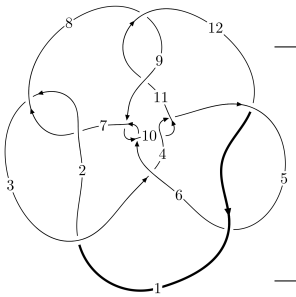
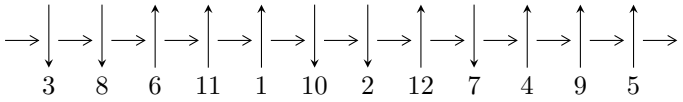
$12a_{0704}$ $(K12a_{0704})$



A knot diagram[1]

Linearized knot diagam



Solving Sequence

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

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

$$\begin{aligned} I_1^u = \langle & -7.60148 \times 10^{463} u^{146} + 1.63393 \times 10^{463} u^{145} + \cdots + 6.38257 \times 10^{464} b - 5.26299 \times 10^{466}, \\ & 1.03268 \times 10^{467} u^{146} - 1.43461 \times 10^{466} u^{145} + \cdots + 3.36361 \times 10^{467} a + 5.88493 \times 10^{469}, \\ & u^{147} - u^{146} + \cdots + 1273u - 527 \rangle \\ I_2^u = \langle & 5521967436 u^{45} + 25712795502 u^{44} + \cdots + 1058458619 b - 22055868259, \\ & 64806150566 u^{45} + 33655961613 u^{44} + \cdots + 1058458619 a - 25765949811, \\ & u^{46} - 14 u^{44} + \cdots + 2u + 1 \rangle \end{aligned}$$

* 2 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 193 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. $\boldsymbol{I_1^u = \langle -7.60 \times 10^{463} u^{146} + 1.63 \times 10^{463} u^{145} + \cdots + 6.38 \times 10^{464} b - 5.26 \times 10^{466},\ 1.03 \times 10^{467} u^{146} - 1.43 \times 10^{466} u^{145} + \cdots + 3.36 \times 10^{467} a + 5.88 \times 10^{469},\ u^{147} - u^{146} + \cdots + 1273u - 527 \rangle}$

(i) Arc colorings

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

$$a_7 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$

$$a_8 = \begin{pmatrix} 1 \\ u^2 \end{pmatrix}$$

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

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

$$a_{10} = \begin{pmatrix} -0.307015u^{146} + 0.0426507u^{145} + \cdots + 264.395u - 174.959 \\ 0.119098u^{146} - 0.0255999u^{145} + \cdots - 98.5592u + 82.4588 \end{pmatrix}$$

$$a_6 = \begin{pmatrix} 0.0335880u^{146} - 0.0499830u^{145} + \cdots - 65.0765u + 47.3200 \\ 0.0868913u^{146} - 0.0208113u^{145} + \cdots - 62.4171u + 61.5742 \end{pmatrix}$$

$$a_4 = \begin{pmatrix} -0.191808u^{146} + 0.0571137u^{145} + \cdots + 183.167u - 118.328 \\ 0.0720548u^{146} - 0.0359632u^{145} + \cdots - 62.4195u + 71.3182 \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} -0.374298u^{146} + 0.0923870u^{145} + \cdots + 300.030u - 232.677 \\ 0.148247u^{146} - 0.0335708u^{145} + \cdots - 121.790u + 85.2752 \end{pmatrix}$$

$$a_5 = \begin{pmatrix} 0.00283914u^{146} - 0.0381795u^{145} + \cdots - 34.0622u + 25.6472 \\ 0.0728317u^{146} - 0.0237253u^{145} + \cdots - 60.1539u + 57.8352 \end{pmatrix}$$

$$a_9 = \begin{pmatrix} -0.187918u^{146} + 0.0170508u^{145} + \cdots + 165.835u - 92.4997 \\ 0.119098u^{146} - 0.0255999u^{145} + \cdots - 98.5592u + 82.4588 \end{pmatrix}$$

$$a_{12} = \begin{pmatrix} -0.0766419u^{146} + 0.00138737u^{145} + \cdots + 32.4750u - 28.5523 \\ 0.0407402u^{146} + 0.00299541u^{145} + \cdots - 25.7432u + 17.3077 \end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= -1.17353u^{146} + 0.321754u^{145} + \cdots + 866.505u - 865.889$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{147} + 65u^{146} + \cdots + 6797777u + 277729$
c_2, c_7	$u^{147} - u^{146} + \cdots + 1273u - 527$
c_3	$u^{147} + 5u^{146} + \cdots - 487893741u + 95956559$
c_4, c_{10}	$u^{147} + u^{146} + \cdots - 434404u - 73112$
c_5, c_{12}	$u^{147} - 3u^{146} + \cdots - 1819273u - 573163$
c_6, c_9	$u^{147} - 2u^{146} + \cdots - 976586u + 350333$
c_8, c_{11}	$u^{147} + 6u^{146} + \cdots - 10u - 1$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{147} + 59y^{146} + \cdots - 2005730840055y - 77133397441$
c_2, c_7	$y^{147} - 65y^{146} + \cdots + 6797777y - 277729$
c_3	$y^{147} - 75y^{146} + \cdots + 857754722402922901y - 9207661215120481$
c_4, c_{10}	$y^{147} - 109y^{146} + \cdots - 76435879920y - 5345364544$
c_5, c_{12}	$y^{147} - 103y^{146} + \cdots + 11878213249293y - 328515824569$
c_6, c_9	$y^{147} + 102y^{146} + \cdots - 10016924047636y - 122733210889$
c_8, c_{11}	$y^{147} + 74y^{146} + \cdots + 496y - 1$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.778426 + 0.640882I$ $a = 0.472111 + 1.067180I$ $b = -1.54249 - 0.15023I$	$0.127554 - 0.538258I$	0
$u = 0.778426 - 0.640882I$ $a = 0.472111 - 1.067180I$ $b = -1.54249 + 0.15023I$	$0.127554 + 0.538258I$	0
$u = 0.920265 + 0.340469I$ $a = -0.65259 - 1.57181I$ $b = 0.429836 - 0.752106I$	$-0.036251 + 0.731182I$	0
$u = 0.920265 - 0.340469I$ $a = -0.65259 + 1.57181I$ $b = 0.429836 + 0.752106I$	$-0.036251 - 0.731182I$	0
$u = 0.356734 + 0.957481I$ $a = -0.12746 - 1.71970I$ $b = 0.152177 + 1.223830I$	$11.10520 - 1.67996I$	0
$u = 0.356734 - 0.957481I$ $a = -0.12746 + 1.71970I$ $b = 0.152177 - 1.223830I$	$11.10520 + 1.67996I$	0
$u = 0.541223 + 0.872467I$ $a = -0.10006 + 1.86950I$ $b = 0.431756 - 1.343840I$	$12.19500 + 5.90750I$	0
$u = 0.541223 - 0.872467I$ $a = -0.10006 - 1.86950I$ $b = 0.431756 + 1.343840I$	$12.19500 - 5.90750I$	0
$u = 0.511898 + 0.819681I$ $a = -0.082419 + 0.534274I$ $b = -0.599851 - 0.097815I$	$1.60243 + 2.51217I$	0
$u = 0.511898 - 0.819681I$ $a = -0.082419 - 0.534274I$ $b = -0.599851 + 0.097815I$	$1.60243 - 2.51217I$	0

	Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=$	$0.785232+0.556584I$		
$a=$	$0.122117-0.805763I$	$1.012040-0.694926I$	0
$b=$	$0.631868-0.663164I$		
$u=$	$0.785232-0.556584I$		
$a=$	$0.122117+0.805763I$	$1.012040+0.694926I$	0
$b=$	$0.631868+0.663164I$		
$u=$	$0.828523+0.636779I$		
$a=$	$1.24927-2.04135I$	$9.83164-4.55996I$	0
$b=$	$0.79896+1.30051I$		
$u=$	$0.828523-0.636779I$		
$a=$	$1.24927+2.04135I$	$9.83164+4.55996I$	0
$b=$	$0.79896-1.30051I$		
$u=$	$-0.841628+0.630253I$		
$a=$	$0.953830-0.159269I$	$1.81516+6.04930I$	0
$b=$	$0.471205+0.705323I$		
$u=$	$-0.841628-0.630253I$		
$a=$	$0.953830+0.159269I$	$1.81516-6.04930I$	0
$b=$	$0.471205-0.705323I$		
$u=$	$-0.573028+0.745920I$		
$a=$	$0.58729+1.74112I$	$5.15512-6.76066I$	0
$b=$	$-0.54507-1.50557I$		
$u=$	$-0.573028-0.745920I$		
$a=$	$0.58729-1.74112I$	$5.15512+6.76066I$	0
$b=$	$-0.54507+1.50557I$		
$u=$	$-0.774357+0.519727I$		
$a=$	$1.51025+3.19257I$	$0.83895+2.21626I$	0
$b=$	$0.273043-1.036390I$		
$u=$	$-0.774357-0.519727I$		
$a=$	$1.51025-3.19257I$	$0.83895-2.21626I$	0
$b=$	$0.273043+1.036390I$		

