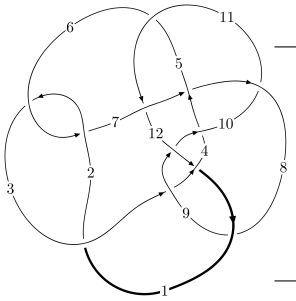
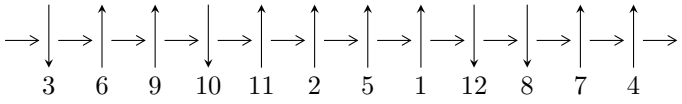
$12a_{0389}$ $(K12a_{0389})$



A knot diagram[1]

Linearized knot diagam



Solving Sequence

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

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

$$\begin{aligned}
I_1^u &= \langle -9.76018 \times 10^{52} u^{42} - 8.19007 \times 10^{53} u^{41} + \cdots + 4.22162 \times 10^{54} b - 1.94678 \times 10^{55}, \\
&\quad - 3.03721 \times 10^{54} u^{42} - 1.54819 \times 10^{55} u^{41} + \cdots + 5.91027 \times 10^{55} a - 2.03913 \times 10^{56}, \\
&\quad u^{43} + 4u^{42} + \cdots + 134u + 28 \rangle \\
I_2^u &= \langle -5.79031 \times 10^{80} a u^{81} + 2.67049 \times 10^{81} u^{81} + \cdots - 6.08145 \times 10^{81} a - 7.04436 \times 10^{79}, \\
&\quad 2.08713 \times 10^{81} a u^{81} - 4.14790 \times 10^{81} u^{81} + \cdots + 2.02533 \times 10^{82} a - 9.22667 \times 10^{81}, \\
&\quad u^{82} + 16u^{80} + \cdots + 28u - 5 \rangle \\
I_3^u &= \langle 690655 u^{20} a - 666179 u^{20} + \cdots + 1599444 a + 1444642, \\
&\quad - 242859 u^{20} a + 48196 u^{20} + \cdots + 583206 a - 231757,\ u^{21} + u^{20} + \cdots - u + 1 \rangle \\
I_4^u &= \langle -u^7 + 2u^4 - u^3 + u^2 + b + u + 1,\ u^5 + u^4 + u^3 + a + u + 1,\ u^8 + u^7 + 2u^6 + u^5 + 3u^4 + 2u^3 + 2u^2 + u + 1
\end{aligned}$$

* 4 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 257 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. $\boldsymbol{I_1^u = \langle -9.76 \times 10^{52} u^{42} - 8.19 \times 10^{53} u^{41} + \cdots + 4.22 \times 10^{54} b - 1.95 \times 10^{55},\ -3.04 \times 10^{54} u^{42} - 1.55 \times 10^{55} u^{41} + \cdots + 5.91 \times 10^{55} a - 2.04 \times 10^{56},\ u^{43} + 4u^{42} + \cdots + 134u + 28 \rangle}$

(i) Arc colorings

$$a_2 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$

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

$$a_3 = \begin{pmatrix} 1 \\ -u^2 \end{pmatrix}$$

$$a_7 = \begin{pmatrix} u \\ u \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} 0.0513888u^{42} + 0.261949u^{41} + \cdots + 20.1928u + 3.45016 \\ 0.0231195u^{42} + 0.194003u^{41} + \cdots + 18.1185u + 4.61145 \end{pmatrix}$$

$$a_{12} = \begin{pmatrix} 0.0159210u^{42} + 0.131374u^{41} + \cdots + 14.9367u + 2.18649 \\ -0.0123483u^{42} + 0.0634275u^{41} + \cdots + 12.8625u + 3.34778 \end{pmatrix}$$

$$a_1 = \begin{pmatrix} u^2 + 1 \\ -u^4 \end{pmatrix}$$

$$a_5 = \begin{pmatrix} 0.155651u^{42} + 0.702946u^{41} + \cdots + 35.1812u + 7.23755 \\ 0.101892u^{42} + 0.546709u^{41} + \cdots + 38.4993u + 9.13509 \end{pmatrix}$$

$$a_8 = \begin{pmatrix} 0.0518738u^{42} + 0.267566u^{41} + \cdots + 17.9695u + 3.60481 \\ 0.0142301u^{42} + 0.0907475u^{41} + \cdots + 9.44885u + 2.12776 \end{pmatrix}$$

$$a_9 = \begin{pmatrix} 0.108301u^{42} + 0.464706u^{41} + \cdots + 26.4079u + 5.38944 \\ 0.0305975u^{42} + 0.135562u^{41} + \cdots + 10.6899u + 2.32099 \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} 0.143779u^{42} + 0.616717u^{41} + \cdots + 31.4209u + 5.08925 \\ 0.0671918u^{42} + 0.363732u^{41} + \cdots + 23.7776u + 5.19067 \end{pmatrix}$$

