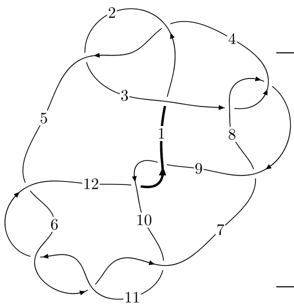
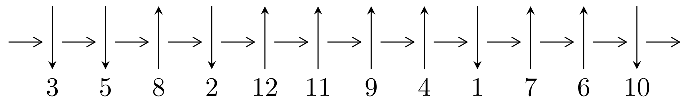
$12a_{0121}$ ($K12a_{0121}$)



A knot diagram[1]

Linearized knot diagam



Solving Sequence

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

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

$$I_1^u = \langle 3.70426 \times 10^{59} u^{73} + 1.40507 \times 10^{59} u^{72} + \cdots + 3.05010 \times 10^{59} b + 6.17432 \times 10^{60},$$
$$-5.99855 \times 10^{59} u^{73} + 1.15828 \times 10^{59} u^{72} + \cdots + 6.10019 \times 10^{59} a - 1.21152 \times 10^{61},\ u^{74} + u^{73} + \cdots + 8u +$$

$$I_1^v = \langle a,\ -v^3 + b - v + 1,\ v^4 + v^2 - v + 1 \rangle$$

* 2 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 78 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.

$\boldsymbol{I_1^u = \langle 3.70\times10^{59}u^{73}+1.41\times10^{59}u^{72}+\cdots+3.05\times10^{59}b+6.17\times10^{60},\ -6.00\times10^{59}u^{73}+1.16\times10^{59}u^{72}+\cdots+6.10\times10^{59}a-1.21\times10^{61},\ u^{74}+u^{73}+\cdots+8u+16\rangle}$

(i) Arc colorings

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

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

$$a_1 = \begin{pmatrix} 0.983338u^{73} - 0.189877u^{72} + \cdots + 5.71968u + 19.8603 \\ -1.21447u^{73} - 0.460663u^{72} + \cdots + 16.1377u - 20.2430 \end{pmatrix}$$

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

$$a_{10} = \begin{pmatrix} 0.138891u^{73} + 0.179714u^{72} + \cdots - 5.47228u - 11.2643 \\ -0.298191u^{73} - 0.945298u^{72} + \cdots + 28.6342u + 19.9267 \end{pmatrix}$$

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

$$a_2 = \begin{pmatrix} 0.602949u^{73} - 0.0755376u^{72} + \cdots - 1.33370u + 13.1498 \\ -0.834082u^{73} - 0.575003u^{72} + \cdots + 23.1911u - 13.5325 \end{pmatrix}$$

$$a_5 = \begin{pmatrix} 0.231133u^{73} + 0.650540u^{72} + \cdots - 21.8574u + 0.382698 \\ -0.834082u^{73} - 0.575003u^{72} + \cdots + 23.1911u - 13.5325 \end{pmatrix}$$

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

$$a_{11} = \begin{pmatrix} -0.683959u^{73} - 0.130336u^{72} + \cdots - 1.49771u - 10.9000 \\ 0.331838u^{73} - 1.01634u^{72} + \cdots + 31.2725u + 30.4644 \end{pmatrix}$$

$$a_6 = \begin{pmatrix} -0.576445u^{73} - 0.941694u^{72} + \cdots + 3.90277u - 0.454644 \\ 0.294240u^{73} + 0.616016u^{72} + \cdots - 15.4748u - 3.92866 \end{pmatrix}$$

