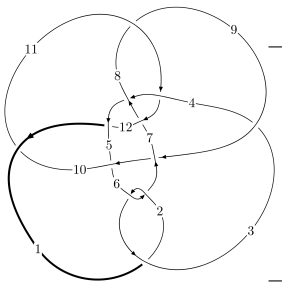
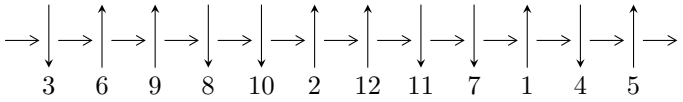
$12a_{0361}$ $(K12a_{0361})$



A knot diagram[1]

Linearized knot diagam



Solving Sequence

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

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

$$\begin{aligned} I_1^u = \langle & -5.19484 \times 10^{727} u^{208} + 8.25909 \times 10^{726} u^{207} + \cdots + 2.89794 \times 10^{726} b - 5.95025 \times 10^{728}, \\ & - 5.74402 \times 10^{728} u^{208} - 2.50115 \times 10^{729} u^{207} + \cdots + 8.98362 \times 10^{727} a + 8.40848 \times 10^{730}, \\ & u^{209} + u^{208} + \cdots + 157u - 31 \rangle \\ I_2^u = \langle & -5.62203 \times 10^{24} u^{44} - 2.14255 \times 10^{24} u^{43} + \cdots + 1.91127 \times 10^{24} b - 4.18208 \times 10^{24}, \\ & 1.38584 \times 10^{25} u^{44} - 7.72588 \times 10^{23} u^{43} + \cdots + 1.91127 \times 10^{24} a - 1.67886 \times 10^{25}, \ u^{45} + 13u^{43} + \cdots + 3u + \end{aligned}$$

* 2 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 254 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. $\boldsymbol{I_1^u = \langle -5.19 \times 10^{727} u^{208} + 8.26 \times 10^{726} u^{207} + \cdots + 2.90 \times 10^{726} b - 5.95 \times 10^{728},\ -5.74 \times 10^{728} u^{208} - 2.50 \times 10^{729} u^{207} + \cdots + 8.98 \times 10^{727} a + 8.41 \times 10^{730},\ u^{209} + u^{208} + \cdots + 157u - 31 \rangle}$

(i) Arc colorings

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

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

$$a_6 = \begin{pmatrix} 1 \\ u^2 \end{pmatrix}$$

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

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

$$a_{10} = \begin{pmatrix} 6.39389u^{208} + 27.8413u^{207} + \cdots + 5326.95u - 935.980 \\ 17.9260u^{208} - 2.84999u^{207} + \cdots - 1746.62u + 205.327 \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} 24.0595u^{208} + 43.1655u^{207} + \cdots + 7005.92u - 1310.55 \\ 11.9868u^{208} - 6.46156u^{207} + \cdots - 2018.72u + 284.552 \end{pmatrix}$$

$$a_5 = \begin{pmatrix} 47.9537u^{208} + 46.5295u^{207} + \cdots + 6025.57u - 1293.15 \\ -9.59584u^{208} - 6.09771u^{207} + \cdots - 555.561u + 146.161 \end{pmatrix}$$

$$a_9 = \begin{pmatrix} 24.3199u^{208} + 24.9913u^{207} + \cdots + 3580.32u - 730.653 \\ 17.9260u^{208} - 2.84999u^{207} + \cdots - 1746.62u + 205.327 \end{pmatrix}$$

$$a_4 = \begin{pmatrix} -32.6099u^{208} - 30.8544u^{207} + \cdots - 3776.28u + 834.973 \\ 15.2112u^{208} + 11.6311u^{207} + \cdots + 1168.81u - 280.462 \end{pmatrix}$$

$$a_8 = \begin{pmatrix} 36.5951u^{208} - 2.85855u^{207} + \cdots - 2738.98u + 271.752 \\ -3.36340u^{208} - 5.69928u^{207} + \cdots - 666.592u + 129.498 \end{pmatrix}$$