$$a_4 = \begin{pmatrix} -0.245909u^{42} - 1.05925u^{41} + \cdots - 50.3183u - 9.57685 \\ -0.147417u^{42} - 0.635759u^{41} + \cdots - 30.6375u - 6.47544 \end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= 1.10962u^{42} + 3.30125u^{41} + \cdots + 55.8783u + 10.2094$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{43} + 12u^{42} + \cdots - 8532u - 784$
c_2, c_6	$u^{43} - 4u^{42} + \cdots + 134u - 28$
c_3, c_5	$3(3u^{43} + 18u^{42} + \cdots - 9u - 1)$
c_4	$3(3u^{43} + 3u^{42} + \cdots + 6656u - 1024)$
c_7, c_{12}	$u^{43} + 2u^{42} + \cdots - 21u - 3$
c_8, c_{11}	$u^{43} + 10u^{42} + \cdots - 66u - 6$
c_9, c_{10}	$u^{43} + 6u^{42} + \cdots + u - 1$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{43} + 8y^{42} + \cdots + 30513904y - 614656$
c_2, c_6	$y^{43} + 12y^{42} + \cdots - 8532y - 784$
c_3, c_5	$9(9y^{43} - 60y^{42} + \cdots + 19y - 1)$
c_4	$9(9y^{43} - 33y^{42} + \cdots + 1.70394 \times 10^7 y - 1048576)$
c_7, c_{12}	$y^{43} - 16y^{42} + \cdots + 159y - 9$
c_8, c_{11}	$y^{43} - 10y^{42} + \cdots - 588y - 36$
c_9, c_{10}	$y^{43} + 4y^{42} + \cdots + 19y - 1$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.718182 + 0.751745I$ $a = -0.522759 - 0.163186I$ $b = -0.933915 - 0.789766I$	$-1.03885 + 5.59083I$	$-0.80296 - 8.20049I$
$u = 0.718182 - 0.751745I$ $a = -0.522759 + 0.163186I$ $b = -0.933915 + 0.789766I$	$-1.03885 - 5.59083I$	$-0.80296 + 8.20049I$
$u = -0.431183 + 0.848497I$ $a = 0.90051 + 2.07304I$ $b = 1.21180 + 1.76142I$	$-1.55530 - 2.02522I$	$-12.2265 + 20.7180I$
$u = -0.431183 - 0.848497I$ $a = 0.90051 - 2.07304I$ $b = 1.21180 - 1.76142I$	$-1.55530 + 2.02522I$	$-12.2265 - 20.7180I$
$u = 0.771623 + 0.728064I$ $a = 0.365410 - 0.767846I$ $b = 0.283036 + 0.562453I$	$3.84055 - 0.99267I$	$9.49500 + 4.60211I$
$u = 0.771623 - 0.728064I$ $a = 0.365410 + 0.767846I$ $b = 0.283036 - 0.562453I$	$3.84055 + 0.99267I$	$9.49500 - 4.60211I$
$u = -0.046594 + 0.908670I$ $a = 1.164645 - 0.012772I$ $b = 2.12526 - 0.65917I$	$-4.88607 - 2.08508I$	$-7.79096 + 3.96252I$
$u = -0.046594 - 0.908670I$ $a = 1.164645 + 0.012772I$ $b = 2.12526 + 0.65917I$	$-4.88607 + 2.08508I$	$-7.79096 - 3.96252I$
$u = -0.630009 + 0.893960I$ $a = -1.30697 + 0.78142I$ $b = -2.04729 + 0.27572I$	$-1.74768 - 2.41654I$	$9.67963 + 4.40868I$
$u = -0.630009 - 0.893960I$ $a = -1.30697 - 0.78142I$ $b = -2.04729 - 0.27572I$	$-1.74768 + 2.41654I$	$9.67963 - 4.40868I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.583673+0.688264I$ $a=\ \ 0.382832+0.752482I$ $b=-0.72882-1.38224I$	$3.88646-0.96920I$	$6.32905-0.22884I$
$u=-0.583673-0.688264I$ $a=\ \ 0.382832-0.752482I$ $b=-0.72882+1.38224I$	$3.88646+0.96920I$	$6.32905+0.22884I$
$u=-0.999781+0.479062I$ $a=\ \ 0.485799+0.279788I$ $b=-0.313320-0.267661I$	$5.03993-1.05509I$	$21.5749+4.0861I$
$u=-0.999781-0.479062I$ $a=\ \ 0.485799-0.279788I$ $b=-0.313320+0.267661I$	$5.03993+1.05509I$	$21.5749-4.0861I$
$u=\ \ 0.939472+0.598164I$ $a=-0.504756+1.300037I$ $b=-0.162293+0.284453I$	$6.13585-6.88234I$	$10.41111+6.89791I$
$u=\ \ 0.939472-0.598164I$ $a=-0.504756-1.300037I$ $b=-0.162293-0.284453I$	$6.13585+6.88234I$	$10.41111-6.89791I$
$u=\ \ 0.009492+0.842049I$ $a=-0.027024+0.454273I$ $b=\ \ 1.013011+0.223049I$	$-1.68203-1.83995I$	$2.74369+3.75799I$
$u=\ \ 0.009492-0.842049I$ $a=-0.027024-0.454273I$ $b=\ \ 1.013011-0.223049I$	$-1.68203+1.83995I$	$2.74369-3.75799I$
$u=-0.987577+0.624297I$ $a=-0.456506-1.224878I$ $b=-0.105049+0.116560I$	$2.7441+15.6580I$	$5.64449-7.99170I$
$u=-0.987577-0.624297I$ $a=-0.456506+1.224878I$ $b=-0.105049-0.116560I$	$2.7441-15.6580I$	$5.64449+7.99170I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 1.167516 + 0.159688I$ $a = 0.674624 + 0.558725I$ $b = 0.164428 - 0.018115I$	$-0.04862 + 9.36863I$	$3.31258 - 12.56283I$
$u = 1.167516 - 0.159688I$ $a = 0.674624 - 0.558725I$ $b = 0.164428 + 0.018115I$	$-0.04862 - 9.36863I$	$3.31258 + 12.56283I$
$u = -0.634457 + 1.002920I$ $a = -0.489863 - 0.256674I$ $b = -1.94366 - 1.06319I$	$2.84002 - 3.91305I$	$5.13045 + 1.88768I$
$u = -0.634457 - 1.002920I$ $a = -0.489863 + 0.256674I$ $b = -1.94366 + 1.06319I$	$2.84002 + 3.91305I$	$5.13045 - 1.88768I$
$u = 0.711454 + 0.981552I$ $a = -0.676420 + 0.324738I$ $b = -1.97645 + 0.33283I$	$3.06667 + 6.61548I$	$9.05531 - 10.31718I$
$u = 0.711454 - 0.981552I$ $a = -0.676420 - 0.324738I$ $b = -1.97645 - 0.33283I$	$3.06667 - 6.61548I$	$9.05531 + 10.31718I$
$u = -0.212615 + 1.246801I$ $a = -1.024712 - 0.267774I$ $b = -1.58785 - 0.53969I$	$-1.60269 - 5.36815I$	$5.92946 + 11.43526I$
$u = -0.212615 - 1.246801I$ $a = -1.024712 + 0.267774I$ $b = -1.58785 + 0.53969I$	$-1.60269 + 5.36815I$	$5.92946 - 11.43526I$
$u = 0.731768 + 1.094416I$ $a = 1.282193 - 0.414778I$ $b = 2.24528 - 0.60925I$	$4.59586 + 13.00720I$	$7.74298 - 11.37761I$
$u = 0.731768 - 1.094416I$ $a = 1.282193 + 0.414778I$ $b = 2.24528 + 0.60925I$	$4.59586 - 13.00720I$	$7.74298 + 11.37761I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.225826 + 1.299835I$ $a = -0.890318 + 0.539751I$ $b = -1.86420 + 0.91662I$	$-5.5253 + 13.9644I$	$0. - 10.27847I$
$u = 0.225826 - 1.299835I$ $a = -0.890318 - 0.539751I$ $b = -1.86420 - 0.91662I$	$-5.5253 - 13.9644I$	$0. + 10.27847I$
$u = -1.327786 + 0.119699I$ $a = 0.000010 + 0.488521I$ $b = -0.158759 + 0.237886I$	$3.44804 + 0.36999I$	$0. - 20.7347I$
$u = -1.327786 - 0.119699I$ $a = 0.000010 - 0.488521I$ $b = -0.158759 - 0.237886I$	$3.44804 - 0.36999I$	$0. + 20.7347I$
$u = -0.759592 + 1.110308I$ $a = 1.158564 + 0.362113I$ $b = 2.45406 + 0.61030I$	$1.2097 - 22.0263I$	$4.00000 + 11.67686I$
$u = -0.759592 - 1.110308I$ $a = 1.158564 - 0.362113I$ $b = 2.45406 - 0.61030I$	$1.2097 + 22.0263I$	$4.00000 - 11.67686I$
$u = -0.745632 + 1.187640I$ $a = -0.455074 - 0.199741I$ $b = -1.042660 - 0.779445I$	$2.82111 - 5.29573I$	$12.9987 + 26.5587I$
$u = -0.745632 - 1.187640I$ $a = -0.455074 + 0.199741I$ $b = -1.042660 + 0.779445I$	$2.82111 + 5.29573I$	$12.9987 - 26.5587I$
$u = 0.31165 + 1.39193I$ $a = 0.533862 + 0.359501I$ $b = 1.059394 + 0.479960I$	$-4.74380 - 3.59234I$	0
$u = 0.31165 - 1.39193I$ $a = 0.533862 - 0.359501I$ $b = 1.059394 - 0.479960I$	$-4.74380 + 3.59234I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.000647+0.512790I$ $a=-0.893952+0.888550I$ $b=\ \ 0.483093+0.313857I$	$-1.62700-1.83193I$	$0.64526+1.98343I$
$u=-0.000647-0.512790I$ $a=-0.893952-0.888550I$ $b=\ \ 0.483093-0.313857I$	$-1.62700+1.83193I$	$0.64526-1.98343I$
$u=-0.454864$ $a=-1.32876$ $b=-0.350197$	0.911852	11.1470

II. $I_2^u = \langle -5.79 \times 10^{80} a u^{81} + 2.67 \times 10^{81} u^{81} + \cdots - 6.08 \times 10^{81} a - 7.04 \times 10^{79},\ 2.09 \times 10^{81} a u^{81} - 4.15 \times 10^{81} u^{81} + \cdots + 2.03 \times 10^{82} a - 9.23 \times 10^{81},\ u^{82} + 16 u^{80} + \cdots + 28u - 5 \rangle$

(i) Arc colorings

$$a_2 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$

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

$$a_3 = \begin{pmatrix} 1 \\ -u^2 \end{pmatrix}$$

$$a_7 = \begin{pmatrix} u \\ u \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} a \\ 1.23135 a u^{81} - 5.67900 u^{81} + \cdots + 12.9327 a + 0.149804 \end{pmatrix}$$

$$a_{12} = \begin{pmatrix} -2.40596 a u^{81} - 3.18384 u^{81} + \cdots - 4.39682 a - 33.6869 \\ -1.17460 a u^{81} - 8.86285 u^{81} + \cdots + 7.53586 a - 33.5371 \end{pmatrix}$$

$$a_1 = \begin{pmatrix} u^2 + 1 \\ -u^4 \end{pmatrix}$$

$$a_5 = \begin{pmatrix} 0.545671 a u^{81} - 2.08186 u^{81} + \cdots + 4.43845 a - 8.82082 \\ 4.41200 a u^{81} - 2.28183 u^{81} + \cdots + 19.8861 a - 3.34871 \end{pmatrix}$$

$$a_8 = \begin{pmatrix} -0.320223 a u^{81} + 2.73715 u^{81} + \cdots + 1.83764 a + 11.9926 \\ -0.704980 a u^{81} - 2.34180 u^{81} + \cdots - 6.73521 a - 1.53151 \end{pmatrix}$$

$$a_9 = \begin{pmatrix} 2.58654 a u^{81} + 1.32806 u^{81} + \cdots + 7.71066 a - 7.65206 \\ 1.07936 a u^{81} - 4.43683 u^{81} + \cdots - 6.15677 a - 19.7556 \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} -5.37003 a u^{81} - 2.54125 u^{81} + \cdots - 11.4774 a - 6.65226 \\ -4.00792 a u^{81} - 4.43184 u^{81} + \cdots - 1.14834 a - 10.4356 \end{pmatrix}$$