$$a_{12} = \begin{pmatrix} 0.0885217u^{73} - 0.151798u^{72} + \cdots + 9.13405u + 14.7379 \\ -1.20808u^{73} - 1.72858u^{72} + \cdots + 42.1635u + 0.443963 \end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= 0.992562u^{73} - 1.56064u^{72} + \cdots + 18.3687u + 67.7778$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{74} + 39u^{73} + \cdots + 5u + 1$
c_2, c_4	$u^{74} - 5u^{73} + \cdots - 5u + 1$
c_3, c_8	$u^{74} + u^{73} + \cdots + 8u + 16$
c_5, c_6, c_{10} c_{11}	$u^{74} + 2u^{73} + \cdots + u + 1$
c_7	$u^{74} - 27u^{73} + \cdots - 3648u + 256$
c_9, c_{12}	$u^{74} - 14u^{73} + \cdots - 401u + 131$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{74} - 3y^{73} + \cdots + 31y + 1$
c_2, c_4	$y^{74} - 39y^{73} + \cdots - 5y + 1$
c_3, c_8	$y^{74} - 27y^{73} + \cdots - 3648y + 256$
c_5, c_6, c_{10} c_{11}	$y^{74} + 82y^{73} + \cdots + 13y + 1$
c_7	$y^{74} + 33y^{73} + \cdots + 733184y + 65536$
c_9, c_{12}	$y^{74} + 38y^{73} + \cdots + 804669y + 17161$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.423407 + 0.908405I$ $a = 0.333736 + 0.370914I$ $b = 0.795329 - 0.678802I$	$-6.68590 - 0.24691I$	$-2.05218 + 1.39856I$
$u = 0.423407 - 0.908405I$ $a = 0.333736 - 0.370914I$ $b = 0.795329 + 0.678802I$	$-6.68590 + 0.24691I$	$-2.05218 - 1.39856I$
$u = -0.801884 + 0.590421I$ $a = -0.687028 + 0.893257I$ $b = 0.35735 - 2.20178I$	$-9.54906 + 1.30956I$	$-4.03408 + 2.47435I$
$u = -0.801884 - 0.590421I$ $a = -0.687028 - 0.893257I$ $b = 0.35735 + 2.20178I$	$-9.54906 - 1.30956I$	$-4.03408 - 2.47435I$
$u = -0.829553 + 0.543699I$ $a = 0.978509 - 0.503295I$ $b = -0.755197 + 0.923555I$	$-1.52786 - 2.20202I$	$-1.33752 + 3.99333I$
$u = -0.829553 - 0.543699I$ $a = 0.978509 + 0.503295I$ $b = -0.755197 - 0.923555I$	$-1.52786 + 2.20202I$	$-1.33752 - 3.99333I$
$u = 0.850830 + 0.554970I$ $a = 2.05682 + 0.92874I$ $b = -0.486535 - 1.179000I$	$-2.05198 + 3.51352I$	$0. - 6.69469I$
$u = 0.850830 - 0.554970I$ $a = 2.05682 - 0.92874I$ $b = -0.486535 + 1.179000I$	$-2.05198 - 3.51352I$	$0. + 6.69469I$
$u = 0.684502 + 0.755683I$ $a = 1.19354 + 0.87816I$ $b = 0.197384 - 1.181150I$	$-5.16241 - 1.26769I$	$-6.83065 + 0.I$
$u = 0.684502 - 0.755683I$ $a = 1.19354 - 0.87816I$ $b = 0.197384 + 1.181150I$	$-5.16241 + 1.26769I$	$-6.83065 + 0.I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.857556 + 0.558345I$ $a = 0.684895 + 0.677632I$ $b = -0.37941 - 1.93637I$	$-2.02581 + 0.94411I$	0
