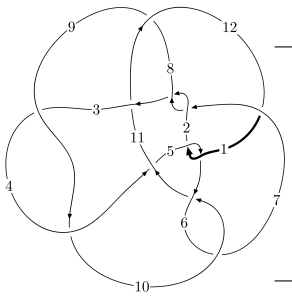
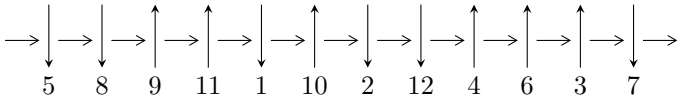
$12a_{1280}$ $(K12a_{1280})$



A knot diagram[1]

Linearized knot diagam



Solving Sequence

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

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

$$\begin{aligned} I_1^u = \langle & -1.89817 \times 10^{771} u^{159} - 8.88168 \times 10^{771} u^{158} + \cdots + 1.85109 \times 10^{773} b + 7.26797 \times 10^{773}, \\ & - 7.79658 \times 10^{780} u^{159} + 8.42830 \times 10^{780} u^{158} + \cdots + 1.47412 \times 10^{783} a + 4.88030 \times 10^{784}, \\ & u^{160} + 5u^{159} + \cdots + 1034u + 763 \rangle \\ I_2^u = \langle & -1.11952 \times 10^{18} u^{39} + 9.08577 \times 10^{17} u^{38} + \cdots + 4.95466 \times 10^{16} b + 1.44944 \times 10^{18}, \\ & 2.55914 \times 10^{20} u^{39} - 1.19489 \times 10^{22} u^{38} + \cdots + 3.04167 \times 10^{20} a - 5.39997 \times 10^{22}, \ u^{40} + 10u^{38} + \cdots - 2u + \end{aligned}$$

* 2 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 200 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. $\boldsymbol{I_1^u = \langle -1.90 \times 10^{771} u^{159} - 8.88 \times 10^{771} u^{158} + \cdots + 1.85 \times 10^{773} b + 7.27 \times 10^{773},\ -7.80 \times 10^{780} u^{159} + 8.43 \times 10^{780} u^{158} + \cdots + 1.47 \times 10^{783} a + 4.88 \times 10^{784},\ u^{160} + 5u^{159} + \cdots + 1034u + 763 \rangle}$

(i) Arc colorings

$$a_1 = \begin{pmatrix} 0 \\ u \end{pmatrix}$$

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

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

$$a_2 = \begin{pmatrix} -u \\ u^3 + u \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} 0.00528898u^{159} - 0.00571753u^{158} + \cdots - 31.2417u - 33.1066 \\ 0.0102543u^{159} + 0.0479809u^{158} + \cdots - 1.97258u - 3.92632 \end{pmatrix}$$

$$a_4 = \begin{pmatrix} 0.00208837u^{159} + 0.0175818u^{158} + \cdots + 93.9097u + 25.1074 \\ -0.00146282u^{159} - 0.00856543u^{158} + \cdots - 6.96135u - 0.610702 \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} -0.00496536u^{159} - 0.0536984u^{158} + \cdots - 29.2691u - 29.1803 \\ 0.0102543u^{159} + 0.0479809u^{158} + \cdots - 1.97258u - 3.92632 \end{pmatrix}$$

$$a_7 = \begin{pmatrix} -0.00321433u^{159} - 0.00722482u^{158} + \cdots - 20.2256u + 8.49310 \\ 0.0134674u^{159} + 0.0671173u^{158} + \cdots + 23.7049u + 7.19324 \end{pmatrix}$$

$$a_8 = \begin{pmatrix} 0.00196200u^{159} + 0.0180792u^{158} + \cdots - 8.19279u + 12.9535 \\ 0.0119696u^{159} + 0.0581319u^{158} + \cdots + 15.0244u + 2.29208 \end{pmatrix}$$

$$a_9 = \begin{pmatrix} 0.0495996u^{159} + 0.266425u^{158} + \cdots + 129.695u + 41.9874 \\ -0.00966189u^{159} - 0.0379134u^{158} + \cdots - 8.27916u + 7.42179 \end{pmatrix}$$

$$a_3 = \begin{pmatrix} -0.000282697u^{159} - 0.00229252u^{158} + \cdots + 4.31477u + 9.56055 \\ 0.00667690u^{159} + 0.0315444u^{158} + \cdots + 12.8545u - 0.248031 \end{pmatrix}$$