$$a_4 = \begin{pmatrix} -4.83881 a u^{81} - 5.00401 u^{81} + \cdots - 6.64032 a - 14.9366 \\ 0.673184 a u^{81} - 4.49704 u^{81} + \cdots + 22.1841 a - 9.34371 \end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= 19.7809 u^{81} + 4.18064 u^{80} + \cdots - 495.369 u + 83.1513$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$(u^{82}+32u^{81}+\cdots+686u+25)^2$
c_2	$(u^{82}+16u^{80}+\cdots-28u-5)^2$
c_3, c_5	$u^{164}+u^{163}+\cdots-362858u+42877$
c_4	$(u^{82}+2u^{81}+\cdots-662u+76)^2$
c_6	$(u^{82}+16u^{80}+\cdots+28u-5)^2$
c_7, c_{12}	$u^{164}-12u^{163}+\cdots-28u+1$
c_8, c_{11}	$u^{164}+11u^{163}+\cdots+11062u+3389$
c_9	$u^{164}-u^{163}+\cdots-3078u+373$
c_{10}	$u^{164}+u^{163}+\cdots+3078u+373$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$(y^{82}+48y^{81}+\cdots-151346y+625)^2$
c_2, c_6	$(y^{82}+32y^{81}+\cdots+686y+25)^2$
c_3, c_5	$y^{164}-45y^{163}+\cdots-178661607030y+1838437129$
c_4	$(y^{82}-36y^{81}+\cdots-265724y+5776)^2$
c_7, c_{12}	$y^{164}+24y^{163}+\cdots-146y+1$
c_8, c_{11}	$y^{164}-35y^{163}+\cdots-1545612284y+11485321$
c_9, c_{10}	$y^{164}-15y^{163}+\cdots-11486792y+139129$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.102379+0.987009I$ $a=\ 0.317278-0.873673I$ $b=\ 0.756126+1.189239I$	$-1.74735+6.05585I$	0
$u=-0.102379+0.987009I$ $a=\ 0.493436-0.973937I$ $b=\ 1.42885-1.67251I$	$-1.74735+6.05585I$	0
$u=-0.102379-0.987009I$ $a=\ 0.317278+0.873673I$ $b=\ 0.756126-1.189239I$	$-1.74735-6.05585I$	0
$u=-0.102379-0.987009I$ $a=\ 0.493436+0.973937I$ $b=\ 1.42885+1.67251I$	$-1.74735-6.05585I$	0
$u=-0.688378+0.711449I$ $a=\ 0.44220+1.37172I$ $b=\ 0.317278-0.376478I$	$2.53761+6.16310I$	0
$u=-0.688378+0.711449I$ $a=\ 0.337930+0.263236I$ $b=\ 2.63563+0.58402I$	$2.53761+6.16310I$	0
$u=-0.688378-0.711449I$ $a=\ 0.44220-1.37172I$ $b=\ 0.317278+0.376478I$	$2.53761-6.16310I$	0
$u=-0.688378-0.711449I$ $a=\ 0.337930-0.263236I$ $b=\ 2.63563-0.58402I$	$2.53761-6.16310I$	0
$u=\ 0.081643+1.021795I$ $a=-0.574735+0.127492I$ $b=-2.31102+0.84132I$	$-4.98297+6.06099I$	0
$u=\ 0.081643+1.021795I$ $a=\ 1.15680-0.87879I$ $b=\ 1.96133-1.27439I$	$-4.98297+6.06099I$	0

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.081643 - 1.021795I$ $a = -0.574735 - 0.127492I$ $b = -2.31102 - 0.84132I$	$-4.98297 - 6.06099I$	0
$u = 0.081643 - 1.021795I$ $a = 1.15680 + 0.87879I$ $b = 1.96133 + 1.27439I$	$-4.98297 - 6.06099I$	0
$u = 0.222975 + 0.949050I$ $a = -0.849225 - 0.071882I$ $b = -1.56892 - 0.96744I$	$-5.31896 + 2.25086I$	0
$u = 0.222975 + 0.949050I$ $a = 1.49418 - 0.54414I$ $b = 2.35863 - 0.72524I$	$-5.31896 + 2.25086I$	0
$u = 0.222975 - 0.949050I$ $a = -0.849225 + 0.071882I$ $b = -1.56892 + 0.96744I$	$-5.31896 - 2.25086I$	0
$u = 0.222975 - 0.949050I$ $a = 1.49418 + 0.54414I$ $b = 2.35863 + 0.72524I$	$-5.31896 - 2.25086I$	0
$u = -0.171387 + 0.956518I$ $a = 0.599720 + 0.762281I$ $b = 1.43154 + 0.91842I$	$-1.81006 - 2.10708I$	0
$u = -0.171387 + 0.956518I$ $a = 0.704891 + 0.841467I$ $b = 1.263282 + 0.237449I$	$-1.81006 - 2.10708I$	0
$u = -0.171387 - 0.956518I$ $a = 0.599720 - 0.762281I$ $b = 1.43154 - 0.91842I$	$-1.81006 + 2.10708I$	0
$u = -0.171387 - 0.956518I$ $a = 0.704891 - 0.841467I$ $b = 1.263282 - 0.237449I$	$-1.81006 + 2.10708I$	0

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.783796+0.687106I$ $a=\ \ 0.211946-0.816504I$ $b=\ \ 0.783680+0.913408I$	$0.93884+6.00467I$	0
$u=-0.783796+0.687106I$ $a=\ \ 0.46250+1.48455I$ $b=\ \ 0.365251+0.119121I$	$0.93884+6.00467I$	0
$u=-0.783796-0.687106I$ $a=\ \ 0.211946+0.816504I$ $b=\ \ 0.783680-0.913408I$	$0.93884-6.00467I$	0
$u=-0.783796-0.687106I$ $a=\ \ 0.46250-1.48455I$ $b=\ \ 0.365251-0.119121I$	$0.93884-6.00467I$	0
$u=\ \ 0.615325+0.729924I$ $a=-0.698457+0.164535I$ $b=-0.672941-0.947419I$	$-1.05465+5.50459I$	0
$u=\ \ 0.615325+0.729924I$ $a=-0.276711-0.595308I$ $b=-1.08058-0.94515I$	$-1.05465+5.50459I$	0
$u=\ \ 0.615325-0.729924I$ $a=-0.698457-0.164535I$ $b=-0.672941+0.947419I$	$-1.05465-5.50459I$	0
$u=\ \ 0.615325-0.729924I$ $a=-0.276711+0.595308I$ $b=-1.08058+0.94515I$	$-1.05465-5.50459I$	0
$u=\ \ 0.588823+0.751386I$ $a=\ \ 0.540619-0.898618I$ $b=-0.369589+0.471258I$	$4.68710+1.89704I$	0
$u=\ \ 0.588823+0.751386I$ $a=-0.566521+0.334837I$ $b=-2.39469+1.10008I$	$4.68710+1.89704I$	0

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.588823 - 0.751386I$ $a = 0.540619 + 0.898618I$ $b = -0.369589 - 0.471258I$	$4.68710 - 1.89704I$	0
$u = 0.588823 - 0.751386I$ $a = -0.566521 - 0.334837I$ $b = -2.39469 - 1.10008I$	$4.68710 - 1.89704I$	0
$u = 0.759373 + 0.724307I$ $a = 0.435025 - 1.130379I$ $b = 0.197944 + 0.289395I$	$4.14795 - 1.48215I$	0
$u = 0.759373 + 0.724307I$ $a = 0.351078 - 0.603944I$ $b = 1.253359 + 0.360196I$	$4.14795 - 1.48215I$	0
$u = 0.759373 - 0.724307I$ $a = 0.435025 + 1.130379I$ $b = 0.197944 - 0.289395I$	$4.14795 + 1.48215I$	0
$u = 0.759373 - 0.724307I$ $a = 0.351078 + 0.603944I$ $b = 1.253359 - 0.360196I$	$4.14795 + 1.48215I$	0
$u = 0.592504 + 0.873679I$ $a = 0.916767 + 0.661132I$ $b = 1.92566 - 0.35296I$	$-3.55448 + 2.33523I$	0
$u = 0.592504 + 0.873679I$ $a = -1.33631 - 1.11053I$ $b = -1.54585 - 1.13215I$	$-3.55448 + 2.33523I$	0
$u = 0.592504 - 0.873679I$ $a = 0.916767 - 0.661132I$ $b = 1.92566 + 0.35296I$	$-3.55448 - 2.33523I$	0
$u = 0.592504 - 0.873679I$ $a = -1.33631 + 1.11053I$ $b = -1.54585 + 1.13215I$	$-3.55448 - 2.33523I$	0