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.736512+0.570399I$ $a=-0.352151+0.728005I$ $b=-0.619511-0.998464I$	$2.20503-1.16067I$	0
$u=-0.736512-0.570399I$ $a=-0.352151-0.728005I$ $b=-0.619511+0.998464I$	$2.20503+1.16067I$	0
$u=-0.634955+0.864567I$ $a=\ \ 0.410494-0.446785I$ $b=-1.326540-0.139935I$	$4.95565-6.44680I$	0
$u=-0.634955-0.864567I$ $a=\ \ 0.410494+0.446785I$ $b=-1.326540+0.139935I$	$4.95565+6.44680I$	0
$u=\ \ 1.07508$ $a=-0.912775$ $b=-0.770574$	2.41716	0
$u=-0.761395+0.759469I$ $a=-0.92997-1.67614I$ $b=\ \ 0.25336+1.46998I$	$7.01462-1.27991I$	0
$u=-0.761395-0.759469I$ $a=-0.92997+1.67614I$ $b=\ \ 0.25336-1.46998I$	$7.01462+1.27991I$	0
$u=\ \ 0.842370+0.670276I$ $a=-0.90569+1.87573I$ $b=-0.098364-1.236020I$	$3.16395-2.59138I$	0
$u=\ \ 0.842370-0.670276I$ $a=-0.90569-1.87573I$ $b=-0.098364+1.236020I$	$3.16395+2.59138I$	0
$u=-0.864504+0.649729I$ $a=-1.114200-0.142895I$ $b=-0.622297+0.429015I$	$1.73673-1.05522I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.864504-0.649729I$ $a=-1.114200+0.142895I$ $b=-0.622297-0.429015I$	$1.73673+1.05522I$	0
$u=\ \ 0.922929+0.582561I$ $a=-0.291109+0.376979I$ $b=-0.751318-0.383558I$	$0.54199-3.86844I$	0
$u=\ \ 0.922929-0.582561I$ $a=-0.291109-0.376979I$ $b=-0.751318+0.383558I$	$0.54199+3.86844I$	0
$u=\ \ 0.830577+0.365011I$ $a=\ \ 0.012926+0.482356I$ $b=-0.562755-0.628357I$	$0.01525-3.33985I$	0
$u=\ \ 0.830577-0.365011I$ $a=\ \ 0.012926-0.482356I$ $b=-0.562755+0.628357I$	$0.01525+3.33985I$	0
$u=-0.955020+0.544768I$ $a=\ \ 1.49599+2.23878I$ $b=-0.054886-1.040640I$	$0.21240+2.08501I$	0
$u=-0.955020-0.544768I$ $a=\ \ 1.49599-2.23878I$ $b=-0.054886+1.040640I$	$0.21240-2.08501I$	0
$u=\ \ 0.882596+0.657710I$ $a=\ \ 0.894460-1.041250I$ $b=-0.65403+1.39196I$	$9.65804-0.48101I$	0
$u=\ \ 0.882596-0.657710I$ $a=\ \ 0.894460+1.041250I$ $b=-0.65403-1.39196I$	$9.65804+0.48101I$	0
$u=\ \ 1.096650+0.094685I$ $a=\ \ 1.28110+0.88681I$ $b=\ \ 0.661377-0.018405I$	$-1.73830-5.76419I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 1.096650 - 0.094685I$ $a = 1.28110 - 0.88681I$ $b = 0.661377 + 0.018405I$	$-1.73830 + 5.76419I$	0
$u = -0.869444 + 0.202717I$ $a = 1.28699 + 1.50201I$ $b = 0.980292 - 0.454294I$	$-2.87525 - 0.00985I$	0
$u = -0.869444 - 0.202717I$ $a = 1.28699 - 1.50201I$ $b = 0.980292 + 0.454294I$	$-2.87525 + 0.00985I$	0
$u = -0.508186 + 0.729992I$ $a = -0.618628 + 0.050688I$ $b = 0.795914 + 0.101504I$	$7.73827 - 1.29712I$	0
$u = -0.508186 - 0.729992I$ $a = -0.618628 - 0.050688I$ $b = 0.795914 - 0.101504I$	$7.73827 + 1.29712I$	0
$u = -0.951941 + 0.576556I$ $a = 1.73167 + 0.74324I$ $b = 0.672415 - 0.868583I$	$1.51005 + 5.75445I$	0
$u = -0.951941 - 0.576556I$ $a = 1.73167 - 0.74324I$ $b = 0.672415 + 0.868583I$	$1.51005 - 5.75445I$	0
$u = 1.030960 + 0.419841I$ $a = 0.804538 + 0.337202I$ $b = 0.131939 - 0.668989I$	$-0.55978 - 3.61625I$	0
$u = 1.030960 - 0.419841I$ $a = 0.804538 - 0.337202I$ $b = 0.131939 + 0.668989I$	$-0.55978 + 3.61625I$	0
$u = 1.116450 + 0.080668I$ $a = 0.248720 - 0.433098I$ $b = 0.508199 - 1.235860I$	$-0.05892 + 5.41496I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 1.116450 - 0.080668I$ $a = 0.248720 + 0.433098I$ $b = 0.508199 + 1.235860I$	$-0.05892 - 5.41496I$	0
$u = 0.925740 + 0.629821I$ $a = -0.463380 - 1.086740I$ $b = 1.50833 - 0.33353I$	$-0.33932 - 4.43207I$	0
$u = 0.925740 - 0.629821I$ $a = -0.463380 + 1.086740I$ $b = 1.50833 + 0.33353I$	$-0.33932 + 4.43207I$	0
$u = -1.120700 + 0.010146I$ $a = -0.852519 - 0.224656I$ $b = -0.436881 + 1.197210I$	$5.92817 + 4.34568I$	0
$u = -1.120700 - 0.010146I$ $a = -0.852519 + 0.224656I$ $b = -0.436881 - 1.197210I$	$5.92817 - 4.34568I$	0
$u = -0.844619 + 0.243562I$ $a = -0.328642 - 0.338028I$ $b = -0.553371 + 0.267517I$	$-1.42084 + 0.71027I$	0
$u = -0.844619 - 0.243562I$ $a = -0.328642 + 0.338028I$ $b = -0.553371 - 0.267517I$	$-1.42084 - 0.71027I$	0
$u = -1.078830 + 0.315369I$ $a = -1.07680 + 1.23292I$ $b = -0.048520 + 1.103220I$	$1.12055 - 2.42534I$	0
$u = -1.078830 - 0.315369I$ $a = -1.07680 - 1.23292I$ $b = -0.048520 - 1.103220I$	$1.12055 + 2.42534I$	0
$u = 1.109170 + 0.265389I$ $a = 1.062610 - 0.679961I$ $b = 0.694795 + 0.597913I$	$-5.31063 - 4.35765I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 1.109170 - 0.265389I$ $a = 1.062610 + 0.679961I$ $b = 0.694795 - 0.597913I$	$-5.31063 + 4.35765I$	0
$u = 0.519758 + 1.017660I$ $a = 0.15611 - 1.48042I$ $b = -0.54341 + 1.47748I$	$10.1208 + 12.9054I$	0
$u = 0.519758 - 1.017660I$ $a = 0.15611 + 1.48042I$ $b = -0.54341 - 1.47748I$	$10.1208 - 12.9054I$	0
