.83242+2.86969I$
$u=-0.765621-0.606358I$ $a=0.278651-1.280040I$ $b=1.24023-1.62359I$	$0.23703+1.69228I$	$0.83242-2.86969I$
$u=0.337566+0.846099I$ $a=-0.091147-1.262980I$ $b=0.939589+0.176841I$	$-2.00038+1.54339I$	$-3.04611-5.94174I$
$u=0.337566-0.846099I$ $a=-0.091147+1.262980I$ $b=0.939589-0.176841I$	$-2.00038-1.54339I$	$-3.04611+5.94174I$
$u=-0.620903+1.061930I$ $a=1.55504+1.96968I$ $b=1.56919-2.08170I$	$-1.22831-3.61122I$	$-0.22198+3.20516I$
$u=-0.620903-1.061930I$ $a=1.55504-1.96968I$ $b=1.56919+2.08170I$	$-1.22831+3.61122I$	$-0.22198-3.20516I$
$u=0.467804+1.187440I$ $a=0.623317+0.856528I$ $b=-1.323390+0.290602I$	$2.26110+5.81595I$	$-4.03162-6.52282I$
$u=0.467804-1.187440I$ $a=0.623317-0.856528I$ $b=-1.323390-0.290602I$	$2.26110-5.81595I$	$-4.03162+6.52282I$

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 1.096150 + 0.673790I$ $a = 0.0129986 - 0.0113203I$ $b = -0.857327 - 0.140205I$	$7.53035 + 2.31013I$	$6.08544 - 2.15566I$
$u = 1.096150 - 0.673790I$ $a = 0.0129986 + 0.0113203I$ $b = -0.857327 + 0.140205I$	$7.53035 - 2.31013I$	$6.08544 + 2.15566I$
$u = 0.199181 + 0.600312I$ $a = -2.57923 + 3.26705I$ $b = -0.522876 - 0.873088I$	$4.82909 - 2.78799I$	$-2.22398 - 0.71537I$
$u = 0.199181 - 0.600312I$ $a = -2.57923 - 3.26705I$ $b = -0.522876 + 0.873088I$	$4.82909 + 2.78799I$	$-2.22398 + 0.71537I$
$u = 0.056256 + 0.577327I$ $a = -0.541472 - 1.074660I$ $b = 0.797007 - 0.718327I$	$-2.39405 + 1.36812I$	$-15.0403 - 4.3531I$
$u = 0.056256 - 0.577327I$ $a = -0.541472 + 1.074660I$ $b = 0.797007 + 0.718327I$	$-2.39405 - 1.36812I$	$-15.0403 + 4.3531I$
$u = 0.97044 + 1.14952I$ $a = -0.002747 + 0.847842I$ $b = -1.130650 + 0.094155I$	$6.14313 + 5.16446I$	$2.14687 - 7.70212I$
$u = 0.97044 - 1.14952I$ $a = -0.002747 - 0.847842I$ $b = -1.130650 - 0.094155I$	$6.14313 - 5.16446I$	$2.14687 + 7.70212I$

III. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1	$(u^{18}-7u^{17}+\cdots-14u+1)(u^{42}+8u^{41}+\cdots+14u+1)$
c_2	$(u^{18}+3u^{17}+\cdots+2u+1)(u^{42}+4u^{40}+\cdots+8u+1)$
c_3	$(u^{18}-3u^{16}+\cdots-3u+1)(u^{42}+u^{41}+\cdots+15u+1)$
c_4	$(u^{18}-u^{17}+\cdots-2u+1)(u^{42}-3u^{40}+\cdots+3884u+653)$
c_5	$(u^{18}-3u^{17}+\cdots-2u+1)(u^{42}+4u^{40}+\cdots+8u+1)$
c_6	$(u^{18}-u^{17}+\cdots+4u^2+1)(u^{42}-2u^{41}+\cdots-1450u+2881)$
c_7	$(u^{18}-3u^{17}+\cdots-10u+4)(u^{42}-2u^{41}+\cdots+102u+116)$
c_8	$(u^{18}+u^{17}+\cdots+76u+57)(u^{42}+29u^{40}+\cdots-3172u+968)$
c_9	$(u^{18}+u^{17}+\cdots+4u^2+1)(u^{42}-2u^{41}+\cdots-1450u+2881)$
c_{10}	$(u^{18}+u^{17}+\cdots+2u+1)(u^{42}-3u^{40}+\cdots+3884u+653)$
c_{11}	$(u^{18}+3u^{17}+\cdots+10u+4)(u^{42}-2u^{41}+\cdots+102u+116)$
c_{12}	$(u^{18}-6u^{16}+\cdots-11u+1)(u^{42}+u^{41}+\cdots+8821u+713)$

IV. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1	$(y^{18}+15y^{17}+\cdots-18y+1)(y^{42}+60y^{41}+\cdots+106y+1)$
c_2, c_5	$(y^{18}+7y^{17}+\cdots+14y+1)(y^{42}+8y^{41}+\cdots+14y+1)$
c_3	$(y^{18}-6y^{17}+\cdots+5y+1)(y^{42}+7y^{41}+\cdots+461y+1)$
c_4, c_{10}	$(y^{18}+13y^{17}+\cdots+8y+1)(y^{42}-6y^{41}+\cdots-6058384y+426409)$
c_6, c_9	$(y^{18}+13y^{17}+\cdots+8y+1)$ $\cdot(y^{42}+54y^{41}+\cdots+123416908y+8300161)$
c_7, c_{11}	$(y^{18}+17y^{17}+\cdots+132y+16)$ $\cdot(y^{42}+50y^{41}+\cdots+280292y+13456)$
c_8	$(y^{18}+9y^{17}+\cdots+9386y+3249)$ $\cdot(y^{42}+58y^{41}+\cdots-12741008y+937024)$
c_{12}	$(y^{18}-12y^{17}+\cdots-81y+1)$ $\cdot(y^{42}-59y^{41}+\cdots-9108213y+508369)$