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.497907+0.791181I$ $a=-0.09313-1.79644I$ $b=\ \ 0.40229-1.37398I$	$-0.77152-1.64761I$	0
$u=-0.497907+0.791181I$ $a=-1.19243-1.61276I$ $b=-1.68357-0.85158I$	$-0.77152-1.64761I$	0
$u=-0.497907-0.791181I$ $a=-0.09313+1.79644I$ $b=\ \ 0.40229+1.37398I$	$-0.77152+1.64761I$	0
$u=-0.497907-0.791181I$ $a=-1.19243+1.61276I$ $b=-1.68357+0.85158I$	$-0.77152+1.64761I$	0
$u=-0.656153+0.855523I$ $a=-0.16967-1.59996I$ $b=\ \ 0.031540-0.452918I$	$5.26864-2.54846I$	0
$u=-0.656153+0.855523I$ $a=\ \ 1.57834+0.35247I$ $b=\ \ 2.55673+0.64010I$	$5.26864-2.54846I$	0
$u=-0.656153-0.855523I$ $a=-0.16967+1.59996I$ $b=\ \ 0.031540+0.452918I$	$5.26864+2.54846I$	0
$u=-0.656153-0.855523I$ $a=\ \ 1.57834-0.35247I$ $b=\ \ 2.55673-0.64010I$	$5.26864+2.54846I$	0
$u=\ \ 0.734731+0.552895I$ $a=-0.50407+1.56637I$ $b=-0.050639+0.140593I$	$0.78675-7.63610I$	0
$u=\ \ 0.734731+0.552895I$ $a=\ \ 1.46961+0.95629I$ $b=\ \ 1.44160+0.52221I$	$0.78675-7.63610I$	0

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.734731 - 0.552895I$ $a = -0.50407 - 1.56637I$ $b = -0.050639 - 0.140593I$	$0.78675 + 7.63610I$	0
$u = 0.734731 - 0.552895I$ $a = 1.46961 - 0.95629I$ $b = 1.44160 - 0.52221I$	$0.78675 + 7.63610I$	0
$u = 0.580213 + 0.698978I$ $a = 0.035627 + 1.300327I$ $b = 0.688348 - 0.437352I$	$-1.30751 - 3.63367I$	0
$u = 0.580213 + 0.698978I$ $a = 0.90301 - 1.19516I$ $b = 1.85953 - 0.02021I$	$-1.30751 - 3.63367I$	0
$u = 0.580213 - 0.698978I$ $a = 0.035627 - 1.300327I$ $b = 0.688348 + 0.437352I$	$-1.30751 + 3.63367I$	0
$u = 0.580213 - 0.698978I$ $a = 0.90301 + 1.19516I$ $b = 1.85953 + 0.02021I$	$-1.30751 + 3.63367I$	0
$u = 0.147604 + 1.096332I$ $a = 0.692277 + 1.077089I$ $b = 1.54129 + 0.89857I$	$-5.00549 - 2.29441I$	0
$u = 0.147604 + 1.096332I$ $a = -0.517297 - 0.433151I$ $b = -1.15443 - 1.19525I$	$-5.00549 - 2.29441I$	0
$u = 0.147604 - 1.096332I$ $a = 0.692277 - 1.077089I$ $b = 1.54129 - 0.89857I$	$-5.00549 + 2.29441I$	0
$u = 0.147604 - 1.096332I$ $a = -0.517297 + 0.433151I$ $b = -1.15443 + 1.19525I$	$-5.00549 + 2.29441I$	0

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.492160+1.000696I$ $a=\ \ 1.053691+0.382790I$ $b=\ \ 1.39710+0.59856I$	$-1.43135-2.33882I$	0
$u=-0.492160+1.000696I$ $a=\ \ 1.10522+1.16722I$ $b=\ \ 1.80366+0.79472I$	$-1.43135-2.33882I$	0
$u=-0.492160-1.000696I$ $a=\ \ 1.053691-0.382790I$ $b=\ \ 1.39710-0.59856I$	$-1.43135+2.33882I$	0
$u=-0.492160-1.000696I$ $a=\ \ 1.10522-1.16722I$ $b=\ \ 1.80366-0.79472I$	$-1.43135+2.33882I$	0
$u=-0.831555+0.747005I$ $a=-0.794981-0.573537I$ $b=-1.96782+0.04826I$	$2.09965-5.22800I$	0
$u=-0.831555+0.747005I$ $a=\ \ 0.536603+0.282820I$ $b=-0.008492-0.407778I$	$2.09965-5.22800I$	0
$u=-0.831555-0.747005I$ $a=-0.794981+0.573537I$ $b=-1.96782-0.04826I$	$2.09965+5.22800I$	0
$u=-0.831555-0.747005I$ $a=\ \ 0.536603-0.282820I$ $b=-0.008492+0.407778I$	$2.09965+5.22800I$	0
$u=\ \ 0.558931+0.971274I$ $a=\ \ 0.189922-0.781054I$ $b=-0.255754+1.246243I$	$3.98782+2.66971I$	0
$u=\ \ 0.558931+0.971274I$ $a=-0.518881+0.482099I$ $b=-1.35483+1.45301I$	$3.98782+2.66971I$	0

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.558931 - 0.971274I$ $a = 0.189922 + 0.781054I$ $b = -0.255754 - 1.246243I$	$3.98782 - 2.66971I$	0
$u = 0.558931 - 0.971274I$ $a = -0.518881 - 0.482099I$ $b = -1.35483 - 1.45301I$	$3.98782 - 2.66971I$	0
$u = -0.875737$ $a = -0.905996 + 0.765010I$ $b = -0.074026 - 0.240770I$	-1.58426	2.71380
$u = -0.875737$ $a = -0.905996 - 0.765010I$ $b = -0.074026 + 0.240770I$	-1.58426	2.71380
$u = 0.745313 + 0.865190I$ $a = -0.670864 + 0.774770I$ $b = -0.403118 + 0.284988I$	$4.09671 + 7.97160I$	0
$u = 0.745313 + 0.865190I$ $a = -1.282899 + 0.103611I$ $b = -2.46294 + 0.52288I$	$4.09671 + 7.97160I$	0
$u = 0.745313 - 0.865190I$ $a = -0.670864 - 0.774770I$ $b = -0.403118 - 0.284988I$	$4.09671 - 7.97160I$	0
$u = 0.745313 - 0.865190I$ $a = -1.282899 - 0.103611I$ $b = -2.46294 - 0.52288I$	$4.09671 - 7.97160I$	0
$u = 0.631098 + 0.962390I$ $a = -0.680616 - 0.717661I$ $b = -0.742658 - 0.622932I$	$-1.79456 - 0.57489I$	0
$u = 0.631098 + 0.962390I$ $a = 0.217567 - 0.140312I$ $b = 1.55805 + 0.36586I$	$-1.79456 - 0.57489I$	0

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.631098 - 0.962390I$ $a = -0.680616 + 0.717661I$ $b = -0.742658 + 0.622932I$	$-1.79456 + 0.57489I$	0
$u = 0.631098 - 0.962390I$ $a = 0.217567 + 0.140312I$ $b = 1.55805 - 0.36586I$	$-1.79456 + 0.57489I$	0
$u = 0.776367 + 0.858693I$ $a = 0.655709 - 0.601697I$ $b = 0.880515 - 0.641390I$	$4.12981 - 2.24537I$	0
$u = 0.776367 + 0.858693I$ $a = 0.092585 - 1.227344I$ $b = -0.241282 + 0.114546I$	$4.12981 - 2.24537I$	0
$u = 0.776367 - 0.858693I$ $a = 0.655709 + 0.601697I$ $b = 0.880515 + 0.641390I$	$4.12981 + 2.24537I$	0
$u = 0.776367 - 0.858693I$ $a = 0.092585 + 1.227344I$ $b = -0.241282 - 0.114546I$	$4.12981 + 2.24537I$	0
$u = 0.020717 + 1.158741I$ $a = -0.838570 - 0.618427I$ $b = -1.46709 - 1.15879I$	$-4.72203 - 6.11748I$	0
$u = 0.020717 + 1.158741I$ $a = -1.05996 + 1.14441I$ $b = -1.77762 + 0.77517I$	$-4.72203 - 6.11748I$	0
$u = 0.020717 - 1.158741I$ $a = -0.838570 + 0.618427I$ $b = -1.46709 + 1.15879I$	$-4.72203 + 6.11748I$	0
$u = 0.020717 - 1.158741I$ $a = -1.05996 - 1.14441I$ $b = -1.77762 - 0.77517I$	$-4.72203 + 6.11748I$	0