$$a_{12} = \begin{pmatrix} 0.00641506u^{159} + 0.0525232u^{158} + \cdots + 20.9392u + 4.33778 \\ 0.000688568u^{159} + 0.00147807u^{158} + \cdots + 5.68861u + 3.15312 \end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= 0.0110703u^{159} + 0.0900993u^{158} + \cdots - 86.6660u + 30.0672$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1, c_5	$u^{160} + 5u^{159} + \cdots + 1034u + 763$
c_2, c_7	$u^{160} + u^{159} + \cdots + 79965u + 7417$
c_3, c_9	$u^{160} - u^{159} + \cdots - 79965u + 7417$
c_4	$u^{160} + u^{159} + \cdots + 6487992u + 714773$
c_6, c_{10}	$u^{160} - 5u^{159} + \cdots - 1034u + 763$
c_8	$u^{160} + 7u^{159} + \cdots + 60u + 7$
c_{11}	$u^{160} - 7u^{159} + \cdots - 60u + 7$
c_{12}	$u^{160} - u^{159} + \cdots - 6487992u + 714773$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_5, c_6 c_{10}	$y^{160} + 81y^{159} + \cdots + 13136378y + 582169$
c_2, c_3, c_7 c_9	$y^{160} - 115y^{159} + \cdots + 324258557y + 55011889$
c_4, c_{12}	$y^{160} - 7y^{159} + \cdots + 4855248205898y + 510900441529$
c_8, c_{11}	$y^{160} + 7y^{159} + \cdots + 1832y + 49$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.385490+0.927127I$ $a=\ 1.27250-1.33805I$ $b=\ 1.30399-0.73093I$	$4.40812-1.23041I$	0
$u=-0.385490-0.927127I$ $a=\ 1.27250+1.33805I$ $b=\ 1.30399+0.73093I$	$4.40812+1.23041I$	0
$u=-0.294481+0.965440I$ $a=\ 2.94395+0.99740I$ $b=\ 0.356688+1.203140I$	$-2.58230+7.66961I$	0
$u=-0.294481-0.965440I$ $a=\ 2.94395-0.99740I$ $b=\ 0.356688-1.203140I$	$-2.58230-7.66961I$	0
$u=\ 0.457188+0.877846I$ $a=\ 2.09641-0.62542I$ $b=\ 0.530075-1.123270I$	$-6.63354-0.43992I$	0
$u=\ 0.457188-0.877846I$ $a=\ 2.09641+0.62542I$ $b=\ 0.530075+1.123270I$	$-6.63354+0.43992I$	0
$u=-0.193630+0.965913I$ $a=-1.71135+0.57654I$ $b=-1.203960+0.670041I$	$3.46403-0.49869I$	0
$u=-0.193630-0.965913I$ $a=-1.71135-0.57654I$ $b=-1.203960-0.670041I$	$3.46403+0.49869I$	0
$u=-0.630257+0.821670I$ $a=\ 1.18016-1.23585I$ $b=\ 0.842114+0.831002I$	$3.14638+5.48393I$	0
$u=-0.630257-0.821670I$ $a=\ 1.18016+1.23585I$ $b=\ 0.842114-0.831002I$	$3.14638-5.48393I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.528497+0.902931I$ $a=\ \ 0.459469+0.183830I$ $b=-0.06658+1.53283I$	$-4.48952+8.79836I$	0
$u=-0.528497-0.902931I$ $a=\ \ 0.459469-0.183830I$ $b=-0.06658-1.53283I$	$-4.48952-8.79836I$	0
$u=\ \ 0.423235+0.960586I$ $a=-2.26309+0.72628I$ $b=-0.200193+1.041780I$	$-6.16928-4.22992I$	0
$u=\ \ 0.423235-0.960586I$ $a=-2.26309-0.72628I$ $b=-0.200193-1.041780I$	$-6.16928+4.22992I$	0
$u=\ \ 1.042900+0.163804I$ $a=\ \ 0.156926-0.138138I$ $b=\ \ 0.513923+1.144070I$	$1.55339+8.26333I$	0
$u=\ \ 1.042900-0.163804I$ $a=\ \ 0.156926+0.138138I$ $b=\ \ 0.513923-1.144070I$	$1.55339-8.26333I$	0
$u=-1.059430+0.037653I$ $a=\ \ 0.141751-0.253958I$ $b=-0.189671+1.071480I$	$-3.62698-1.64070I$	0
$u=-1.059430-0.037653I$ $a=\ \ 0.141751+0.253958I$ $b=-0.189671-1.071480I$	$-3.62698+1.64070I$	0
$u=\ \ 0.339681+1.004880I$ $a=\ \ 1.171080-0.163992I$ $b=\ \ 0.339681-1.004880I$	$0.481977I$	0
$u=\ \ 0.339681-1.004880I$ $a=\ \ 1.171080+0.163992I$ $b=\ \ 0.339681+1.004880I$	$-0.481977I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.200193+1.041780I$ $a=\ \ 1.85659-0.90395I$ $b=\ \ 0.423235+0.960586I$	$6.16928+4.22992I$	0
$u=-0.200193-1.041780I$ $a=\ \ 1.85659+0.90395I$ $b=\ \ 0.423235-0.960586I$	$6.16928-4.22992I$	0
$u=\ \ 0.409874+0.982147I$ $a=-1.51896-0.85860I$ $b=-0.646848+0.242634I$	$4.95212-3.37858I$	0
$u=\ \ 0.409874-0.982147I$ $a=-1.51896+0.85860I$ $b=-0.646848-0.242634I$	$4.95212+3.37858I$	0
$u=\ \ 0.441987+0.988216I$ $a=-1.64389-0.14711I$ $b=-0.590734+1.176550I$	$0.59941-4.40862I$	0
$u=\ \ 0.441987-0.988216I$ $a=-1.64389+0.14711I$ $b=-0.590734-1.176550I$	$0.59941+4.40862I$	0
$u=-0.882981+0.242850I$ $a=-0.692829+0.792420I$ $b=-0.882981-0.242850I$	$-8.16312I$	0
$u=-0.882981-0.242850I$ $a=-0.692829-0.792420I$ $b=-0.882981+0.242850I$	$8.16312I$	0
$u=\ \ 0.069090+0.909973I$ $a=-1.39578-0.84012I$ $b=-1.069070-0.439551I$	$3.21338+1.36887I$	0
$u=\ \ 0.069090-0.909973I$ $a=-1.39578+0.84012I$ $b=-1.069070+0.439551I$	$3.21338-1.36887I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.189671+1.071480I$ $a=-1.330260-0.045638I$ $b=-1.059430+0.037653I$	$3.62698+1.64070I$	0
$u=-0.189671-1.071480I$ $a=-1.330260+0.045638I$ $b=-1.059430-0.037653I$	$3.62698-1.64070I$	0
$u=\ \ 0.215475+0.882220I$ $a=-1.96224-0.86988I$ $b=-0.266047-0.173518I$	$4.87192-3.43607I$	0