$$a_{12} = \begin{pmatrix} 35.2543u^{208} + 47.3291u^{207} + \cdots + 6049.61u - 1248.70 \\ 4.43078u^{208} + 6.47752u^{207} + \cdots + 921.918u - 175.511 \end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= -1268.80u^{208} - 749.344u^{207} + \cdots - 65537.2u + 17961.7$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{209} + 95u^{208} + \cdots - 21355u - 961$
c_2, c_6	$u^{209} - u^{208} + \cdots + 157u + 31$
c_3	$u^{209} + u^{208} + \cdots + 10419082u + 304643$
c_4	$u^{209} + 6u^{208} + \cdots - 116u + 8$
c_5	$u^{209} - u^{208} + \cdots + 2641791u + 518269$
c_7	$u^{209} + 3u^{208} + \cdots + 41u + 1$
c_8	$u^{209} + 10u^{208} + \cdots - 360u + 13$
c_9	$u^{209} + 5u^{208} + \cdots + 23494787u + 2058527$
c_{10}	$u^{209} - 5u^{208} + \cdots + 23728u + 1856$
c_{11}	$u^{209} + 4u^{208} + \cdots + 71u - 173$
c_{12}	$u^{209} + 3u^{208} + \cdots + 132u + 1$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{209} + 55y^{208} + \cdots + 62744853y - 923521$
c_2, c_6	$y^{209} + 95y^{208} + \cdots - 21355y - 961$
c_3	$y^{209} + 47y^{208} + \cdots - 7664051227998y - 92807357449$
c_4	$y^{209} + 28y^{208} + \cdots - 2608y - 64$
c_5	$y^{209} + 29y^{208} + \cdots - 14754978917513y - 268602756361$
c_7	$y^{209} - 13y^{208} + \cdots + 169y - 1$
c_8	$y^{209} - 14y^{208} + \cdots - 67974y - 169$
c_9	$y^{209} + y^{208} + \cdots - 123218028405125y - 4237533409729$
c_{10}	$y^{209} - 37y^{208} + \cdots + 94845696y - 3444736$
c_{11}	$y^{209} - 2y^{208} + \cdots + 2076543y - 29929$
c_{12}	$y^{209} - 41y^{208} + \cdots + 5070y - 1$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.414459+0.912946I$ $a=-0.003703+1.328120I$ $b=\ \ 0.055954+0.726607I$	$-0.797811+0.322751I$	0
$u=-0.414459-0.912946I$ $a=-0.003703-1.328120I$ $b=\ \ 0.055954-0.726607I$	$-0.797811-0.322751I$	0
$u=\ \ 0.789395+0.604559I$ $a=-0.382992+0.377656I$ $b=\ \ 0.426451+1.127850I$	$5.55730-7.04279I$	0
$u=\ \ 0.789395-0.604559I$ $a=-0.382992-0.377656I$ $b=\ \ 0.426451-1.127850I$	$5.55730+7.04279I$	0
$u=\ \ 0.888897+0.443556I$ $a=\ \ 0.138371+0.096590I$ $b=\ \ 0.90624+1.40713I$	$1.34487-7.80456I$	0
$u=\ \ 0.888897-0.443556I$ $a=\ \ 0.138371-0.096590I$ $b=\ \ 0.90624-1.40713I$	$1.34487+7.80456I$	0
$u=\ \ 0.522878+0.844028I$ $a=-2.51795-0.11586I$ $b=\ \ 0.56972-1.52968I$	$2.55861+5.83117I$	0
$u=\ \ 0.522878-0.844028I$ $a=-2.51795+0.11586I$ $b=\ \ 0.56972+1.52968I$	$2.55861-5.83117I$	0
$u=\ \ 0.509684+0.869877I$ $a=\ \ 0.924253-0.199476I$ $b=\ \ 0.29260+1.86459I$	$2.48549-1.65200I$	0