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.610056 + 0.985518I$ $a = 1.038962 - 0.159001I$ $b = 2.41965 - 0.82510I$	$-2.23730 + 8.40928I$	0
$u = 0.610056 + 0.985518I$ $a = -0.990136 + 0.973592I$ $b = -2.05440 + 0.32984I$	$-2.23730 + 8.40928I$	0
$u = 0.610056 - 0.985518I$ $a = 1.038962 + 0.159001I$ $b = 2.41965 + 0.82510I$	$-2.23730 - 8.40928I$	0
$u = 0.610056 - 0.985518I$ $a = -0.990136 - 0.973592I$ $b = -2.05440 - 0.32984I$	$-2.23730 - 8.40928I$	0
$u = 1.019344 + 0.563448I$ $a = 0.508278 - 1.119809I$ $b = 0.147529 + 0.199846I$	$4.20151 - 7.22862I$	0
$u = 1.019344 + 0.563448I$ $a = -0.525991 + 0.481685I$ $b = 0.134773 - 0.128980I$	$4.20151 - 7.22862I$	0
$u = 1.019344 - 0.563448I$ $a = 0.508278 + 1.119809I$ $b = 0.147529 - 0.199846I$	$4.20151 + 7.22862I$	0
$u = 1.019344 - 0.563448I$ $a = -0.525991 - 0.481685I$ $b = 0.134773 + 0.128980I$	$4.20151 + 7.22862I$	0
$u = -0.658563 + 0.976376I$ $a = -1.125343 - 0.516263I$ $b = -2.64625 - 0.72623I$	$1.72208 - 11.38300I$	0
$u = -0.658563 + 0.976376I$ $a = -0.243734 - 0.487896I$ $b = -0.11099 + 1.68510I$	$1.72208 - 11.38300I$	0

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.658563-0.976376I$ $a=-1.125343+0.516263I$ $b=-2.64625+0.72623I$	$1.72208+11.38300I$	0
$u=-0.658563-0.976376I$ $a=-0.243734+0.487896I$ $b=-0.11099-1.68510I$	$1.72208+11.38300I$	0
$u=-0.692637+0.420238I$ $a=-1.084930-0.530335I$ $b=-0.184382+0.053809I$	$2.24532+0.18686I$	$7.18291-3.86145I$
$u=-0.692637+0.420238I$ $a=-1.11979+1.05165I$ $b=-1.045952+0.506656I$	$2.24532+0.18686I$	$7.18291-3.86145I$
$u=-0.692637-0.420238I$ $a=-1.084930+0.530335I$ $b=-0.184382-0.053809I$	$2.24532-0.18686I$	$7.18291+3.86145I$
$u=-0.692637-0.420238I$ $a=-1.11979-1.05165I$ $b=-1.045952-0.506656I$	$2.24532-0.18686I$	$7.18291+3.86145I$
$u=-0.837347+0.866979I$ $a=-0.767843-0.092615I$ $b=-1.110011-0.332522I$	$2.87654-3.09038I$	0
$u=-0.837347+0.866979I$ $a=\ \ 0.241720+0.641911I$ $b=-0.179630+0.176942I$	$2.87654-3.09038I$	0
$u=-0.837347-0.866979I$ $a=-0.767843+0.092615I$ $b=-1.110011+0.332522I$	$2.87654+3.09038I$	0
$u=-0.837347-0.866979I$ $a=\ \ 0.241720-0.641911I$ $b=-0.179630-0.176942I$	$2.87654+3.09038I$	0

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.713163 + 0.977639I$ $a = -0.968035 + 0.415291I$ $b = -2.27874 + 0.60272I$	$3.38769 + 7.07961I$	0
$u = 0.713163 + 0.977639I$ $a = -0.575501 + 0.436867I$ $b = -1.51526 - 0.47494I$	$3.38769 + 7.07961I$	0
$u = 0.713163 - 0.977639I$ $a = -0.968035 - 0.415291I$ $b = -2.27874 - 0.60272I$	$3.38769 - 7.07961I$	0
$u = 0.713163 - 0.977639I$ $a = -0.575501 - 0.436867I$ $b = -1.51526 + 0.47494I$	$3.38769 - 7.07961I$	0
$u = -0.764471 + 0.945268I$ $a = 0.302137 + 0.924075I$ $b = 0.622130 - 0.311227I$	$1.51925 - 0.72010I$	0
$u = -0.764471 + 0.945268I$ $a = -0.230770 - 0.252512I$ $b = -1.056167 - 0.501436I$	$1.51925 - 0.72010I$	0
$u = -0.764471 - 0.945268I$ $a = 0.302137 - 0.924075I$ $b = 0.622130 + 0.311227I$	$1.51925 + 0.72010I$	0
$u = -0.764471 - 0.945268I$ $a = -0.230770 + 0.252512I$ $b = -1.056167 + 0.501436I$	$1.51925 + 0.72010I$	0
$u = -0.706304 + 1.005042I$ $a = 0.701144 - 0.166413I$ $b = 2.43829 + 0.47911I$	$-0.02479 - 11.64150I$	0
$u = -0.706304 + 1.005042I$ $a = -1.33325 - 0.49801I$ $b = -2.54711 - 0.56416I$	$-0.02479 - 11.64150I$	0

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.706304-1.005042I$ $a=\ \ 0.701144+0.166413I$ $b=\ \ 2.43829-0.47911I$	$-0.02479+11.64150I$	0
$u=-0.706304-1.005042I$ $a=-1.33325+0.49801I$ $b=-2.54711+0.56416I$	$-0.02479+11.64150I$	0
$u=\ \ 0.656134+1.044523I$ $a=\ \ 1.299897-0.397065I$ $b=\ \ 2.47031-0.71567I$	$-0.64011+12.97150I$	0
$u=\ \ 0.656134+1.044523I$ $a=\ \ 0.90076+1.31218I$ $b=\ \ 1.35150+1.10801I$	$-0.64011+12.97150I$	0
$u=\ \ 0.656134-1.044523I$ $a=\ \ 1.299897+0.397065I$ $b=\ \ 2.47031+0.71567I$	$-0.64011-12.97150I$	0
$u=\ \ 0.656134-1.044523I$ $a=\ \ 0.90076-1.31218I$ $b=\ \ 1.35150-1.10801I$	$-0.64011-12.97150I$	0
$u=-0.638373+1.080172I$ $a=\ \ 0.518988+0.461647I$ $b=\ \ 1.134453+0.760897I$	$0.41887-5.36607I$	0
$u=-0.638373+1.080172I$ $a=-0.871436+1.009610I$ $b=-1.36179+0.79319I$	$0.41887-5.36607I$	0
$u=-0.638373-1.080172I$ $a=\ \ 0.518988-0.461647I$ $b=\ \ 1.134453-0.760897I$	$0.41887+5.36607I$	0
$u=-0.638373-1.080172I$ $a=-0.871436-1.009610I$ $b=-1.36179-0.79319I$	$0.41887+5.36607I$	0

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-1.121030+0.584998I$ $a=\ \ 0.244141+1.147393I$ $b=-0.007370+0.431276I$	$3.95679-0.35266I$	0
$u=-1.121030+0.584998I$ $a=-0.504941-0.081075I$ $b=-0.219157+0.038383I$	$3.95679-0.35266I$	0
$u=-1.121030-0.584998I$ $a=\ \ 0.244141-1.147393I$ $b=-0.007370-0.431276I$	$3.95679+0.35266I$	0
$u=-1.121030-0.584998I$ $a=-0.504941+0.081075I$ $b=-0.219157-0.038383I$	$3.95679+0.35266I$	0
$u=-0.367565+1.222032I$ $a=\ \ 0.878996+0.455684I$ $b=\ \ 2.08893+0.84142I$	$-5.51762-4.38107I$	0
$u=-0.367565+1.222032I$ $a=-0.364829+0.496811I$ $b=-1.002012+0.885954I$	$-5.51762-4.38107I$	0
$u=-0.367565-1.222032I$ $a=\ \ 0.878996-0.455684I$ $b=\ \ 2.08893-0.84142I$	$-5.51762+4.38107I$	0
$u=-0.367565-1.222032I$ $a=-0.364829-0.496811I$ $b=-1.002012-0.885954I$	$-5.51762+4.38107I$	0
$u=\ \ 0.749973+1.139258I$ $a=-1.073570+0.371491I$ $b=-2.39232+0.60804I$	$2.40195+13.63020I$	0
$u=\ \ 0.749973+1.139258I$ $a=\ \ 0.581656-0.336374I$ $b=\ \ 1.30562-0.82900I$	$2.40195+13.63020I$	0