$u = 1.081760 + 0.403301I$ $a = 2.61050 - 0.28768I$ $b = 0.482133 + 0.742642I$	$-1.22465 - 6.28817I$	0
$u = 1.081760 - 0.403301I$ $a = 2.61050 + 0.28768I$ $b = 0.482133 - 0.742642I$	$-1.22465 + 6.28817I$	0
$u = 1.109800 + 0.330691I$ $a = -0.110825 - 0.423167I$ $b = -0.106102 - 0.990189I$	$-0.09489 - 2.69736I$	0
$u = 1.109800 - 0.330691I$ $a = -0.110825 + 0.423167I$ $b = -0.106102 + 0.990189I$	$-0.09489 + 2.69736I$	0
$u = 1.030300 + 0.532043I$ $a = 1.55209 + 0.51998I$ $b = 0.270079 + 0.972107I$	$2.43324 - 9.06775I$	0
$u = 1.030300 - 0.532043I$ $a = 1.55209 - 0.51998I$ $b = 0.270079 - 0.972107I$	$2.43324 + 9.06775I$	0
$u = -0.919850 + 0.715123I$ $a = -1.03976 - 1.91848I$ $b = -0.37442 + 1.46514I$	$6.53444 + 6.85574I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.919850-0.715123I$ $a=-1.03976+1.91848I$ $b=-0.37442-1.46514I$	$6.53444-6.85574I$	0
$u=-0.175922+0.813953I$ $a=-0.489267-0.219324I$ $b=-0.855226+0.732951I$	$2.52802+3.03063I$	0
$u=-0.175922-0.813953I$ $a=-0.489267+0.219324I$ $b=-0.855226-0.732951I$	$2.52802-3.03063I$	0
$u=-0.713611+0.929280I$ $a=-0.57125-1.67819I$ $b=\ \ 0.068158+1.332130I$	$7.15337-0.77850I$	0
$u=-0.713611-0.929280I$ $a=-0.57125+1.67819I$ $b=\ \ 0.068158-1.332130I$	$7.15337+0.77850I$	0
$u=-1.054680+0.523950I$ $a=-0.106815+0.605372I$ $b=\ \ 0.856583+0.519963I$	$-3.68402+2.62097I$	0
$u=-1.054680-0.523950I$ $a=-0.106815-0.605372I$ $b=\ \ 0.856583-0.519963I$	$-3.68402-2.62097I$	0
$u=-0.508269+1.069880I$ $a=\ \ 0.05315+1.50946I$ $b=-0.290466-1.259420I$	$5.28461-5.83710I$	0
$u=-0.508269-1.069880I$ $a=\ \ 0.05315-1.50946I$ $b=-0.290466+1.259420I$	$5.28461+5.83710I$	0
$u=\ \ 1.053190+0.586494I$ $a=\ \ 1.63132-1.56190I$ $b=\ \ 0.444893+1.119520I$	$-1.56950-7.43975I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 1.053190 - 0.586494I$ $a = 1.63132 + 1.56190I$ $b = 0.444893 - 1.119520I$	$-1.56950 + 7.43975I$	0
$u = 0.696771 + 0.373794I$ $a = -0.52927 - 3.42433I$ $b = -0.142389 + 0.911369I$	$0.26523 + 3.14967I$	0
$u = 0.696771 - 0.373794I$ $a = -0.52927 + 3.42433I$ $b = -0.142389 - 0.911369I$	$0.26523 - 3.14967I$	0
$u = -1.039210 + 0.627307I$ $a = -0.033966 - 0.939924I$ $b = -0.943537 + 0.083530I$	$6.20996 + 6.45813I$	0
$u = -1.039210 - 0.627307I$ $a = -0.033966 + 0.939924I$ $b = -0.943537 - 0.083530I$	$6.20996 - 6.45813I$	0
$u = -0.684520 + 0.385763I$ $a = -1.08225 + 1.07395I$ $b = 0.739531 + 0.852241I$	$8.32815 - 1.83774I$	0
$u = -0.684520 - 0.385763I$ $a = -1.08225 - 1.07395I$ $b = 0.739531 - 0.852241I$	$8.32815 + 1.83774I$	0
$u = -0.857481 + 0.868825I$ $a = -0.95591 - 1.49107I$ $b = -0.02106 + 1.45893I$	$7.11278 - 0.43851I$	0
$u = -0.857481 - 0.868825I$ $a = -0.95591 + 1.49107I$ $b = -0.02106 - 1.45893I$	$7.11278 + 0.43851I$	0
$u = 0.901619 + 0.824966I$ $a = -0.873005 + 1.046140I$ $b = 0.46470 - 1.71275I$	$9.44446 - 5.09819I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.901619 - 0.824966I$ $a = -0.873005 - 1.046140I$ $b = 0.46470 + 1.71275I$	$9.44446 + 5.09819I$	0
$u = 0.883285 + 0.849255I$ $a = -0.95339 + 1.57687I$ $b = -0.66559 - 1.63015I$	$9.51800 - 1.11224I$	0
$u = 0.883285 - 0.849255I$ $a = -0.95339 - 1.57687I$ $b = -0.66559 + 1.63015I$	$9.51800 + 1.11224I$	0
$u = -0.154729 + 0.754785I$ $a = -0.565219 + 0.989219I$ $b = -0.067469 - 1.172290I$	$3.77326 - 0.70669I$	0
$u = -0.154729 - 0.754785I$ $a = -0.565219 - 0.989219I$ $b = -0.067469 + 1.172290I$	$3.77326 + 0.70669I$	0
$u = -1.047050 + 0.654944I$ $a = 1.51025 + 1.64785I$ $b = 0.67095 - 1.47784I$	$3.74559 + 12.12120I$	0
$u = -1.047050 - 0.654944I$ $a = 1.51025 - 1.64785I$ $b = 0.67095 + 1.47784I$	$3.74559 - 12.12120I$	0
$u = 0.624836 + 0.432656I$ $a = -0.965469 + 0.167783I$ $b = -0.393327 + 1.133680I$	$3.84330 + 4.90506I$	0
$u = 0.624836 - 0.432656I$ $a = -0.965469 - 0.167783I$ $b = -0.393327 - 1.133680I$	$3.84330 - 4.90506I$	0
$u = -1.158820 + 0.447683I$ $a = -0.192868 - 0.507991I$ $b = -0.262122 + 0.837860I$	$6.51476 + 5.21110I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-1.158820-0.447683I$ $a=-0.192868+0.507991I$ $b=-0.262122-0.837860I$	$6.51476-5.21110I$	0
$u=-0.934881+0.823887I$ $a=-0.79041-1.59233I$ $b=-0.23009+1.56819I$	$6.87164+6.72069I$	0
$u=-0.934881-0.823887I$ $a=-0.79041+1.59233I$ $b=-0.23009-1.56819I$	$6.87164-6.72069I$	0
$u=-1.155870+0.478104I$ $a=\ \ 1.59992+0.04880I$ $b=\ \ 0.177101-1.070390I$	$0.80861+5.23839I$	0
$u=-1.155870-0.478104I$ $a=\ \ 1.59992-0.04880I$ $b=\ \ 0.177101+1.070390I$	$0.80861-5.23839I$	0
$u=-1.174290+0.456038I$ $a=\ \ 0.558595+0.932177I$ $b=\ \ 0.671569+0.886764I$	$-0.61769+1.60053I$	0