$u=\ \ 0.215475-0.882220I$ $a=-1.96224+0.86988I$ $b=-0.266047+0.173518I$	$4.87192+3.43607I$	0
$u=-0.501432+0.972041I$ $a=\ \ 0.130804-0.697371I$ $b=\ \ 0.984720-0.627553I$	$3.73283-0.97858I$	0
$u=-0.501432-0.972041I$ $a=\ \ 0.130804+0.697371I$ $b=\ \ 0.984720+0.627553I$	$3.73283+0.97858I$	0
$u=-0.594235+0.676961I$ $a=-1.81454-0.03818I$ $b=-0.204775-1.293760I$	$-5.14661-4.35854I$	0
$u=-0.594235-0.676961I$ $a=-1.81454+0.03818I$ $b=-0.204775+1.293760I$	$-5.14661+4.35854I$	0
$u=\ \ 0.409920+0.771799I$ $a=\ \ 0.201552+0.273355I$ $b=\ \ 0.30645+1.45756I$	$-7.01825-3.22517I$	0
$u=\ \ 0.409920-0.771799I$ $a=\ \ 0.201552-0.273355I$ $b=\ \ 0.30645-1.45756I$	$-7.01825+3.22517I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.199327 + 1.111140I$ $a = -0.568173 - 1.013380I$ $b = -0.779145 - 0.883965I$	$3.46471 + 2.35167I$	0
$u = 0.199327 - 1.111140I$ $a = -0.568173 + 1.013380I$ $b = -0.779145 + 0.883965I$	$3.46471 - 2.35167I$	0
$u = -0.108254 + 1.126240I$ $a = 0.906055 - 0.323734I$ $b = 0.521123 - 0.687415I$	$0.369570 + 0.575295I$	0
$u = -0.108254 - 1.126240I$ $a = 0.906055 + 0.323734I$ $b = 0.521123 + 0.687415I$	$0.369570 - 0.575295I$	0
$u = -0.312914 + 0.810172I$ $a = -0.303878 + 0.767833I$ $b = 0.27057 - 1.43596I$	$-3.09882 - 5.03766I$	0
$u = -0.312914 - 0.810172I$ $a = -0.303878 - 0.767833I$ $b = 0.27057 + 1.43596I$	$-3.09882 + 5.03766I$	0
$u = 0.392363 + 1.065770I$ $a = -1.44995 - 0.84307I$ $b = -1.153290 - 0.103649I$	$5.25585 - 3.21786I$	0
$u = 0.392363 - 1.065770I$ $a = -1.44995 + 0.84307I$ $b = -1.153290 + 0.103649I$	$5.25585 + 3.21786I$	0
$u = 0.521123 + 0.687415I$ $a = 0.680160 - 0.140841I$ $b = -0.108254 - 1.126240I$	$-0.369570 + 0.575295I$	0
$u = 0.521123 - 0.687415I$ $a = 0.680160 + 0.140841I$ $b = -0.108254 + 1.126240I$	$-0.369570 - 0.575295I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.738333+0.445064I$ $a=\ 0.017546-0.227666I$ $b=\ 0.586656-1.132260I$	$1.02642-1.58654I$	0
$u=-0.738333-0.445064I$ $a=\ 0.017546+0.227666I$ $b=\ 0.586656+1.132260I$	$1.02642+1.58654I$	0
$u=-1.069070+0.439551I$ $a=\ 0.166690+0.372505I$ $b=\ 0.069090-0.909973I$	$-3.21338+1.36887I$	0
$u=-1.069070-0.439551I$ $a=\ 0.166690-0.372505I$ $b=\ 0.069090+0.909973I$	$-3.21338-1.36887I$	0
$u=-0.274738+1.124500I$ $a=-0.850665-0.828285I$ $b=-0.655182-0.448203I$	$2.34756+3.34951I$	0
$u=-0.274738-1.124500I$ $a=-0.850665+0.828285I$ $b=-0.655182+0.448203I$	$2.34756-3.34951I$	0
$u=-1.153290+0.103649I$ $a=\ 0.530853+0.573422I$ $b=\ 0.392363-1.065770I$	$-5.25585-3.21786I$	0
$u=-1.153290-0.103649I$ $a=\ 0.530853-0.573422I$ $b=\ 0.392363+1.065770I$	$-5.25585+3.21786I$	0
$u=\ 0.765672+0.345950I$ $a=\ 0.133743+0.510090I$ $b=-0.533037-1.282680I$	$-1.21473+4.93993I$	0
$u=\ 0.765672-0.345950I$ $a=\ 0.133743-0.510090I$ $b=-0.533037+1.282680I$	$-1.21473-4.93993I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.833054+0.070087I$ $a=0.553181-0.190046I$ $b=0.499694-0.025259I$	$-2.48910+0.06312I$	0
$u=-0.833054-0.070087I$ $a=0.553181+0.190046I$ $b=0.499694+0.025259I$	$-2.48910-0.06312I$	0
$u=0.984720+0.627553I$ $a=-0.724162-0.345867I$ $b=-0.501432-0.972041I$	$-3.73283-0.97858I$	0
$u=0.984720-0.627553I$ $a=-0.724162+0.345867I$ $b=-0.501432+0.972041I$	$-3.73283+0.97858I$	0
$u=-0.606513+1.004750I$ $a=1.369280+0.164619I$ $b=-0.123366+0.779154I$	$-0.79502+1.63299I$	0
$u=-0.606513-1.004750I$ $a=1.369280-0.164619I$ $b=-0.123366-0.779154I$	$-0.79502-1.63299I$	0
$u=0.398013+0.718929I$ $a=-0.163909+0.749231I$ $b=-0.090052-1.341910I$	$-6.98707+0.72092I$	0
$u=0.398013-0.718929I$ $a=-0.163909-0.749231I$ $b=-0.090052+1.341910I$	$-6.98707-0.72092I$	0
$u=-0.779145+0.883965I$ $a=0.237109+0.001248I$ $b=0.199327-1.111140I$	$-3.46471+2.35167I$	0
$u=-0.779145-0.883965I$ $a=0.237109-0.001248I$ $b=0.199327+1.111140I$	$-3.46471-2.35167I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.842114 + 0.831002I$ $a = -1.83183 - 0.06907I$ $b = -0.630257 + 0.821670I$	$-3.14638 - 5.48393I$	0
$u = 0.842114 - 0.831002I$ $a = -1.83183 + 0.06907I$ $b = -0.630257 - 0.821670I$	$-3.14638 + 5.48393I$	0
$u = -0.559346 + 1.054570I$ $a = 1.87501 - 0.04824I$ $b = 0.87768 + 1.17439I$	$2.80840 + 6.49328I$	0
$u = -0.559346 - 1.054570I$ $a = 1.87501 + 0.04824I$ $b = 0.87768 - 1.17439I$	$2.80840 - 6.49328I$	0
$u = 0.415814 + 1.128180I$ $a = 1.31019 + 0.66892I$ $b = 1.176620 + 0.512232I$	$7.33371 - 7.21816I$	0
$u = 0.415814 - 1.128180I$ $a = 1.31019 - 0.66892I$ $b = 1.176620 - 0.512232I$	$7.33371 + 7.21816I$	0