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.749973 - 1.139258I$ $a = -1.073570 - 0.371491I$ $b = -2.39232 - 0.60804I$	$2.40195 - 13.63020I$	0
$u = 0.749973 - 1.139258I$ $a = 0.581656 + 0.336374I$ $b = 1.30562 + 0.82900I$	$2.40195 - 13.63020I$	0
$u = -0.845881 + 1.115257I$ $a = -1.334105 - 0.344236I$ $b = -2.16679 - 0.37211I$	$2.33444 - 6.63695I$	0
$u = -0.845881 + 1.115257I$ $a = 0.355867 + 0.289833I$ $b = 0.719952 + 0.270282I$	$2.33444 - 6.63695I$	0
$u = -0.845881 - 1.115257I$ $a = -1.334105 + 0.344236I$ $b = -2.16679 + 0.37211I$	$2.33444 + 6.63695I$	0
$u = -0.845881 - 1.115257I$ $a = 0.355867 - 0.289833I$ $b = 0.719952 - 0.270282I$	$2.33444 + 6.63695I$	0
$u = -0.097362 + 0.536746I$ $a = -1.32055 + 1.00516I$ $b = -0.86089 + 1.87657I$	$2.58479 - 0.09865I$	$1.75768 - 0.41334I$
$u = -0.097362 + 0.536746I$ $a = -0.94357 - 1.92962I$ $b = -0.349717 + 0.124457I$	$2.58479 - 0.09865I$	$1.75768 - 0.41334I$
$u = -0.097362 - 0.536746I$ $a = -1.32055 - 1.00516I$ $b = -0.86089 - 1.87657I$	$2.58479 + 0.09865I$	$1.75768 + 0.41334I$
$u = -0.097362 - 0.536746I$ $a = -0.94357 + 1.92962I$ $b = -0.349717 - 0.124457I$	$2.58479 + 0.09865I$	$1.75768 + 0.41334I$

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.06857+1.47022I$ $a=\ 0.742540+0.512047I$ $b=\ 1.64947+0.63887I$	$-3.79732-4.23788I$	0
$u=-0.06857+1.47022I$ $a=\ 0.041539-0.179639I$ $b=-0.051292-0.478297I$	$-3.79732-4.23788I$	0
$u=-0.06857-1.47022I$ $a=\ 0.742540-0.512047I$ $b=\ 1.64947-0.63887I$	$-3.79732+4.23788I$	0
$u=-0.06857-1.47022I$ $a=\ 0.041539+0.179639I$ $b=-0.051292+0.478297I$	$-3.79732+4.23788I$	0
$u=\ 0.454458+0.039085I$ $a=\ 1.63283+0.91663I$ $b=\ 0.576929-0.958945I$	$-1.49447+4.52523I$	$3.99817-7.04316I$
$u=\ 0.454458+0.039085I$ $a=-2.00901-1.21433I$ $b=\ 0.226960-0.320503I$	$-1.49447+4.52523I$	$3.99817-7.04316I$
$u=\ 0.454458-0.039085I$ $a=\ 1.63283-0.91663I$ $b=\ 0.576929+0.958945I$	$-1.49447-4.52523I$	$3.99817+7.04316I$
$u=\ 0.454458-0.039085I$ $a=-2.00901+1.21433I$ $b=\ 0.226960+0.320503I$	$-1.49447-4.52523I$	$3.99817+7.04316I$
$u=\ 0.415034$ $a=-1.09706+1.83796I$ $b=\ 0.217401+0.303171I$	-2.77257	-0.265100
$u=\ 0.415034$ $a=-1.09706-1.83796I$ $b=\ 0.217401-0.303171I$	-2.77257	-0.265100

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.006580+0.328712I$ $a=\ \ 2.24112+0.27424I$ $b=\ \ 0.67653+2.68161I$	$0.57540-6.78088I$	$-5.17076+2.86152I$
$u=-0.006580+0.328712I$ $a=\ \ 1.59061+3.52804I$ $b=-0.291550+0.252885I$	$0.57540-6.78088I$	$-5.17076+2.86152I$
$u=-0.006580-0.328712I$ $a=\ \ 2.24112-0.27424I$ $b=\ \ 0.67653-2.68161I$	$0.57540+6.78088I$	$-5.17076-2.86152I$
$u=-0.006580-0.328712I$ $a=\ \ 1.59061-3.52804I$ $b=-0.291550-0.252885I$	$0.57540+6.78088I$	$-5.17076-2.86152I$

III.

$\boldsymbol{I_3^u = \langle 6.91\times 10^5 au^{20} - 6.66\times 10^5 u^{20} + \cdots + 1.60\times 10^6 a + 1.44\times 10^6,\ -2.43\times 10^5 au^{20} + 4.82\times 10^4 u^{20} + \cdots + 5.83\times 10^5 a - 2.32\times 10^5,\ u^{21} + u^{20} + \cdots - u + 1\rangle}$

(i) Arc colorings

$$a_2 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$

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

$$a_3 = \begin{pmatrix} 1 \\ -u^2 \end{pmatrix}$$

$$a_7 = \begin{pmatrix} u \\ u \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} a \\ -1.49504au^{20} + 1.44206u^{20} + \cdots - 3.46226a - 3.12717 \end{pmatrix}$$

$$a_{12} = \begin{pmatrix} 1.31468au^{20} - 0.100016u^{20} + \cdots + 2.62870a + 2.24404 \\ -0.180362au^{20} + 1.34204u^{20} + \cdots - 1.83356a - 0.883125 \end{pmatrix}$$

$$a_1 = \begin{pmatrix} u^2 + 1 \\ -u^4 \end{pmatrix}$$

$$a_5 = \begin{pmatrix} 0.784475au^{20} + 0.397685u^{20} + \cdots + 0.876181a - 0.173880 \\ -1.63738au^{20} + 0.594672u^{20} + \cdots - 2.58527a - 4.63963 \end{pmatrix}$$

$$a_8 = \begin{pmatrix} -2.34472au^{20} - 2.06949u^{20} + \cdots + 0.364785a - 3.64135 \\ -1.61997au^{20} - 3.60148u^{20} + \cdots + 2.45790a - 3.66334 \end{pmatrix}$$

$$a_9 = \begin{pmatrix} -3.46226au^{20} - 3.22343u^{20} + \cdots + 0.545147a - 5.91816 \\ -1.62870au^{20} - 3.07689u^{20} + \cdots + 1.49504a - 3.50155 \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} -2.58608au^{20} - 1.05697u^{20} + \cdots - 0.558930a - 4.49851 \\ -2.29916au^{20} + 0.531631u^{20} + \cdots - 1.87552a - 5.20908 \end{pmatrix}$$

$$a_4 = \begin{pmatrix} -2.62537au^{20} - 4.11397u^{20} + \cdots + 3.22343a - 3.47995 \\ -1.04097au^{20} - 3.02197u^{20} + \cdots + 3.07689a - 0.910587 \end{pmatrix}$$

(ii) Obstruction class $= 1$

(iii) Cusp Shapes $= -\frac{573826}{92393}u^{20} - \frac{655818}{92393}u^{19} + \cdots - \frac{280213}{13199}u + \frac{259652}{92393}$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$(u^{21}-9u^{20}+\cdots-5u+1)^2$
c_2	$(u^{21}+u^{20}+\cdots-u+1)^2$
c_3	$3(3u^{42}-25u^{40}+\cdots+8u^2+1)$
c_4	$3(3u^{42}-28u^{40}+\cdots-79585u^2+13342)$
c_5	$3(3u^{42}-25u^{40}+\cdots+8u^2+1)$
c_6	$(u^{21}-u^{20}+\cdots-u-1)^2$
c_7	$u^{42}+u^{41}+\cdots-10u^2+3$
c_8	$u^{42}-2u^{41}+\cdots+72u+6$
c_9	$u^{42}-6u^{41}+\cdots+4u+1$
c_{10}	$u^{42}+6u^{41}+\cdots-4u+1$
c_{11}	$u^{42}+2u^{41}+\cdots-72u+6$
c_{12}	$u^{42}-u^{41}+\cdots-10u^2+3$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$(y^{21}+y^{20}+\cdots-13y-1)^2$
c_2, c_6	$(y^{21}+9y^{20}+\cdots-5y-1)^2$
c_3, c_5	$9(9y^{42}-150y^{41}+\cdots+16y+1)$
c_4	$9(3y^{21}-28y^{20}+\cdots-79585y+13342)^2$
c_7, c_{12}	$y^{42}-9y^{41}+\cdots-60y+9$
c_8, c_{11}	$y^{42}-26y^{41}+\cdots+84y+36$
c_9, c_{10}	$y^{42}-8y^{41}+\cdots-10y+1$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_3^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.881576+0.418831I$ $a=-0.361683-1.121333I$ $b=\ \ 0.207870-0.378663I$	$3.78339-0.04138I$	$10.41762-3.81109I$
$u=-0.881576+0.418831I$ $a=-0.730949+0.005543I$ $b=-0.278195+0.434952I$	$3.78339-0.04138I$	$10.41762-3.81109I$
$u=-0.881576-0.418831I$ $a=-0.361683+1.121333I$ $b=\ \ 0.207870+0.378663I$	$3.78339+0.04138I$	$10.41762+3.81109I$
$u=-0.881576-0.418831I$ $a=-0.730949-0.005543I$ $b=-0.278195-0.434952I$	$3.78339+0.04138I$	$10.41762+3.81109I$
$u=-0.975689$ $a=-0.557318+0.589892I$ $b=\ \ 0.049772+0.442736I$	3.74666	15.9220
$u=-0.975689$ $a=-0.557318-0.589892I$ $b=\ \ 0.049772-0.442736I$	3.74666	15.9220
$u=\ \ 0.698370+0.650268I$ $a=-0.355980-0.686589I$ $b=-1.79122+0.32674I$	$1.83840-6.35244I$	$4.81759+6.65061I$
$u=\ \ 0.698370+0.650268I$ $a=-0.52515+1.49030I$ $b=-0.393589-0.091413I$	$1.83840-6.35244I$	$4.81759+6.65061I$
$u=\ \ 0.698370-0.650268I$ $a=-0.355980+0.686589I$ $b=-1.79122-0.32674I$	$1.83840+6.35244I$	$4.81759-6.65061I$
$u=\ \ 0.698370-0.650268I$ $a=-0.52515-1.49030I$ $b=-0.393589+0.091413I$	$1.83840+6.35244I$	$4.81759-6.65061I$