$u=-1.174290-0.456038I$ $a=\ \ 0.558595-0.932177I$ $b=\ \ 0.671569-0.886764I$	$-0.61769-1.60053I$	0
$u=\ \ 0.585756+1.119370I$ $a=-0.25573+1.43592I$ $b=-0.15509-1.51545I$	$10.28990-6.14961I$	0
$u=\ \ 0.585756-1.119370I$ $a=-0.25573-1.43592I$ $b=-0.15509+1.51545I$	$10.28990+6.14961I$	0
$u=-1.261980+0.077175I$ $a=\ \ 0.527018+0.488795I$ $b=\ \ 0.248284-0.552269I$	$-4.24872-0.41421I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-1.261980-0.077175I$ $a=\ \ 0.527018-0.488795I$ $b=\ \ 0.248284+0.552269I$	$-4.24872+0.41421I$	0
$u=-1.024840+0.748828I$ $a=-0.96566-1.62522I$ $b=-0.183223+1.335610I$	$6.14818+6.91952I$	0
$u=-1.024840-0.748828I$ $a=-0.96566+1.62522I$ $b=-0.183223-1.335610I$	$6.14818-6.91952I$	0
$u=\ \ 1.084530+0.660699I$ $a=\ \ 0.060708-0.336124I$ $b=\ \ 0.736647-0.198405I$	$-0.10714-8.06084I$	0
$u=\ \ 1.084530-0.660699I$ $a=\ \ 0.060708+0.336124I$ $b=\ \ 0.736647+0.198405I$	$-0.10714+8.06084I$	0
$u=-1.263420+0.190404I$ $a=\ \ 0.255671-0.085952I$ $b=\ \ 0.396072+0.938866I$	$-4.28033+0.06979I$	0
$u=-1.263420-0.190404I$ $a=\ \ 0.255671+0.085952I$ $b=\ \ 0.396072-0.938866I$	$-4.28033-0.06979I$	0
$u=-1.057800+0.717890I$ $a=\ \ 0.019815+0.936804I$ $b=\ \ 1.368880+0.046309I$	$3.65497+12.33790I$	0
$u=-1.057800-0.717890I$ $a=\ \ 0.019815-0.936804I$ $b=\ \ 1.368880-0.046309I$	$3.65497-12.33790I$	0
$u=\ \ 1.097160+0.681470I$ $a=-1.60195+1.63849I$ $b=-0.50117-1.34000I$	$10.4966-11.6763I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 1.097160 - 0.681470I$ $a = -1.60195 - 1.63849I$ $b = -0.50117 + 1.34000I$	$10.4966 + 11.6763I$	0
$u = 0.324184 + 0.603283I$ $a = -0.35598 - 1.75498I$ $b = -0.395963 + 1.020450I$	$0.26929 + 2.74611I$	$0. - 3.99050I$
$u = 0.324184 - 0.603283I$ $a = -0.35598 + 1.75498I$ $b = -0.395963 - 1.020450I$	$0.26929 - 2.74611I$	$0. + 3.99050I$
$u = 0.651865 + 0.040838I$ $a = -0.28791 + 1.76543I$ $b = -0.377662 - 0.980166I$	$0.74001 - 2.86113I$	$0.48983 + 9.51285I$
$u = 0.651865 - 0.040838I$ $a = -0.28791 - 1.76543I$ $b = -0.377662 + 0.980166I$	$0.74001 + 2.86113I$	$0.48983 - 9.51285I$
$u = 0.371730 + 0.531762I$ $a = -1.43296 - 0.13471I$ $b = -0.075235 - 0.444757I$	$1.282380 - 0.028580I$	$6.72421 + 0.I$
$u = 0.371730 - 0.531762I$ $a = -1.43296 + 0.13471I$ $b = -0.075235 + 0.444757I$	$1.282380 + 0.028580I$	$6.72421 + 0.I$
$u = 1.158020 + 0.728105I$ $a = 1.43662 - 1.38373I$ $b = 0.62270 + 1.44339I$	$8.1292 - 19.2249I$	0
$u = 1.158020 - 0.728105I$ $a = 1.43662 + 1.38373I$ $b = 0.62270 - 1.44339I$	$8.1292 + 19.2249I$	0
$u = -1.167570 + 0.750211I$ $a = 1.17329 + 1.35511I$ $b = 0.405224 - 1.244280I$	$3.23701 + 12.35210I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-1.167570-0.750211I$ $a=\ 1.17329-1.35511I$ $b=\ 0.405224+1.244280I$	$3.23701-12.35210I$	0
$u=-0.526800+0.281339I$ $a=-0.044772-1.250000I$ $b=-1.061180+0.328323I$	$-1.68659+1.48642I$	$-3.89465-1.87481I$
$u=-0.526800-0.281339I$ $a=-0.044772+1.250000I$ $b=-1.061180-0.328323I$	$-1.68659-1.48642I$	$-3.89465+1.87481I$
$u=\ 1.24091+0.68700I$ $a=\ 0.960494-0.947844I$ $b=\ 0.006643+1.189320I$	$8.43109-4.36962I$	0
$u=\ 1.24091-0.68700I$ $a=\ 0.960494+0.947844I$ $b=\ 0.006643-1.189320I$	$8.43109+4.36962I$	0
$u=-1.41976+0.05176I$ $a=\ 0.460727+0.025043I$ $b=\ 0.379027-1.341340I$	$2.55405+9.85279I$	0
$u=-1.41976-0.05176I$ $a=\ 0.460727-0.025043I$ $b=\ 0.379027+1.341340I$	$2.55405-9.85279I$	0
$u=\ 0.452028+0.350835I$ $a=-1.368300+0.131305I$ $b=\ 0.040417-0.191224I$	$1.114650+0.168820I$	$9.57195-0.27721I$
$u=\ 0.452028-0.350835I$ $a=-1.368300-0.131305I$ $b=\ 0.040417+0.191224I$	$1.114650-0.168820I$	$9.57195+0.27721I$
$u=-0.219368+0.505607I$ $a=\ 0.273997-0.975751I$ $b=-0.828403+0.396864I$	$-1.66412+1.60791I$	$-1.66565-3.98288I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.219368-0.505607I$ $a=\ \ 0.273997+0.975751I$ $b=-0.828403-0.396864I$	$-1.66412-1.60791I$	$-1.66565+3.98288I$
$u=\ \ 1.18900+0.86881I$ $a=-0.851281+0.941237I$ $b=-0.04486-1.48679I$	$8.46970-0.93677I$	0
$u=\ \ 1.18900-0.86881I$ $a=-0.851281-0.941237I$ $b=-0.04486+1.48679I$	$8.46970+0.93677I$	0
$u=-0.114435+0.409672I$ $a=\ \ 1.34661-0.60517I$ $b=-0.231741+1.322640I$	$4.04119+5.40894I$	$7.65001-7.34240I$
$u=-0.114435-0.409672I$ $a=\ \ 1.34661+0.60517I$ $b=-0.231741-1.322640I$	$4.04119-5.40894I$	$7.65001+7.34240I$
$u=\ \ 1.57650+0.11429I$ $a=\ \ 0.080720+0.372110I$ $b=\ \ 0.105838-1.155980I$	$-2.34543+1.65223I$	0
$u=\ \ 1.57650-0.11429I$ $a=\ \ 0.080720-0.372110I$ $b=\ \ 0.105838+1.155980I$	$-2.34543-1.65223I$	0