$u = 0.857556 - 0.558345I$ $a = 0.684895 - 0.677632I$ $b = -0.37941 + 1.93637I$	$-2.02581 - 0.94411I$	0
$u = -0.547569 + 0.920117I$ $a = -0.474236 + 0.749588I$ $b = -0.753401 - 1.013480I$	$-0.84622 + 2.33865I$	0
$u = -0.547569 - 0.920117I$ $a = -0.474236 - 0.749588I$ $b = -0.753401 + 1.013480I$	$-0.84622 - 2.33865I$	0
$u = 0.428504 + 0.823370I$ $a = -0.336458 - 0.903865I$ $b = -0.092714 + 1.043080I$	$-6.30073 - 4.37712I$	$-0.70444 + 1.63184I$
$u = 0.428504 - 0.823370I$ $a = -0.336458 + 0.903865I$ $b = -0.092714 - 1.043080I$	$-6.30073 + 4.37712I$	$-0.70444 - 1.63184I$
$u = -0.897117 + 0.590669I$ $a = -2.07001 + 1.11773I$ $b = 0.51805 - 1.33705I$	$-9.24424 - 5.99219I$	0
$u = -0.897117 - 0.590669I$ $a = -2.07001 - 1.11773I$ $b = 0.51805 + 1.33705I$	$-9.24424 + 5.99219I$	0
$u = 0.832703 + 0.681766I$ $a = -1.039600 - 0.747085I$ $b = 0.724020 + 1.159500I$	$-9.45633 + 2.62273I$	0
$u = 0.832703 - 0.681766I$ $a = -1.039600 + 0.747085I$ $b = 0.724020 - 1.159500I$	$-9.45633 - 2.62273I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.769283+0.488778I$ $a=-2.05548+0.60852I$ $b=\ \ 0.438285-0.921897I$	$-1.384040+0.132047I$	$2.16067+0.30955I$
$u=-0.769283-0.488778I$ $a=-2.05548-0.60852I$ $b=\ \ 0.438285+0.921897I$	$-1.384040-0.132047I$	$2.16067-0.30955I$
$u=-0.944570+0.558179I$ $a=-0.818444+0.415309I$ $b=\ \ 0.57504-1.64298I$	$-0.71686-4.42426I$	0
$u=-0.944570-0.558179I$ $a=-0.818444-0.415309I$ $b=\ \ 0.57504+1.64298I$	$-0.71686+4.42426I$	0
$u=-0.766571+0.807568I$ $a=-1.19792+1.21825I$ $b=-0.20218-1.45363I$	$-13.17610+1.37303I$	0
$u=-0.766571-0.807568I$ $a=-1.19792-1.21825I$ $b=-0.20218+1.45363I$	$-13.17610-1.37303I$	0
$u=-0.078416+0.870824I$ $a=\ \ 0.015544-0.645299I$ $b=\ \ 0.570597+0.489818I$	$-5.43606-3.66476I$	$-0.14387+4.42422I$
$u=-0.078416-0.870824I$ $a=\ \ 0.015544+0.645299I$ $b=\ \ 0.570597-0.489818I$	$-5.43606+3.66476I$	$-0.14387-4.42422I$
$u=\ \ 0.596490+0.957647I$ $a=\ \ 0.432293+0.957849I$ $b=\ \ 0.81695-1.18139I$	$-1.53922-6.15680I$	0
$u=\ \ 0.596490-0.957647I$ $a=\ \ 0.432293-0.957849I$ $b=\ \ 0.81695+1.18139I$	$-1.53922+6.15680I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.791891 + 0.295773I$ $a = 2.48374 + 0.34198I$ $b = -0.709497 - 0.587590I$	$-7.51454 - 2.01833I$	$-0.618134 - 0.685391I$