Solutions to I_3^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.476537+0.936351I$ $a=\ 1.80266+0.94454I$ $b=\ 2.16809+0.95721I$	$-1.68581-1.86148I$	$-7.79878-2.15039I$
$u=-0.476537+0.936351I$ $a=-2.16341-1.13374I$ $b=-2.63982-0.90534I$	$-1.68581-1.86148I$	$-7.79878-2.15039I$
$u=-0.476537-0.936351I$ $a=\ 1.80266-0.94454I$ $b=\ 2.16809-0.95721I$	$-1.68581+1.86148I$	$-7.79878+2.15039I$
$u=-0.476537-0.936351I$ $a=-2.16341+1.13374I$ $b=-2.63982+0.90534I$	$-1.68581+1.86148I$	$-7.79878+2.15039I$
$u=-0.104938+1.045834I$ $a=-0.996552-0.618015I$ $b=-1.78863-1.21314I$	$-4.18470-5.21358I$	$-0.79665+4.22153I$
$u=-0.104938+1.045834I$ $a=\ 0.368788-0.683066I$ $b=\ 1.39495-0.29757I$	$-4.18470-5.21358I$	$-0.79665+4.22153I$
$u=-0.104938-1.045834I$ $a=-0.996552+0.618015I$ $b=-1.78863+1.21314I$	$-4.18470+5.21358I$	$-0.79665-4.22153I$
$u=-0.104938-1.045834I$ $a=\ 0.368788+0.683066I$ $b=\ 1.39495+0.29757I$	$-4.18470+5.21358I$	$-0.79665-4.22153I$
$u=\ 0.561052+0.893013I$ $a=-0.235455+0.765228I$ $b=\ 0.526202-1.267104I$	$3.43041+2.23267I$	$3.41392-1.50119I$
$u=\ 0.561052+0.893013I$ $a=\ 0.486006-0.367781I$ $b=\ 1.77426-1.54792I$	$3.43041+2.23267I$	$3.41392-1.50119I$

Solutions to I_3^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.561052 - 0.893013I$ $a = -0.235455 - 0.765228I$ $b = 0.526202 + 1.267104I$	$3.43041 - 2.23267I$	$3.41392 + 1.50119I$
$u = 0.561052 - 0.893013I$ $a = 0.486006 + 0.367781I$ $b = 1.77426 + 1.54792I$	$3.43041 - 2.23267I$	$3.41392 + 1.50119I$
$u = 0.674245 + 1.017385I$ $a = 1.235031 - 0.519035I$ $b = 2.52854 - 0.64889I$	$0.72594 + 11.68850I$	$5.01313 - 11.04581I$
$u = 0.674245 + 1.017385I$ $a = -0.576962 - 0.288535I$ $b = -1.59779 + 0.81587I$	$0.72594 + 11.68850I$	$5.01313 - 11.04581I$
$u = 0.674245 - 1.017385I$ $a = 1.235031 + 0.519035I$ $b = 2.52854 + 0.64889I$	$0.72594 - 11.68850I$	$5.01313 + 11.04581I$
$u = 0.674245 - 1.017385I$ $a = -0.576962 + 0.288535I$ $b = -1.59779 - 0.81587I$	$0.72594 - 11.68850I$	$5.01313 + 11.04581I$
$u = -0.094129 + 0.709191I$ $a = -0.252055 + 1.030204I$ $b = -1.86324 + 1.58970I$	$-2.65904 + 4.24204I$	$-3.54332 - 5.59638I$
$u = -0.094129 + 0.709191I$ $a = -0.69175 + 1.33662I$ $b = -0.766515 - 0.680615I$	$-2.65904 + 4.24204I$	$-3.54332 - 5.59638I$
$u = -0.094129 - 0.709191I$ $a = -0.252055 - 1.030204I$ $b = -1.86324 - 1.58970I$	$-2.65904 - 4.24204I$	$-3.54332 + 5.59638I$
$u = -0.094129 - 0.709191I$ $a = -0.69175 - 1.33662I$ $b = -0.766515 + 0.680615I$	$-2.65904 - 4.24204I$	$-3.54332 + 5.59638I$

Solutions to I_3^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.826136+1.029522I$ $a=\ 1.184032+0.362526I$ $b=\ 2.14999+0.37191I$	$2.33522-6.36054I$	$8.63011-1.69394I$
$u=-0.826136+1.029522I$ $a=\ 0.379736+0.331436I$ $b=\ 0.695524+0.033648I$	$2.33522-6.36054I$	$8.63011-1.69394I$
$u=-0.826136-1.029522I$ $a=\ 1.184032-0.362526I$ $b=\ 2.14999-0.37191I$	$2.33522+6.36054I$	$8.63011+1.69394I$
$u=-0.826136-1.029522I$ $a=\ 0.379736-0.331436I$ $b=\ 0.695524-0.033648I$	$2.33522+6.36054I$	$8.63011+1.69394I$
$u=-0.00985+1.43426I$ $a=-0.729901-0.526288I$ $b=-1.58381-0.67192I$	$-3.92414-4.32422I$	$-12.5168+20.5203I$
$u=-0.00985+1.43426I$ $a=\ 0.172191+0.049366I$ $b=\ 0.305401+0.349487I$	$-3.92414-4.32422I$	$-12.5168+20.5203I$
$u=-0.00985-1.43426I$ $a=-0.729901+0.526288I$ $b=-1.58381+0.67192I$	$-3.92414+4.32422I$	$-12.5168-20.5203I$
$u=-0.00985-1.43426I$ $a=\ 0.172191-0.049366I$ $b=\ 0.305401-0.349487I$	$-3.92414+4.32422I$	$-12.5168-20.5203I$
$u=\ 0.447345+0.344431I$ $a=\ 1.004017+0.416329I$ $b=\ 0.40170+2.22779I$	$0.93439+7.02753I$	$10.9024-13.2309I$
$u=\ 0.447345+0.344431I$ $a=-1.95530+0.54442I$ $b=\ 0.000501+0.269681I$	$0.93439+7.02753I$	$10.9024-13.2309I$

Solutions to I_3^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.447345 - 0.344431I$ $a = 1.004017 - 0.416329I$ $b = 0.40170 - 2.22779I$	$0.93439 - 7.02753I$	$10.9024 + 13.2309I$
$u = 0.447345 - 0.344431I$ $a = -1.95530 - 0.54442I$ $b = 0.000501 - 0.269681I$	$0.93439 - 7.02753I$	$10.9024 + 13.2309I$

IV. $I_4^u = \langle -u^7 + 2u^4 - u^3 + u^2 + b + u + 1,\ u^5 + u^4 + u^3 + a + u + 1,\ u^8 + u^7 + 2u^6 + u^5 + 3u^4 + 2u^3 + 2u^2 + u + 1 \rangle$