II.

$\boldsymbol{I_2^u = \langle 5.52\times 10^{9}u^{45}+2.57\times 10^{10}u^{44}+\cdots+1.06\times 10^{9}b-2.21\times 10^{10},\ 6.48\times 10^{10}u^{45}+3.37\times 10^{10}u^{44}+\cdots+1.06\times 10^{9}a-2.58\times 10^{10},\ u^{46}-14u^{44}+\cdots+2u+1\rangle}$

(i) Arc colorings

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

$$a_7 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$

$$a_8 = \begin{pmatrix} 1 \\ u^2 \end{pmatrix}$$

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

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

$$a_{10} = \begin{pmatrix} -61.2269u^{45}-31.7971u^{44}+\cdots+155.575u+24.3429 \\ -5.21699u^{45}-24.2927u^{44}+\cdots+4.78111u+20.8377 \end{pmatrix}$$

$$a_6 = \begin{pmatrix} 86.6796u^{45}+28.8479u^{44}+\cdots-213.023u-58.1226 \\ -19.0850u^{45}+5.45786u^{44}+\cdots+77.6882u+8.78695 \end{pmatrix}$$

$$a_4 = \begin{pmatrix} 102.479u^{45}+116.185u^{44}+\cdots-523.571u-193.245 \\ 39.4376u^{45}+46.6334u^{44}+\cdots-57.7586u-31.6555 \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} 61.8999u^{45}+68.7982u^{44}+\cdots-277.237u-111.672 \\ 38.1696u^{45}+43.0006u^{44}+\cdots-83.1193u-15.2732 \end{pmatrix}$$

$$a_5 = \begin{pmatrix} 88.7181u^{45}+23.8564u^{44}+\cdots-232.895u-56.3967 \\ -5.52510u^{45}+4.82144u^{44}+\cdots+32.6598u+3.51431 \end{pmatrix}$$

$$a_9 = \begin{pmatrix} -66.4439u^{45}-56.0898u^{44}+\cdots+160.356u+45.1806 \\ -5.21699u^{45}-24.2927u^{44}+\cdots+4.78111u+20.8377 \end{pmatrix}$$

$$a_{12} = \begin{pmatrix} -10.3969u^{45}-10.8975u^{44}+\cdots+183.784u+64.8233 \\ -4.45118u^{45}-5.54290u^{44}+\cdots+100.027u+46.6299 \end{pmatrix}$$