$u = -0.655182 + 0.448203I$ $a = 0.418144 + 0.462178I$ $b = -0.274738 - 1.124500I$	$-2.34756 + 3.34951I$	0
$u = -0.655182 - 0.448203I$ $a = 0.418144 - 0.462178I$ $b = -0.274738 + 1.124500I$	$-2.34756 - 3.34951I$	0
$u = -0.123366 + 0.779154I$ $a = -2.40149 + 0.01080I$ $b = -0.606513 + 1.004750I$	$0.79502 - 1.63299I$	0
$u = -0.123366 - 0.779154I$ $a = -2.40149 - 0.01080I$ $b = -0.606513 - 1.004750I$	$0.79502 + 1.63299I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.285090+0.732214I$ $a=\ 1.96824-0.40604I$ $b=\ 1.223720+0.369838I$	$3.73949+4.32335I$	0
$u=-0.285090-0.732214I$ $a=\ 1.96824+0.40604I$ $b=\ 1.223720-0.369838I$	$3.73949-4.32335I$	0
$u=-1.162480+0.379098I$ $a=-0.286847-0.181302I$ $b=-0.572808+1.187830I$	$-2.82817-13.47410I$	0
$u=-1.162480-0.379098I$ $a=-0.286847+0.181302I$ $b=-0.572808-1.187830I$	$-2.82817+13.47410I$	0
$u=\ 0.530075+1.123270I$ $a=\ 1.071000+0.753859I$ $b=\ 0.457188-0.877846I$	$6.63354-0.43992I$	0
$u=\ 0.530075-1.123270I$ $a=\ 1.071000-0.753859I$ $b=\ 0.457188+0.877846I$	$6.63354+0.43992I$	0
$u=-0.414058+1.179940I$ $a=-1.58135-0.52910I$ $b=-0.77596-1.19119I$	$1.55910+6.59009I$	0
$u=-0.414058-1.179940I$ $a=-1.58135+0.52910I$ $b=-0.77596+1.19119I$	$1.55910-6.59009I$	0
$u=\ 0.513923+1.144070I$ $a=\ 1.068130+0.337962I$ $b=\ 1.042900+0.163804I$	$-1.55339-8.26333I$	0
$u=\ 0.513923-1.144070I$ $a=\ 1.068130-0.337962I$ $b=\ 1.042900-0.163804I$	$-1.55339+8.26333I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.356688 + 1.203140I$ $a = -1.82709 - 1.00984I$ $b = -0.294481 + 0.965440I$	$2.58230 - 7.66961I$	0
$u = 0.356688 - 1.203140I$ $a = -1.82709 + 1.00984I$ $b = -0.294481 - 0.965440I$	$2.58230 + 7.66961I$	0
$u = 0.572579 + 1.119490I$ $a = -1.88829 - 0.15398I$ $b = -0.69528 + 1.41951I$	$1.05567 - 9.97787I$	0
$u = 0.572579 - 1.119490I$ $a = -1.88829 + 0.15398I$ $b = -0.69528 - 1.41951I$	$1.05567 + 9.97787I$	0
$u = 0.724099 + 0.110420I$ $a = 0.104396 + 1.321150I$ $b = 0.444211 + 0.024548I$	$-4.35932 + 3.66419I$	0
$u = 0.724099 - 0.110420I$ $a = 0.104396 - 1.321150I$ $b = 0.444211 - 0.024548I$	$-4.35932 - 3.66419I$	0
$u = -0.541294 + 1.147470I$ $a = 1.53105 - 0.30514I$ $b = 0.450781 + 1.267390I$	$-2.03353 + 7.92224I$	0
$u = -0.541294 - 1.147470I$ $a = 1.53105 + 0.30514I$ $b = 0.450781 - 1.267390I$	$-2.03353 - 7.92224I$	0
$u = 0.586656 + 1.132260I$ $a = -0.647738 - 0.320076I$ $b = -0.738333 - 0.445064I$	$-1.02642 - 1.58654I$	0
$u = 0.586656 - 1.132260I$ $a = -0.647738 + 0.320076I$ $b = -0.738333 + 0.445064I$	$-1.02642 + 1.58654I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 1.223720 + 0.369838I$ $a = -0.439882 - 0.493294I$ $b = -0.285090 + 0.732214I$	$-3.73949 - 4.32335I$	0
$u = 1.223720 - 0.369838I$ $a = -0.439882 + 0.493294I$ $b = -0.285090 - 0.732214I$	$-3.73949 + 4.32335I$	0
$u = 1.176620 + 0.512232I$ $a = 0.019477 - 0.191925I$ $b = 0.415814 + 1.128180I$	$-7.33371 + 7.21816I$	0
$u = 1.176620 - 0.512232I$ $a = 0.019477 + 0.191925I$ $b = 0.415814 - 1.128180I$	$-7.33371 - 7.21816I$	0
$u = -0.281396 + 1.269730I$ $a = 0.709476 - 0.299779I$ $b = 0.469795 + 0.051989I$	$1.74068 + 3.95647I$	0
$u = -0.281396 - 1.269730I$ $a = 0.709476 + 0.299779I$ $b = 0.469795 - 0.051989I$	$1.74068 - 3.95647I$	0
$u = -0.646848 + 0.242634I$ $a = 1.64627 - 1.40446I$ $b = 0.409874 + 0.982147I$	$-4.95212 + 3.37858I$	$-6.43526 + 0.I$
$u = -0.646848 - 0.242634I$ $a = 1.64627 + 1.40446I$ $b = 0.409874 - 0.982147I$	$-4.95212 - 3.37858I$	$-6.43526 + 0.I$
$u = -0.204775 + 1.293760I$ $a = -1.371610 + 0.299493I$ $b = -0.594235 - 0.676961I$	$5.14661 - 4.35854I$	0
$u = -0.204775 - 1.293760I$ $a = -1.371610 - 0.299493I$ $b = -0.594235 + 0.676961I$	$5.14661 + 4.35854I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.590734+1.176550I$ $a=\ 1.390780+0.017847I$ $b=\ 0.441987+0.988216I$	$-0.59941+4.40862I$	0
$u=-0.590734-1.176550I$ $a=\ 1.390780-0.017847I$ $b=\ 0.441987-0.988216I$	$-0.59941-4.40862I$	0
$u=-0.572808+1.187830I$ $a=-1.099690+0.687405I$ $b=-1.162480+0.379098I$	$2.82817+13.47410I$	0
$u=-0.572808-1.187830I$ $a=-1.099690-0.687405I$ $b=-1.162480-0.379098I$	$2.82817-13.47410I$	0
$u=-0.090052+1.341910I$ $a=\ 0.501755-1.175910I$ $b=\ 0.398013-0.718929I$	$6.98707+0.72092I$	0
$u=-0.090052-1.341910I$ $a=\ 0.501755+1.175910I$ $b=\ 0.398013+0.718929I$	$6.98707-0.72092I$	0
$u=\ 0.450781+1.267390I$ $a=-1.76826+0.33344I$ $b=-0.541294+1.147470I$	$2.03353-7.92224I$	0
$u=\ 0.450781-1.267390I$ $a=-1.76826-0.33344I$ $b=-0.541294-1.147470I$	$2.03353+7.92224I$	0