$u = 0.791891 - 0.295773I$ $a = 2.48374 - 0.34198I$ $b = -0.709497 + 0.587590I$	$-7.51454 + 2.01833I$	$-0.618134 + 0.685391I$
$u = 0.812781 + 0.230945I$ $a = -0.756305 - 0.135352I$ $b = 0.786320 + 0.593647I$	$1.252930 + 0.387938I$	$8.38658 - 1.11749I$
$u = 0.812781 - 0.230945I$ $a = -0.756305 + 0.135352I$ $b = 0.786320 - 0.593647I$	$1.252930 - 0.387938I$	$8.38658 + 1.11749I$
$u = -0.630186 + 0.982770I$ $a = -0.404159 + 1.105010I$ $b = -0.85849 - 1.30364I$	$-8.74555 + 8.73953I$	0
$u = -0.630186 - 0.982770I$ $a = -0.404159 - 1.105010I$ $b = -0.85849 + 1.30364I$	$-8.74555 - 8.73953I$	0
$u = -0.333081 + 0.761545I$ $a = 0.259564 - 0.774462I$ $b = 0.132468 + 0.828249I$	$0.73066 + 2.03280I$	$3.01596 - 3.03284I$
$u = -0.333081 - 0.761545I$ $a = 0.259564 + 0.774462I$ $b = 0.132468 - 0.828249I$	$0.73066 - 2.03280I$	$3.01596 + 3.03284I$
$u = -1.092490 + 0.457930I$ $a = 1.349320 - 0.120256I$ $b = -1.137890 + 0.725457I$	$-2.31150 - 0.67313I$	0
$u = -1.092490 - 0.457930I$ $a = 1.349320 + 0.120256I$ $b = -1.137890 - 0.725457I$	$-2.31150 + 0.67313I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.988326 + 0.663791I$ $a = 1.224120 + 0.440000I$ $b = -1.03796 - 1.72015I$	$-4.21784 + 6.66573I$	0
$u = 0.988326 - 0.663791I$ $a = 1.224120 - 0.440000I$ $b = -1.03796 + 1.72015I$	$-4.21784 - 6.66573I$	0
$u = -0.962589 + 0.726029I$ $a = -1.38552 + 0.63239I$ $b = 1.20458 - 1.95240I$	$-12.5517 - 7.1340I$	0
$u = -0.962589 - 0.726029I$ $a = -1.38552 - 0.63239I$ $b = 1.20458 + 1.95240I$	$-12.5517 + 7.1340I$	0
$u = 0.167715 + 0.775430I$ $a = -0.121087 - 0.691281I$ $b = -0.316447 + 0.584410I$	$1.04424 + 1.49891I$	$4.26534 - 5.16915I$
$u = 0.167715 - 0.775430I$ $a = -0.121087 + 0.691281I$ $b = -0.316447 - 0.584410I$	$1.04424 - 1.49891I$	$4.26534 + 5.16915I$
$u = 1.205340 + 0.081481I$ $a = -0.387742 - 0.668125I$ $b = 0.409851 - 0.226615I$	$6.07576 + 0.60640I$	0
$u = 1.205340 - 0.081481I$ $a = -0.387742 + 0.668125I$ $b = 0.409851 + 0.226615I$	$6.07576 - 0.60640I$	0
$u = 1.078680 + 0.547501I$ $a = -1.43333 - 0.30857I$ $b = 1.17233 + 0.88754I$	$3.46309 + 3.10149I$	0
$u = 1.078680 - 0.547501I$ $a = -1.43333 + 0.30857I$ $b = 1.17233 - 0.88754I$	$3.46309 - 3.10149I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -1.213100 + 0.013999I$ $a = \quad 0.570854 - 0.662659I$ $b = -0.563202 - 0.195923I$	$-0.36122 + 2.07176I$	0