$u=\ \ 0.509684-0.869877I$ $a=\ \ 0.924253+0.199476I$ $b=\ \ 0.29260-1.86459I$	$2.48549+1.65200I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.288077 + 0.946097I$ $a = -0.77080 - 1.25654I$ $b = 1.27234 + 0.80753I$	$-3.69355 - 0.54833I$	0
$u = 0.288077 - 0.946097I$ $a = -0.77080 + 1.25654I$ $b = 1.27234 - 0.80753I$	$-3.69355 + 0.54833I$	0
$u = -0.688092 + 0.708394I$ $a = -0.96931 - 1.05574I$ $b = -1.22304 + 1.67861I$	$2.45193 + 6.07675I$	0
$u = -0.688092 - 0.708394I$ $a = -0.96931 + 1.05574I$ $b = -1.22304 - 1.67861I$	$2.45193 - 6.07675I$	0
$u = 0.776949 + 0.608508I$ $a = 0.631967 + 0.150693I$ $b = -0.369573 - 0.528778I$	$4.29894 - 1.79618I$	0
$u = 0.776949 - 0.608508I$ $a = 0.631967 - 0.150693I$ $b = -0.369573 + 0.528778I$	$4.29894 + 1.79618I$	0
$u = -0.933186 + 0.395299I$ $a = 0.036618 + 0.138293I$ $b = 0.674525 - 1.168200I$	$3.82194 + 6.78600I$	0
$u = -0.933186 - 0.395299I$ $a = 0.036618 - 0.138293I$ $b = 0.674525 + 1.168200I$	$3.82194 - 6.78600I$	0
$u = 0.324625 + 0.960718I$ $a = 2.27632 + 0.63428I$ $b = -1.170670 - 0.467528I$	$-2.71146 - 6.61718I$	0
$u = 0.324625 - 0.960718I$ $a = 2.27632 - 0.63428I$ $b = -1.170670 + 0.467528I$	$-2.71146 + 6.61718I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.335784+0.958593I$ $a=\ \ 1.96499+0.06488I$ $b=-0.495656-0.383507I$	$-0.63720-3.37626I$	0
$u=-0.335784-0.958593I$ $a=\ \ 1.96499-0.06488I$ $b=-0.495656+0.383507I$	$-0.63720+3.37626I$	0
$u=\ \ 0.906499+0.467616I$ $a=\ \ 0.101936+0.117894I$ $b=-0.828780-1.041650I$	$3.89808-7.70135I$	0
$u=\ \ 0.906499-0.467616I$ $a=\ \ 0.101936-0.117894I$ $b=-0.828780+1.041650I$	$3.89808+7.70135I$	0
$u=-0.920973+0.441679I$ $a=-0.0746547-0.0361478I$ $b=-0.96410+1.31177I$	$2.7171+16.3636I$	0
$u=-0.920973-0.441679I$ $a=-0.0746547+0.0361478I$ $b=-0.96410-1.31177I$	$2.7171-16.3636I$	0
$u=-0.431563+0.876562I$ $a=-3.20089-1.16991I$ $b=\ \ 1.047510-0.091862I$	$-1.94953-1.79271I$	0
$u=-0.431563-0.876562I$ $a=-3.20089+1.16991I$ $b=\ \ 1.047510+0.091862I$	$-1.94953+1.79271I$	0
$u=\ \ 0.305606+0.978245I$ $a=\ \ 0.709704-0.806685I$ $b=\ \ 0.47503+1.33783I$	$-3.90365-0.86232I$	0
$u=\ \ 0.305606-0.978245I$ $a=\ \ 0.709704+0.806685I$ $b=\ \ 0.47503-1.33783I$	$-3.90365+0.86232I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.537969 + 0.876020I$ $a = -0.111044 + 0.845335I$ $b = -0.65330 - 1.46273I$	$2.58623 + 5.57819I$	0
$u = 0.537969 - 0.876020I$ $a = -0.111044 - 0.845335I$ $b = -0.65330 + 1.46273I$	$2.58623 - 5.57819I$	0
$u = -0.422248 + 0.941029I$ $a = -1.93427 + 1.91849I$ $b = 1.76946 - 0.47172I$	$-3.11518 - 2.10460I$	0
$u = -0.422248 - 0.941029I$ $a = -1.93427 - 1.91849I$ $b = 1.76946 + 0.47172I$	$-3.11518 + 2.10460I$	0