$u=\ 0.076170+0.644966I$ $a=\ 5.53062+0.32618I$ $b=\ 0.076170-0.644966I$	$5.59442I$	$0.+4.35174I$
$u=\ 0.076170-0.644966I$ $a=\ 5.53062-0.32618I$ $b=\ 0.076170+0.644966I$	$-5.59442I$	$0.-4.35174I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.565906+1.249250I$ $a=-1.248660-0.187164I$ $b=-0.565906-1.249250I$	$7.22240I$	0
$u=-0.565906-1.249250I$ $a=-1.248660+0.187164I$ $b=-0.565906+1.249250I$	$-7.22240I$	0
$u=-1.203960+0.670041I$ $a=0.286162-0.232778I$ $b=-0.193630+0.965913I$	$-3.46403+0.49869I$	0
$u=-1.203960-0.670041I$ $a=0.286162+0.232778I$ $b=-0.193630-0.965913I$	$-3.46403-0.49869I$	0
$u=-0.533037+1.282680I$ $a=1.035620-0.515871I$ $b=0.765672-0.345950I$	$1.21473+4.93993I$	0
$u=-0.533037-1.282680I$ $a=1.035620+0.515871I$ $b=0.765672+0.345950I$	$1.21473-4.93993I$	0
$u=0.582324+1.262960I$ $a=1.61676-0.12588I$ $b=0.73565-1.22923I$	$4.9506-14.0072I$	0
$u=0.582324-1.262960I$ $a=1.61676+0.12588I$ $b=0.73565+1.22923I$	$4.9506+14.0072I$	0
$u=-0.77596+1.19119I$ $a=-0.893589+0.206219I$ $b=-0.414058-1.179940I$	$-1.55910+6.59009I$	0
$u=-0.77596-1.19119I$ $a=-0.893589-0.206219I$ $b=-0.414058+1.179940I$	$-1.55910-6.59009I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.73565 + 1.22923I$ $a = 1.367010 + 0.101880I$ $b = 0.582324 - 1.262960I$	$-4.9506 - 14.0072I$	0
$u = 0.73565 - 1.22923I$ $a = 1.367010 - 0.101880I$ $b = 0.582324 + 1.262960I$	$-4.9506 + 14.0072I$	0
$u = -0.69868 + 1.26475I$ $a = -1.65087 + 0.08662I$ $b = -0.69868 - 1.26475I$	$20.0711I$	0
$u = -0.69868 - 1.26475I$ $a = -1.65087 - 0.08662I$ $b = -0.69868 + 1.26475I$	$-20.0711I$	0
$u = -0.28586 + 1.43183I$ $a = 0.369287 + 0.198484I$ $b = 0.106761 + 0.498688I$	$1.64258 + 3.83167I$	0
$u = -0.28586 - 1.43183I$ $a = 0.369287 - 0.198484I$ $b = 0.106761 - 0.498688I$	$1.64258 - 3.83167I$	0
$u = 0.27057 + 1.43596I$ $a = -0.573288 - 1.226230I$ $b = -0.312914 - 0.810172I$	$3.09882 - 5.03766I$	0
$u = 0.27057 - 1.43596I$ $a = -0.573288 + 1.226230I$ $b = -0.312914 + 0.810172I$	$3.09882 + 5.03766I$	0
$u = 0.87768 + 1.17439I$ $a = -1.246940 - 0.309038I$ $b = -0.559346 + 1.054570I$	$-2.80840 - 6.49328I$	0
$u = 0.87768 - 1.17439I$ $a = -1.246940 + 0.309038I$ $b = -0.559346 - 1.054570I$	$-2.80840 + 6.49328I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.30645 + 1.45756I$ $a = 0.251821 + 0.650498I$ $b = 0.409920 + 0.771799I$	$7.01825 + 3.22517I$	0
$u = 0.30645 - 1.45756I$ $a = 0.251821 - 0.650498I$ $b = 0.409920 - 0.771799I$	$7.01825 - 3.22517I$	0
$u = 0.106761 + 0.498688I$ $a = -1.030910 + 0.490758I$ $b = -0.28586 + 1.43183I$	$-1.64258 - 3.83167I$	$-1.96317 + 12.23971I$
$u = 0.106761 - 0.498688I$ $a = -1.030910 - 0.490758I$ $b = -0.28586 - 1.43183I$	$-1.64258 + 3.83167I$	$-1.96317 - 12.23971I$
$u = 1.30399 + 0.73093I$ $a = -0.268543 + 0.307620I$ $b = -0.385490 - 0.927127I$	$-4.40812 - 1.23041I$	0
$u = 1.30399 - 0.73093I$ $a = -0.268543 - 0.307620I$ $b = -0.385490 + 0.927127I$	$-4.40812 + 1.23041I$	0
$u = 0.499694 + 0.025259I$ $a = 0.080117 + 0.278174I$ $b = -0.833054 - 0.070087I$	$2.48910 + 0.06312I$	$2.49825 + 0.73817I$
$u = 0.499694 - 0.025259I$ $a = 0.080117 - 0.278174I$ $b = -0.833054 + 0.070087I$	$2.48910 - 0.06312I$	$2.49825 - 0.73817I$
$u = 0.469795 + 0.051989I$ $a = -0.891265 - 0.759865I$ $b = -0.281396 + 1.269730I$	$-1.74068 - 3.95647I$	$-3.95884 + 5.99220I$
$u = 0.469795 - 0.051989I$ $a = -0.891265 + 0.759865I$ $b = -0.281396 - 1.269730I$	$-1.74068 + 3.95647I$	$-3.95884 - 5.99220I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.06658+1.53283I$ $a=-0.746943+0.645715I$ $b=-0.528497+0.902931I$	$4.48952-8.79836I$	0
$u=-0.06658-1.53283I$ $a=-0.746943-0.645715I$ $b=-0.528497-0.902931I$	$4.48952+8.79836I$	0
$u=0.444211+0.024548I$ $a=0.76177-2.07119I$ $b=0.724099+0.110420I$	$4.35932-3.66419I$	$4.12317+3.31331I$
$u=0.444211-0.024548I$ $a=0.76177+2.07119I$ $b=0.724099-0.110420I$	$4.35932+3.66419I$	$4.12317-3.31331I$
$u=-0.69528+1.41951I$ $a=1.57081-0.00968I$ $b=0.572579+1.119490I$	$-1.05567+9.97787I$	0
$u=-0.69528-1.41951I$ $a=1.57081+0.00968I$ $b=0.572579-1.119490I$	$-1.05567-9.97787I$	0
$u=-0.082605+0.379665I$ $a=0.943469-0.404093I$ $b=-0.082605-0.379665I$	$0.949280I$	$0.-6.70220I$
$u=-0.082605-0.379665I$ $a=0.943469+0.404093I$ $b=-0.082605+0.379665I$	$-0.949280I$	$0.+6.70220I$
$u=-0.266047+0.173518I$ $a=-2.17548+4.76973I$ $b=0.215475-0.882220I$	$-4.87192-3.43607I$	$-3.62298+0.04934I$
$u=-0.266047-0.173518I$ $a=-2.17548-4.76973I$ $b=0.215475+0.882220I$	$-4.87192+3.43607I$	$-3.62298-0.04934I$