(i) Arc colorings

$$a_2 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$

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

$$a_3 = \begin{pmatrix} 1 \\ -u^2 \end{pmatrix}$$

$$a_7 = \begin{pmatrix} u \\ u \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} -u^5 - u^4 - u^3 - u - 1 \\ u^7 - 2u^4 + u^3 - u^2 - u - 1 \end{pmatrix}$$

$$a_{12} = \begin{pmatrix} -u^5 - u^4 - u^3 + u^2 - u \\ u^7 - 2u^4 + u^3 - u \end{pmatrix}$$

$$a_1 = \begin{pmatrix} u^2 + 1 \\ -u^4 \end{pmatrix}$$

$$a_5 = \begin{pmatrix} -u^6 - u^5 - 2u^4 - u^3 - 3u^2 - 2u - 1 \\ -u^7 - u^6 - 2u^5 - u^4 - 3u^3 - 3u^2 - 2u - 1 \end{pmatrix}$$

$$a_8 = \begin{pmatrix} -u^5 - u^4 - u^3 - 1 \\ u^7 - u^4 + u^3 \end{pmatrix}$$

$$a_9 = \begin{pmatrix} u^7 + u^6 + u^5 + u^3 + 2u^2 \\ u^7 + u^5 - u^4 + 2u^3 \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} u^7 - u^5 - 3u^4 + u^2 - 1 \\ u^7 - u^6 - 2u^5 - 5u^4 - u^3 - 2u^2 - 2u - 2 \end{pmatrix}$$

$$a_4 = \begin{pmatrix} -u^6 - u^5 - 2u^4 - u^3 - 3u^2 - 2u - 1 \\ -u^7 - u^6 - 2u^5 - u^4 - 3u^3 - 3u^2 - 2u - 1 \end{pmatrix}$$

(ii) Obstruction class $= 1$

(iii) Cusp Shapes $= 10u^7 + 11u^6 + 16u^5 + 9u^4 + 21u^3 + 20u^2 + 4u + 7$

(iv) u-Polynomials at the component

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

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^8 + 7y^7 + 24y^6 + 39y^5 + 29y^4 + 6y^3 + 2y^2 + 3y + 1$
c_2, c_6	$y^8 + 3y^7 + 8y^6 + 11y^5 + 13y^4 + 10y^3 + 6y^2 + 3y + 1$
c_3, c_5	$y^8 + 6y^7 + 11y^6 + 3y^5 - 7y^4 + 3y^2 - 2y + 1$
c_4	y^8
c_7, c_{12}	$y^8 - 2y^7 + 3y^6 - 7y^4 + 3y^3 + 11y^2 + 6y + 1$
c_8, c_{11}	$y^8 - 10y^7 + 43y^6 - 103y^5 + 149y^4 - 130y^3 + 64y^2 - 17y + 4$
c_9, c_{10}	$y^8 - 14y^7 + 71y^6 - 157y^5 + 141y^4 - 8y^3 - 5y^2 + 2y + 1$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_4^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.671852 + 0.866239I$ $a = 1.049991 + 0.870539I$ $b = 1.84297 + 0.06459I$	$-2.27367 + 2.59903I$	$-5.01492 - 5.67257I$
$u = 0.671852 - 0.866239I$ $a = 1.049991 - 0.870539I$ $b = 1.84297 - 0.06459I$	$-2.27367 - 2.59903I$	$-5.01492 + 5.67257I$
$u = -0.636169 + 0.536939I$ $a = -0.577120 - 0.732862I$ $b = 0.665259 + 0.689606I$	$4.52677 - 0.45848I$	$12.52054 - 4.29850I$
$u = -0.636169 - 0.536939I$ $a = -0.577120 + 0.732862I$ $b = 0.665259 - 0.689606I$	$4.52677 + 0.45848I$	$12.52054 + 4.29850I$
$u = 0.187636 + 0.807559I$ $a = -1.47208 - 0.15531I$ $b = -1.77788 - 0.79675I$	$-4.97144 + 0.82384I$	$-7.26579 + 2.83996I$
$u = 0.187636 - 0.807559I$ $a = -1.47208 + 0.15531I$ $b = -1.77788 + 0.79675I$	$-4.97144 - 0.82384I$	$-7.26579 - 2.83996I$
$u = -0.723319 + 1.106196I$ $a = 0.499208 + 0.180900I$ $b = 1.26966 + 0.70532I$	$2.71833 - 5.01867I$	$3.26018 + 0.33670I$
$u = -0.723319 - 1.106196I$ $a = 0.499208 - 0.180900I$ $b = 1.26966 - 0.70532I$	$2.71833 + 5.01867I$	$3.26018 - 0.33670I$

V. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1	$(u^8-3u^7+8u^6-11u^5+13u^4-10u^3+6u^2-3u+1)$ $\cdot((u^{21}-9u^{20}+\cdots-5u+1)^2)(u^{43}+12u^{42}+\cdots-8532u-784)$
c_2	$(u^8+u^7+\cdots+u+1)(u^{21}+u^{20}+\cdots-u+1)^2$ $\cdot(u^{43}-4u^{42}+\cdots+134u-28)$
c_3	$9(u^8+3u^6+\cdots-u^2+1)(3u^{42}-25u^{40}+\cdots+8u^2+1)$ $\cdot(3u^{43}+18u^{42}+\cdots-9u-1)$
c_4	$9u^8(3u^{42}-28u^{40}+\cdots-79585u^2+13342)$ $\cdot(3u^{43}+3u^{42}+\cdots+6656u-1024)$
c_5	$9(u^8+3u^6+\cdots-u^2+1)(3u^{42}-25u^{40}+\cdots+8u^2+1)$ $\cdot(3u^{43}+18u^{42}+\cdots-9u-1)$
c_6	$(u^8-u^7+\cdots-u+1)(u^{21}-u^{20}+\cdots-u-1)^2$ $\cdot(u^{43}-4u^{42}+\cdots+134u-28)$
c_7	$(u^8-u^6-2u^5+u^4-u^3+3u^2+1)(u^{42}+u^{41}+\cdots-10u^2+3)$ $\cdot(u^{43}+2u^{42}+\cdots-21u-3)$
c_8	$(u^8+2u^7-3u^6-7u^5+3u^4+8u^3-2u^2-3u+2)$ $\cdot(u^{42}-2u^{41}+\cdots+72u+6)(u^{43}+10u^{42}+\cdots-66u-6)$
c_9	$(u^8-6u^7+\cdots+2u+1)(u^{42}-6u^{41}+\cdots+4u+1)$ $\cdot(u^{43}+6u^{42}+\cdots+u-1)$
c_{10}	$(u^8+6u^7+\cdots-2u+1)(u^{42}+6u^{41}+\cdots-4u+1)$ $\cdot(u^{43}+6u^{42}+\cdots+u-1)$
c_{11}	$(u^8-2u^7-3u^6+7u^5+3u^4-8u^3-2u^2+3u+2)$ $\cdot(u^{42}+2u^{41}+\cdots-72u+6)(u^{43}+10u^{42}+\cdots-66u-6)$
c_{12}	$(u^8-u^6+2u^5+u^4+u^3+3u^2+1)(u^{42}-u^{41}+\cdots-10u^2+3)$ $\cdot(u^{43}+2u^{42}+\cdots-21u-3)$

VI. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1	$(y^8+7y^7+24y^6+39y^5+29y^4+6y^3+2y^2+3y+1)$ $\cdot(y^{21}+y^{20}+\cdots-13y-1)^2$ $\cdot(y^{43}+8y^{42}+\cdots+30513904y-614656)$
c_2, c_6	$(y^8+3y^7+8y^6+11y^5+13y^4+10y^3+6y^2+3y+1)$ $\cdot((y^{21}+9y^{20}+\cdots-5y-1)^2)(y^{43}+12y^{42}+\cdots-8532y-784)$
c_3, c_5	$81(y^8+6y^7+11y^6+3y^5-7y^4+3y^2-2y+1)$ $\cdot(9y^{42}-150y^{41}+\cdots+16y+1)(9y^{43}-60y^{42}+\cdots+19y-1)$
c_4	$81y^8(3y^{21}-28y^{20}+\cdots-79585y+13342)^2$ $\cdot(9y^{43}-33y^{42}+\cdots+17039360y-1048576)$
c_7, c_{12}	$(y^8-2y^7+3y^6-7y^4+3y^3+11y^2+6y+1)$ $\cdot(y^{42}-9y^{41}+\cdots-60y+9)(y^{43}-16y^{42}+\cdots+159y-9)$
c_8, c_{11}	$(y^8-10y^7+43y^6-103y^5+149y^4-130y^3+64y^2-17y+4)$ $\cdot(y^{42}-26y^{41}+\cdots+84y+36)(y^{43}-10y^{42}+\cdots-588y-36)$
c_9, c_{10}	$(y^8-14y^7+71y^6-157y^5+141y^4-8y^3-5y^2+2y+1)$ $\cdot(y^{42}-8y^{41}+\cdots-10y+1)(y^{43}+4y^{42}+\cdots+19y-1)$