$u = -0.893300 + 0.373250I$ $a = 0.011105 - 0.233458I$ $b = -0.711696 + 0.565707I$	$-1.58574 - 1.28213I$	0
$u = -0.893300 - 0.373250I$ $a = 0.011105 + 0.233458I$ $b = -0.711696 - 0.565707I$	$-1.58574 + 1.28213I$	0
$u = 0.556619 + 0.778290I$ $a = 1.77329 + 0.45235I$ $b = -0.919267 + 0.824154I$	$2.85872 - 1.14050I$	0
$u = 0.556619 - 0.778290I$ $a = 1.77329 - 0.45235I$ $b = -0.919267 - 0.824154I$	$2.85872 + 1.14050I$	0
$u = -0.411300 + 0.958728I$ $a = 1.80933 - 0.17952I$ $b = -0.626405 + 0.192231I$	$-0.77663 - 1.40567I$	0
$u = -0.411300 - 0.958728I$ $a = 1.80933 + 0.17952I$ $b = -0.626405 - 0.192231I$	$-0.77663 + 1.40567I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.983569+0.364070I$ $a=-0.046607+0.360362I$ $b=\ \ 0.231381+1.128630I$	$3.79233-3.30850I$	0
$u=-0.983569-0.364070I$ $a=-0.046607-0.360362I$ $b=\ \ 0.231381-1.128630I$	$3.79233+3.30850I$	0
$u=-0.886079+0.344808I$ $a=\ \ 0.470930-0.154860I$ $b=\ \ 0.446455-1.075400I$	$2.73039+1.60695I$	0
$u=-0.886079-0.344808I$ $a=\ \ 0.470930+0.154860I$ $b=\ \ 0.446455+1.075400I$	$2.73039-1.60695I$	0
$u=-0.466913+0.940277I$ $a=\ \ 1.21517-2.20137I$ $b=-0.173587-0.385206I$	$-0.57533-4.06001I$	0
$u=-0.466913-0.940277I$ $a=\ \ 1.21517+2.20137I$ $b=-0.173587+0.385206I$	$-0.57533+4.06001I$	0
$u=\ \ 0.958053+0.449658I$ $a=-0.023508-0.151872I$ $b=-0.626957-0.900466I$	$-0.71270-7.36796I$	0
$u=\ \ 0.958053-0.449658I$ $a=-0.023508+0.151872I$ $b=-0.626957+0.900466I$	$-0.71270+7.36796I$	0
$u=-0.406179+0.979879I$ $a=\ \ 2.35358-0.71926I$ $b=-1.48565-1.72258I$	$-1.86285+5.34880I$	0
$u=-0.406179-0.979879I$ $a=\ \ 2.35358+0.71926I$ $b=-1.48565+1.72258I$	$-1.86285-5.34880I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.805923 + 0.479818I$ $a = 0.307147 - 0.417499I$ $b = 1.127230 + 0.779722I$	$-0.26681 - 3.66956I$	0
$u = 0.805923 - 0.479818I$ $a = 0.307147 + 0.417499I$ $b = 1.127230 - 0.779722I$	$-0.26681 + 3.66956I$	0
$u = -0.862030 + 0.620910I$ $a = 0.201824 + 0.168437I$ $b = 0.325227 + 0.897320I$	$2.36379 - 3.56400I$	0
$u = -0.862030 - 0.620910I$ $a = 0.201824 - 0.168437I$ $b = 0.325227 - 0.897320I$	$2.36379 + 3.56400I$	0
$u = -0.441797 + 0.819339I$ $a = -2.82579 + 2.77992I$ $b = 0.164809 + 0.206861I$	$-0.141326 + 0.358780I$	0
$u = -0.441797 - 0.819339I$ $a = -2.82579 - 2.77992I$ $b = 0.164809 - 0.206861I$	$-0.141326 - 0.358780I$	0
$u = 0.741317 + 0.555681I$ $a = -0.031113 + 0.315867I$ $b = -1.07054 - 1.05471I$	$4.54088 - 3.50808I$	0
$u = 0.741317 - 0.555681I$ $a = -0.031113 - 0.315867I$ $b = -1.07054 + 1.05471I$	$4.54088 + 3.50808I$	0
$u = -0.734527 + 0.561318I$ $a = 0.214258 + 0.141961I$ $b = -0.56296 + 1.31436I$	$6.19282 - 1.66253I$	0