II. $I_2^u = \langle -1.12 \times 10^{18} u^{39} + 9.09 \times 10^{17} u^{38} + \cdots + 4.95 \times 10^{16} b + 1.45 \times 10^{18},\ 2.56 \times 10^{20} u^{39} - 1.19 \times 10^{22} u^{38} + \cdots + 3.04 \times 10^{20} a - 5.40 \times 10^{22},\ u^{40} + 10 u^{38} + \cdots - 2u + 1 \rangle$

(i) Arc colorings

$$a_1 = \begin{pmatrix} 0 \\ u \end{pmatrix}$$

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

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

$$a_2 = \begin{pmatrix} -u \\ u^3 + u \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} -0.841362u^{39} + 39.2840u^{38} + \cdots - 463.413u + 177.533 \\ 22.5953u^{39} - 18.3378u^{38} + \cdots + 138.625u - 29.2540 \end{pmatrix}$$

$$a_4 = \begin{pmatrix} 96.8384u^{39} + 116.281u^{38} + \cdots - 605.169u + 404.042 \\ -7.42774u^{39} - 28.0649u^{38} + \cdots + 156.143u - 88.3283 \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} -23.4366u^{39} + 57.6218u^{38} + \cdots - 602.038u + 206.787 \\ 22.5953u^{39} - 18.3378u^{38} + \cdots + 138.625u - 29.2540 \end{pmatrix}$$

$$a_7 = \begin{pmatrix} 10.7408u^{39} - 64.7330u^{38} + \cdots + 224.393u - 162.549 \\ 32.2534u^{39} + 3.89162u^{38} + \cdots + 8.53369u + 27.4869 \end{pmatrix}$$

$$a_8 = \begin{pmatrix} 30.6395u^{39} - 79.3869u^{38} + \cdots + 327.930u - 198.276 \\ 19.0177u^{39} + 14.3984u^{38} + \cdots - 45.7972u + 48.5597 \end{pmatrix}$$

$$a_9 = \begin{pmatrix} -137.038u^{39} + 5.37150u^{38} + \cdots - 27.7704u - 15.3466 \\ -3.99723u^{39} - 7.04365u^{38} + \cdots - 103.972u - 5.33221 \end{pmatrix}$$

$$a_3 = \begin{pmatrix} -80.3048u^{39} + 13.3733u^{38} + \cdots - 141.651u - 42.8254 \\ 48.7262u^{39} + 20.7302u^{38} + \cdots + 53.2754u + 41.9282 \end{pmatrix}$$

$$a_{12} = \begin{pmatrix} 161.564u^{39} + 6.83751u^{38} + \cdots + 487.882u + 71.2551 \\ -58.4557u^{39} - 23.0763u^{38} + \cdots - 243.779u - 4.23229 \end{pmatrix}$$