$u = -1.213100 - 0.013999I$ $a = \quad 0.570854 + 0.662659I$ $b = -0.563202 + 0.195923I$	$-0.36122 - 2.07176I$	0
$u = -1.210260 + 0.140063I$ $a = \quad 0.224459 - 0.692691I$ $b = -0.262372 - 0.239344I$	$5.95478 - 4.66035I$	0
$u = -1.210260 - 0.140063I$ $a = \quad 0.224459 + 0.692691I$ $b = -0.262372 + 0.239344I$	$5.95478 + 4.66035I$	0
$u = \quad 1.222830 + 0.196731I$ $a = -0.057216 - 0.731230I$ $b = \quad 0.102347 - 0.239238I$	$-0.73392 + 7.38939I$	0
$u = \quad 1.222830 - 0.196731I$ $a = -0.057216 + 0.731230I$ $b = \quad 0.102347 + 0.239238I$	$-0.73392 - 7.38939I$	0
$u = -1.086840 + 0.598051I$ $a = \quad 1.50608 - 0.40586I$ $b = -1.21482 + 0.98108I$	$2.80968 - 7.08642I$	0
$u = -1.086840 - 0.598051I$ $a = \quad 1.50608 + 0.40586I$ $b = -1.21482 - 0.98108I$	$2.80968 + 7.08642I$	0
$u = -0.737181 + 0.016255I$ $a = \quad 0.608089 + 0.151860I$ $b = -1.007570 - 0.658891I$	$-0.28063 - 2.21410I$	$2.85810 + 7.13012I$
$u = -0.737181 - 0.016255I$ $a = \quad 0.608089 - 0.151860I$ $b = -1.007570 + 0.658891I$	$-0.28063 + 2.21410I$	$2.85810 - 7.13012I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 1.093160 + 0.636688I$ $a = -1.56028 - 0.48571I$ $b = 1.24648 + 1.05875I$	$-4.37061 + 9.78663I$	0
$u = 1.093160 - 0.636688I$ $a = -1.56028 + 0.48571I$ $b = 1.24648 - 1.05875I$	$-4.37061 - 9.78663I$	0
$u = 1.104620 + 0.631964I$ $a = 1.294020 - 0.006338I$ $b = -1.16434 - 1.23107I$	$-4.58482 + 5.78561I$	0
$u = 1.104620 - 0.631964I$ $a = 1.294020 + 0.006338I$ $b = -1.16434 + 1.23107I$	$-4.58482 - 5.78561I$	0
$u = -1.105360 + 0.697204I$ $a = -1.52864 + 0.08925I$ $b = 1.41065 - 1.36000I$	$0.88109 - 8.27754I$	0
$u = -1.105360 - 0.697204I$ $a = -1.52864 - 0.08925I$ $b = 1.41065 + 1.36000I$	$0.88109 + 8.27754I$	0
$u = 1.109560 + 0.728597I$ $a = 1.64987 + 0.12497I$ $b = -1.53970 - 1.40988I$	$0.08090 + 12.33240I$	0
$u = 1.109560 - 0.728597I$ $a = 1.64987 - 0.12497I$ $b = -1.53970 + 1.40988I$	$0.08090 - 12.33240I$	0
$u = 0.656185 + 0.099687I$ $a = -0.698777 + 0.324084I$ $b = 1.40628 - 0.89471I$	$-7.75228 + 3.74107I$	$1.87141 - 6.31684I$
$u = 0.656185 - 0.099687I$ $a = -0.698777 - 0.324084I$ $b = 1.40628 + 0.89471I$	$-7.75228 - 3.74107I$	$1.87141 + 6.31684I$