(ii) Obstruction class $= 1$

(iii) Cusp Shapes $= -\frac{38831777993}{1058458619}u^{45}-\frac{41739227173}{1058458619}u^{44}+\cdots-\frac{56837966793}{1058458619}u-\frac{42548967662}{1058458619}$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{46} - 28u^{45} + \cdots - 22u + 1$
c_2	$u^{46} - 14u^{44} + \cdots - 2u + 1$
c_3	$u^{46} + 14u^{45} + \cdots - 2u + 1$
c_4	$u^{46} - 16u^{44} + \cdots - 4u + 1$
c_5	$u^{46} + 2u^{45} + \cdots + 2u + 1$
c_6	$u^{46} - 3u^{45} + \cdots + u + 1$
c_7	$u^{46} - 14u^{44} + \cdots + 2u + 1$
c_8	$u^{46} + 7u^{45} + \cdots - u + 1$
c_9	$u^{46} + 3u^{45} + \cdots - u + 1$
c_{10}	$u^{46} - 16u^{44} + \cdots + 4u + 1$
c_{11}	$u^{46} - 7u^{45} + \cdots + u + 1$
c_{12}	$u^{46} - 2u^{45} + \cdots - 2u + 1$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{46} + 4y^{45} + \cdots - 22y + 1$
c_2, c_7	$y^{46} - 28y^{45} + \cdots - 22y + 1$
c_3	$y^{46} - 14y^{45} + \cdots - 62y + 1$
c_4, c_{10}	$y^{46} - 32y^{45} + \cdots - 40y + 1$
c_5, c_{12}	$y^{46} - 30y^{45} + \cdots - 26y + 1$
c_6, c_9	$y^{46} + 27y^{45} + \cdots + 27y + 1$
c_8, c_{11}	$y^{46} + 31y^{45} + \cdots + 43y + 1$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.941575+0.273017I$ $a=-2.23100+0.97217I$ $b=-0.038933-0.671399I$	$-0.61468+5.24200I$	$4.39321-5.06826I$
$u=-0.941575-0.273017I$ $a=-2.23100-0.97217I$ $b=-0.038933+0.671399I$	$-0.61468-5.24200I$	$4.39321+5.06826I$
$u=0.658091+0.791803I$ $a=0.60029-1.95335I$ $b=0.54584+1.37410I$	$10.03780-3.23649I$	$7.58461+2.27498I$
$u=0.658091-0.791803I$ $a=0.60029+1.95335I$ $b=0.54584-1.37410I$	$10.03780+3.23649I$	$7.58461-2.27498I$
$u=-0.914724+0.321465I$ $a=1.16770-2.62218I$ $b=-0.033229-0.564631I$	$-0.60065-2.76758I$	$-2.52539+2.12739I$
$u=-0.914724-0.321465I$ $a=1.16770+2.62218I$ $b=-0.033229+0.564631I$	$-0.60065+2.76758I$	$-2.52539-2.12739I$
$u=0.590098+0.704049I$ $a=0.543027+0.189874I$ $b=0.350018-0.619879I$	$2.89940+3.10731I$	$7.99927-2.63699I$
$u=0.590098-0.704049I$ $a=0.543027-0.189874I$ $b=0.350018+0.619879I$	$2.89940-3.10731I$	$7.99927+2.63699I$
$u=0.994784+0.483300I$ $a=0.022092+1.315240I$ $b=-0.852832+0.196466I$	$-2.10131-1.85075I$	0
$u=0.994784-0.483300I$ $a=0.022092-1.315240I$ $b=-0.852832-0.196466I$	$-2.10131+1.85075I$	0

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.995342+0.483574I$ $a=-0.451161-0.429638I$ $b=-0.867391-0.206395I$	$-2.10229+3.88121I$	$0.-4.80822I$
$u=-0.995342-0.483574I$ $a=-0.451161+0.429638I$ $b=-0.867391+0.206395I$	$-2.10229-3.88121I$	$0.+4.80822I$
$u=1.084100+0.285727I$ $a=-1.35965-0.60590I$ $b=-0.291905-1.164100I$	$1.74135-6.96543I$	$0.+6.57505I$
$u=1.084100-0.285727I$ $a=-1.35965+0.60590I$ $b=-0.291905+1.164100I$	$1.74135+6.96543I$	$0.-6.57505I$
$u=1.070640+0.428661I$ $a=-0.633804+1.210920I$ $b=-0.466817+0.760387I$	$-1.72294-1.51692I$	0
$u=1.070640-0.428661I$ $a=-0.633804-1.210920I$ $b=-0.466817-0.760387I$	$-1.72294+1.51692I$	0
$u=0.688884+0.485098I$ $a=-0.667155-0.755872I$ $b=1.156300+0.233146I$	$-1.04835-2.13530I$	$2.50942+5.52868I$
$u=0.688884-0.485098I$ $a=-0.667155+0.755872I$ $b=1.156300-0.233146I$	$-1.04835+2.13530I$	$2.50942-5.52868I$
$u=-0.687782+0.484973I$ $a=0.324408+0.881390I$ $b=1.140670-0.248002I$	$-1.046510+0.105062I$	$1.081989+0.656492I$
$u=-0.687782-0.484973I$ $a=0.324408-0.881390I$ $b=1.140670+0.248002I$	$-1.046510-0.105062I$	$1.081989-0.656492I$

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 1.021360 + 0.605546I$ $a = -1.337250 - 0.159554I$ $b = -0.257783 - 0.512511I$	$1.59640 - 8.16110I$	0
$u = 1.021360 - 0.605546I$ $a = -1.337250 + 0.159554I$ $b = -0.257783 + 0.512511I$	$1.59640 + 8.16110I$	0
$u = -1.096350 + 0.459801I$ $a = -2.37170 - 0.44669I$ $b = -0.504332 + 0.852063I$	$-1.47848 + 5.70448I$	0
$u = -1.096350 - 0.459801I$ $a = -2.37170 + 0.44669I$ $b = -0.504332 - 0.852063I$	$-1.47848 - 5.70448I$	0
$u = 0.771158 + 0.201823I$ $a = 1.104520 + 0.738416I$ $b = 0.411509 - 1.236210I$	$3.02141 + 4.85755I$	$0.27012 - 4.21578I$
$u = 0.771158 - 0.201823I$ $a = 1.104520 - 0.738416I$ $b = 0.411509 + 1.236210I$	$3.02141 - 4.85755I$	$0.27012 + 4.21578I$
$u = 0.753626 + 0.220969I$ $a = -1.08457 + 1.86426I$ $b = 0.268544 + 0.704172I$	$-0.115122 - 1.332660I$	$0.635273 + 1.017517I$
$u = 0.753626 - 0.220969I$ $a = -1.08457 - 1.86426I$ $b = 0.268544 - 0.704172I$	$-0.115122 + 1.332660I$	$0.635273 - 1.017517I$
$u = -0.887596 + 0.834860I$ $a = 0.63157 + 1.57268I$ $b = 0.14666 - 1.58904I$	$6.83741 + 7.20753I$	0
$u = -0.887596 - 0.834860I$ $a = 0.63157 - 1.57268I$ $b = 0.14666 + 1.58904I$	$6.83741 - 7.20753I$	0