(ii) Obstruction class $= 1$

(iii) Cusp Shapes $= \frac{4191182456351112204581 7}{3041665376702009975 47} u^{39} - \frac{1124373360174325400890 7}{304166537670200997547} u^{38} + \cdots + \frac{9308692689622199919454 0}{304166537670200997547} u + \frac{2621146220369060723067 0}{304166537670200997547}$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1, c_{10}	$u^{40} + 10u^{38} + \cdots + 2u + 1$
c_2, c_9	$u^{40} - 16u^{38} + \cdots - 39u + 7$
c_3, c_7	$u^{40} - 16u^{38} + \cdots + 39u + 7$
c_4	$u^{40} - 8u^{38} + \cdots - 12u + 1$
c_5, c_6	$u^{40} + 10u^{38} + \cdots - 2u + 1$
c_8	$u^{40} + u^{38} + \cdots - 4u + 1$
c_{11}	$u^{40} + u^{38} + \cdots + 4u + 1$
c_{12}	$u^{40} - 8u^{38} + \cdots + 12u + 1$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_5, c_6 c_{10}	$y^{40} + 20y^{39} + \cdots + 34y + 1$
c_2, c_3, c_7 c_9	$y^{40} - 32y^{39} + \cdots + 229y + 49$
c_4, c_{12}	$y^{40} - 16y^{39} + \cdots + 978y + 1$
c_8, c_{11}	$y^{40} + 2y^{39} + \cdots + 8y + 1$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.266937 + 0.970516I$ $a = 1.97275 + 0.64269I$ $b = 1.003880 - 0.363984I$	$5.02195 - 4.43214I$	$7.83962 + 8.15624I$
$u = 0.266937 - 0.970516I$ $a = 1.97275 - 0.64269I$ $b = 1.003880 + 0.363984I$	$5.02195 + 4.43214I$	$7.83962 - 8.15624I$
$u = -0.253080 + 0.975102I$ $a = -1.43411 - 0.04622I$ $b = -1.144990 - 0.214911I$	$3.26023 + 2.34112I$	$5.32453 - 7.25935I$
$u = -0.253080 - 0.975102I$ $a = -1.43411 + 0.04622I$ $b = -1.144990 + 0.214911I$	$3.26023 - 2.34112I$	$5.32453 + 7.25935I$
$u = -0.255310 + 0.924043I$ $a = -1.64759 + 0.89709I$ $b = -1.174940 + 0.636289I$	$3.08715 - 0.25895I$	$-2.19036 - 5.53864I$
$u = -0.255310 - 0.924043I$ $a = -1.64759 - 0.89709I$ $b = -1.174940 - 0.636289I$	$3.08715 + 0.25895I$	$-2.19036 + 5.53864I$
$u = 0.255086 + 0.910937I$ $a = 0.70601 + 1.33878I$ $b = 1.170370 + 0.738563I$	$4.77985 + 2.25678I$	$9.73483 - 6.01601I$
$u = 0.255086 - 0.910937I$ $a = 0.70601 - 1.33878I$ $b = 1.170370 - 0.738563I$	$4.77985 - 2.25678I$	$9.73483 + 6.01601I$
$u = 1.003880 + 0.363984I$ $a = 1.018380 + 0.835113I$ $b = 0.266937 - 0.970516I$	$-5.02195 - 4.43214I$	$-7.83962 + 8.15624I$
$u = 1.003880 - 0.363984I$ $a = 1.018380 - 0.835113I$ $b = 0.266937 + 0.970516I$	$-5.02195 + 4.43214I$	$-7.83962 - 8.15624I$

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.367951 + 0.835878I$ $a = 1.92159 + 1.26970I$ $b = 0.504732 - 0.697330I$	$4.81807 - 4.20281I$	$2.77271 + 8.50909I$
$u = 0.367951 - 0.835878I$ $a = 1.92159 - 1.26970I$ $b = 0.504732 + 0.697330I$	$4.81807 + 4.20281I$	$2.77271 - 8.50909I$
$u = 0.504732 + 0.697330I$ $a = 2.56040 + 0.24300I$ $b = 0.367951 - 0.835878I$	$-4.81807 - 4.20281I$	$-2.77271 + 8.50909I$
$u = 0.504732 - 0.697330I$ $a = 2.56040 - 0.24300I$ $b = 0.367951 + 0.835878I$	$-4.81807 + 4.20281I$	$-2.77271 - 8.50909I$
$u = -1.144990 + 0.214911I$ $a = -0.128444 + 0.259399I$ $b = -0.253080 - 0.975102I$	$-3.26023 + 2.34112I$	$-5.32453 - 7.25935I$
$u = -1.144990 - 0.214911I$ $a = -0.128444 - 0.259399I$ $b = -0.253080 + 0.975102I$	$-3.26023 - 2.34112I$	$-5.32453 + 7.25935I$
$u = -0.450563 + 1.145660I$ $a = -1.71484 - 0.36630I$ $b = -0.684519 - 1.181630I$	$0.95277 + 6.40093I$	$0. - 5.46085I$
$u = -0.450563 - 1.145660I$ $a = -1.71484 + 0.36630I$ $b = -0.684519 + 1.181630I$	$0.95277 - 6.40093I$	$0. + 5.46085I$
$u = 0.135564 + 1.277420I$ $a = -0.660117 + 0.490819I$ $b = 0.124407 + 0.438191I$	$6.74796 + 2.00538I$	0
$u = 0.135564 - 1.277420I$ $a = -0.660117 - 0.490819I$ $b = 0.124407 - 0.438191I$	$6.74796 - 2.00538I$	0