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -1.110460 + 0.753116I$ $a = -1.74170 + 0.16320I$ $b = 1.63659 - 1.45911I$	$-7.2134 - 15.0818I$	0
$u = -1.110460 - 0.753116I$ $a = -1.74170 - 0.16320I$ $b = 1.63659 + 1.45911I$	$-7.2134 + 15.0818I$	0
$u = -0.288561 + 0.445663I$ $a = -1.36152 - 0.89813I$ $b = -0.019180 - 0.276110I$	$-1.69767 + 0.56736I$	$-4.68375 + 1.20836I$
$u = -0.288561 - 0.445663I$ $a = -1.36152 + 0.89813I$ $b = -0.019180 + 0.276110I$	$-1.69767 - 0.56736I$	$-4.68375 - 1.20836I$

II. $I_1^v = \langle a,\ -v^3 + b - v + 1,\ v^4 + v^2 - v + 1\rangle$

(i) Arc colorings

$$a_4 = \begin{pmatrix} v \\ 0 \end{pmatrix}$$
$$a_8 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$
$$a_1 = \begin{pmatrix} 0 \\ v^3 + v - 1 \end{pmatrix}$$
$$a_9 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$
$$a_{10} = \begin{pmatrix} 1 \\ -v^3 - v^2 - v \end{pmatrix}$$
$$a_3 = \begin{pmatrix} v \\ 0 \end{pmatrix}$$
$$a_2 = \begin{pmatrix} v \\ v^3 + v - 1 \end{pmatrix}$$
$$a_5 = \begin{pmatrix} 0 \\ -v^3 - v + 1 \end{pmatrix}$$
$$a_7 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$
$$a_{11} = \begin{pmatrix} -v^3 - v^2 - v + 1 \\ -v^3 - v^2 - v \end{pmatrix}$$
$$a_6 = \begin{pmatrix} -v^2 - v - 1 \\ v^3 - 2 \end{pmatrix}$$
$$a_{12} = \begin{pmatrix} v^3 + v - 1 \\ v^3 + v^2 + 2v \end{pmatrix}$$

(ii) Obstruction class $= 1$

(iii) Cusp Shapes $= v^3 - 4v^2 + v - 6$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1, c_2	$(u-1)^4$
c_3, c_7, c_8	u^4
c_4	$(u+1)^4$
c_5, c_6	$u^4+u^3+3u^2+2u+1$
c_9	$u^4+u^3+u^2+1$
c_{10}, c_{11}	$u^4-u^3+3u^2-2u+1$
c_{12}	$u^4-u^3+u^2+1$

(v) Riley Polynomials at the component

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

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^v	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$v = 0.547424 + 0.585652I$ $a = 0$ $b = -0.851808 + 0.911292I$	$-8.43568 + 3.16396I$	$-5.67855 - 1.65351I$
$v = 0.547424 - 0.585652I$ $a = 0$ $b = -0.851808 - 0.911292I$	$-8.43568 - 3.16396I$	$-5.67855 + 1.65351I$
$v = -0.547424 + 1.120870I$ $a = 0$ $b = 0.351808 + 0.720342I$	$-1.43393 - 1.41510I$	$-0.82145 + 5.62908I$
$v = -0.547424 - 1.120870I$ $a = 0$ $b = 0.351808 - 0.720342I$	$-1.43393 + 1.41510I$	$-0.82145 - 5.62908I$

III. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1	$((u-1)^4)(u^{74}+39u^{73}+\cdots+5u+1)$
c_2	$((u-1)^4)(u^{74}-5u^{73}+\cdots-5u+1)$
c_3, c_8	$u^4(u^{74}+u^{73}+\cdots+8u+16)$
c_4	$((u+1)^4)(u^{74}-5u^{73}+\cdots-5u+1)$
c_5, c_6	$(u^4+u^3+3u^2+2u+1)(u^{74}+2u^{73}+\cdots+u+1)$
c_7	$u^4(u^{74}-27u^{73}+\cdots-3648u+256)$
c_9	$(u^4+u^3+u^2+1)(u^{74}-14u^{73}+\cdots-401u+131)$
c_{10}, c_{11}	$(u^4-u^3+3u^2-2u+1)(u^{74}+2u^{73}+\cdots+u+1)$
c_{12}	$(u^4-u^3+u^2+1)(u^{74}-14u^{73}+\cdots-401u+131)$

IV. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1	$((y-1)^4)(y^{74}-3y^{73}+\cdots+31y+1)$
c_2, c_4	$((y-1)^4)(y^{74}-39y^{73}+\cdots-5y+1)$
c_3, c_8	$y^4(y^{74}-27y^{73}+\cdots-3648y+256)$
c_5, c_6, c_{10} c_{11}	$(y^4+5y^3+7y^2+2y+1)(y^{74}+82y^{73}+\cdots+13y+1)$
c_7	$y^4(y^{74}+33y^{73}+\cdots+733184y+65536)$
c_9, c_{12}	$(y^4+y^3+3y^2+2y+1)(y^{74}+38y^{73}+\cdots+804669y+17161)$