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-1.149340+0.465756I$ $a=-0.481766-0.596533I$ $b=-0.389939+0.862329I$	$6.32035+5.68739I$	0
$u=-1.149340-0.465756I$ $a=-0.481766+0.596533I$ $b=-0.389939-0.862329I$	$6.32035-5.68739I$	0
$u=-0.922465+0.885819I$ $a=\ \ 1.00037+1.30843I$ $b=\ \ 0.09648-1.49514I$	$6.76101-0.84775I$	0
$u=-0.922465-0.885819I$ $a=\ \ 1.00037-1.30843I$ $b=\ \ 0.09648+1.49514I$	$6.76101+0.84775I$	0
$u=-0.591225+0.337455I$ $a=-1.26145+0.93631I$ $b=\ \ 0.693756+0.908210I$	$8.43640-2.16890I$	$9.2342+11.7594I$
$u=-0.591225-0.337455I$ $a=-1.26145-0.93631I$ $b=\ \ 0.693756-0.908210I$	$8.43640+2.16890I$	$9.2342-11.7594I$
$u=\ \ 1.104440+0.772936I$ $a=\ \ 0.842450-0.931224I$ $b=-0.21419+1.42061I$	$8.68689-2.71906I$	0
$u=\ \ 1.104440-0.772936I$ $a=\ \ 0.842450+0.931224I$ $b=-0.21419-1.42061I$	$8.68689+2.71906I$	0
$u=-1.406740+0.109720I$ $a=-0.1060190+0.0777905I$ $b=-0.172181-0.985617I$	$-3.26040-1.62476I$	0
$u=-1.406740-0.109720I$ $a=-0.1060190-0.0777905I$ $b=-0.172181+0.985617I$	$-3.26040+1.62476I$	0

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 1.410240 + 0.050007I$ $a = -0.367156 - 0.520456I$ $b = -0.167782 + 0.985763I$	$-3.26083 - 0.27861I$	0
$u = 1.410240 - 0.050007I$ $a = -0.367156 + 0.520456I$ $b = -0.167782 - 0.985763I$	$-3.26083 + 0.27861I$	0
$u = -0.018982 + 0.580131I$ $a = 1.237600 - 0.612315I$ $b = 0.458913 + 0.883263I$	$1.17143 - 1.88478I$	$5.58955 + 1.51211I$
$u = -0.018982 - 0.580131I$ $a = 1.237600 + 0.612315I$ $b = 0.458913 - 0.883263I$	$1.17143 + 1.88478I$	$5.58955 - 1.51211I$
$u = -0.535288 + 0.114043I$ $a = 1.37865 - 2.20684I$ $b = 0.488628 + 0.931652I$	$0.96503 - 2.28552I$	$5.25897 - 1.16142I$
$u = -0.535288 - 0.114043I$ $a = 1.37865 + 2.20684I$ $b = 0.488628 - 0.931652I$	$0.96503 + 2.28552I$	$5.25897 + 1.16142I$

III. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1	$(u^{46}-28u^{45}+\cdots-22u+1)$ $\cdot(u^{147}+65u^{146}+\cdots+6797777u+277729)$
c_2	$(u^{46}-14u^{44}+\cdots-2u+1)(u^{147}-u^{146}+\cdots+1273u-527)$
c_3	$(u^{46}+14u^{45}+\cdots-2u+1)$ $\cdot(u^{147}+5u^{146}+\cdots-487893741u+95956559)$
c_4	$(u^{46}-16u^{44}+\cdots-4u+1)(u^{147}+u^{146}+\cdots-434404u-73112)$
c_5	$(u^{46}+2u^{45}+\cdots+2u+1)(u^{147}-3u^{146}+\cdots-1819273u-573163)$
c_6	$(u^{46}-3u^{45}+\cdots+u+1)(u^{147}-2u^{146}+\cdots-976586u+350333)$
c_7	$(u^{46}-14u^{44}+\cdots+2u+1)(u^{147}-u^{146}+\cdots+1273u-527)$
c_8	$(u^{46}+7u^{45}+\cdots-u+1)(u^{147}+6u^{146}+\cdots-10u-1)$
c_9	$(u^{46}+3u^{45}+\cdots-u+1)(u^{147}-2u^{146}+\cdots-976586u+350333)$
c_{10}	$(u^{46}-16u^{44}+\cdots+4u+1)(u^{147}+u^{146}+\cdots-434404u-73112)$
c_{11}	$(u^{46}-7u^{45}+\cdots+u+1)(u^{147}+6u^{146}+\cdots-10u-1)$
c_{12}	$(u^{46}-2u^{45}+\cdots-2u+1)(u^{147}-3u^{146}+\cdots-1819273u-573163)$

IV. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1	$(y^{46}+4y^{45}+\cdots-22y+1)$ $\cdot(y^{147}+59y^{146}+\cdots-2005730840055y-77133397441)$
c_2, c_7	$(y^{46}-28y^{45}+\cdots-22y+1)$ $\cdot(y^{147}-65y^{146}+\cdots+6797777y-277729)$
c_3	$(y^{46}-14y^{45}+\cdots-62y+1)$ $\cdot(y^{147}-75y^{146}+\cdots+857754722402922901y-9207661215120481)$
c_4, c_{10}	$(y^{46}-32y^{45}+\cdots-40y+1)$ $\cdot(y^{147}-109y^{146}+\cdots-76435879920y-5345364544)$
c_5, c_{12}	$(y^{46}-30y^{45}+\cdots-26y+1)$ $\cdot(y^{147}-103y^{146}+\cdots+11878213249293y-328515824569)$
c_6, c_9	$(y^{46}+27y^{45}+\cdots+27y+1)$ $\cdot(y^{147}+102y^{146}+\cdots-10016924047636y-122733210889)$
c_8, c_{11}	$(y^{46}+31y^{45}+\cdots+43y+1)(y^{147}+74y^{146}+\cdots+496y-1)$