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-1.174940+0.636289I$ $a=\ 0.100201-0.374119I$ $b=-0.255310+0.924043I$	$-3.08715+0.25895I$	0
$u=-1.174940-0.636289I$ $a=\ 0.100201+0.374119I$ $b=-0.255310-0.924043I$	$-3.08715-0.25895I$	0
$u=-0.153259+0.633495I$ $a=-5.43707+0.98008I$ $b=-0.153259-0.633495I$	$6.04280I$	$0.-12.91332I$
$u=-0.153259-0.633495I$ $a=-5.43707-0.98008I$ $b=-0.153259+0.633495I$	$-6.04280I$	$0.+12.91332I$
$u=-0.178778+0.615337I$ $a=-0.188313+0.187766I$ $b=-0.36254+1.42304I$	$-1.45254-3.42254I$	$5.30121-4.52957I$
$u=-0.178778-0.615337I$ $a=-0.188313-0.187766I$ $b=-0.36254-1.42304I$	$-1.45254+3.42254I$	$5.30121+4.52957I$
$u=-0.684519+1.181630I$ $a=-1.153190+0.270405I$ $b=-0.450563-1.145660I$	$-0.95277+6.40093I$	0
$u=-0.684519-1.181630I$ $a=-1.153190-0.270405I$ $b=-0.450563+1.145660I$	$-0.95277-6.40093I$	0
$u=\ 0.527929+1.260530I$ $a=\ 1.81194+0.01805I$ $b=\ 0.527929-1.260530I$	$-9.22235I$	0
$u=\ 0.527929-1.260530I$ $a=\ 1.81194-0.01805I$ $b=\ 0.527929+1.260530I$	$9.22235I$	0

	Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=$	$0.178345+1.363680I$		
$a=$	$1.114680+0.867402I$	$3.50705-6.04532I$	0
$b=$	$0.122775+0.515880I$		
$u=$	$0.178345-1.363680I$		
$a=$	$1.114680-0.867402I$	$3.50705+6.04532I$	0
$b=$	$0.122775-0.515880I$		
$u=$	$1.170370+0.738563I$		
$a=$	$0.510579-0.091593I$	$-4.77985-2.25678I$	0
$b=$	$0.255086+0.910937I$		
$u=$	$1.170370-0.738563I$		
$a=$	$0.510579+0.091593I$	$-4.77985+2.25678I$	0
$b=$	$0.255086-0.910937I$		
$u=$	$-0.36254+1.42304I$		
$a=$	$-0.093925+0.536186I$	$1.45254+3.42254I$	0
$b=$	$-0.178778+0.615337I$		
$u=$	$-0.36254-1.42304I$		
$a=$	$-0.093925-0.536186I$	$1.45254-3.42254I$	0
$b=$	$-0.178778-0.615337I$		
$u=$	$0.122775+0.515880I$		
$a=$	$-2.46441-1.17281I$	$-3.50705+6.04532I$	$-3.46119-7.26382I$
$b=$	$0.178345+1.363680I$		
$u=$	$0.122775-0.515880I$		
$a=$	$-2.46441+1.17281I$	$-3.50705-6.04532I$	$-3.46119+7.26382I$
$b=$	$0.178345-1.363680I$		
$u=$	$0.124407+0.438191I$		
$a=$	$2.20546+0.23002I$	$-6.74796-2.00538I$	$-5.26025+1.78206I$
$b=$	$0.135564+1.277420I$		
$u=$	$0.124407-0.438191I$		
$a=$	$2.20546-0.23002I$	$-6.74796+2.00538I$	$-5.26025-1.78206I$
$b=$	$0.135564-1.277420I$		

III. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1	$(u^{40}+10u^{38}+\cdots+2u+1)(u^{160}+5u^{159}+\cdots+1034u+763)$
c_2	$(u^{40}-16u^{38}+\cdots-39u+7)(u^{160}+u^{159}+\cdots+79965u+7417)$
c_3	$(u^{40}-16u^{38}+\cdots+39u+7)(u^{160}-u^{159}+\cdots-79965u+7417)$
c_4	$(u^{40}-8u^{38}+\cdots-12u+1)(u^{160}+u^{159}+\cdots+6487992u+714773)$
c_5	$(u^{40}+10u^{38}+\cdots-2u+1)(u^{160}+5u^{159}+\cdots+1034u+763)$
c_6	$(u^{40}+10u^{38}+\cdots-2u+1)(u^{160}-5u^{159}+\cdots-1034u+763)$
c_7	$(u^{40}-16u^{38}+\cdots+39u+7)(u^{160}+u^{159}+\cdots+79965u+7417)$
c_8	$(u^{40}+u^{38}+\cdots-4u+1)(u^{160}+7u^{159}+\cdots+60u+7)$
c_9	$(u^{40}-16u^{38}+\cdots-39u+7)(u^{160}-u^{159}+\cdots-79965u+7417)$
c_{10}	$(u^{40}+10u^{38}+\cdots+2u+1)(u^{160}-5u^{159}+\cdots-1034u+763)$
c_{11}	$(u^{40}+u^{38}+\cdots+4u+1)(u^{160}-7u^{159}+\cdots-60u+7)$
c_{12}	$(u^{40}-8u^{38}+\cdots+12u+1)(u^{160}-u^{159}+\cdots-6487992u+714773)$

IV. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1, c_5, c_6 c_{10}	$(y^{40} + 20y^{39} + \cdots + 34y + 1)$ $\cdot (y^{160} + 81y^{159} + \cdots + 13136378y + 582169)$
c_2, c_3, c_7 c_9	$(y^{40} - 32y^{39} + \cdots + 229y + 49)$ $\cdot (y^{160} - 115y^{159} + \cdots + 324258557y + 55011889)$
c_4, c_{12}	$(y^{40} - 16y^{39} + \cdots + 978y + 1)$ $\cdot (y^{160} - 7y^{159} + \cdots + 4855248205898y + 510900441529)$
c_8, c_{11}	$(y^{40} + 2y^{39} + \cdots + 8y + 1)(y^{160} + 7y^{159} + \cdots + 1832y + 49)$