$u = -0.734527 - 0.561318I$ $a = 0.214258 - 0.141961I$ $b = -0.56296 - 1.31436I$	$6.19282 + 1.66253I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.823184 + 0.701392I$ $a = 0.053553 + 0.289955I$ $b = -0.352719 - 0.865316I$	$5.86500 + 2.45959I$	0
$u = 0.823184 - 0.701392I$ $a = 0.053553 - 0.289955I$ $b = -0.352719 + 0.865316I$	$5.86500 - 2.45959I$	0
$u = -0.521954 + 0.947828I$ $a = -1.246820 + 0.290780I$ $b = 0.887857 - 0.626038I$	$-0.05482 - 5.31474I$	0
$u = -0.521954 - 0.947828I$ $a = -1.246820 - 0.290780I$ $b = 0.887857 + 0.626038I$	$-0.05482 + 5.31474I$	0
$u = -0.503314 + 0.959727I$ $a = -1.79453 + 1.63764I$ $b = 1.11591 + 0.98830I$	$-2.56601 - 3.16523I$	0
$u = -0.503314 - 0.959727I$ $a = -1.79453 - 1.63764I$ $b = 1.11591 - 0.98830I$	$-2.56601 + 3.16523I$	0
$u = -0.485065 + 0.971258I$ $a = 1.32781 - 2.48948I$ $b = -2.74821 + 0.98691I$	$-1.41588 - 11.01190I$	0
$u = -0.485065 - 0.971258I$ $a = 1.32781 + 2.48948I$ $b = -2.74821 - 0.98691I$	$-1.41588 + 11.01190I$	0
$u = 0.434775 + 1.010520I$ $a = -1.85506 - 1.36011I$ $b = 1.75251 - 0.02324I$	$-4.68518 + 3.13593I$	0
$u = 0.434775 - 1.010520I$ $a = -1.85506 + 1.36011I$ $b = 1.75251 + 0.02324I$	$-4.68518 - 3.13593I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.415822 + 1.018930I$ $a = -1.93159 - 1.31248I$ $b = 1.38704 - 0.51304I$	$-4.79017 + 3.14126I$	0
$u = 0.415822 - 1.018930I$ $a = -1.93159 + 1.31248I$ $b = 1.38704 + 0.51304I$	$-4.79017 - 3.14126I$	0
$u = 0.423192 + 1.015920I$ $a = -2.12142 - 1.35009I$ $b = 1.70253 - 0.53185I$	$-4.77778 + 3.15386I$	0
$u = 0.423192 - 1.015920I$ $a = -2.12142 + 1.35009I$ $b = 1.70253 + 0.53185I$	$-4.77778 - 3.15386I$	0
$u = -0.260888 + 0.855576I$ $a = -0.773211 + 0.415961I$ $b = 1.406140 - 0.139772I$	$-2.53837 - 0.97499I$	0
$u = -0.260888 - 0.855576I$ $a = -0.773211 - 0.415961I$ $b = 1.406140 + 0.139772I$	$-2.53837 + 0.97499I$	0
$u = -0.542487 + 0.976455I$ $a = 0.30086 + 1.51916I$ $b = 0.424114 + 0.176577I$	$-0.81455 - 3.00785I$	0
$u = -0.542487 - 0.976455I$ $a = 0.30086 - 1.51916I$ $b = 0.424114 - 0.176577I$	$-0.81455 + 3.00785I$	0
$u = -0.487914 + 0.730416I$ $a = -2.17224 + 0.47808I$ $b = 0.990990 + 0.178428I$	$0.669244 + 1.152030I$	0
$u = -0.487914 - 0.730416I$ $a = -2.17224 - 0.47808I$ $b = 0.990990 - 0.178428I$	$0.669244 - 1.152030I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.923016+0.646148I$ $a=\ \ 0.136904+0.205086I$ $b=\ \ 0.153111-0.770509I$	$4.72505-2.91321I$	0
$u=-0.923016-0.646148I$ $a=\ \ 0.136904-0.205086I$ $b=\ \ 0.153111+0.770509I$	$4.72505+2.91321I$	0
$u=-0.796443+0.356823I$ $a=-0.005199+0.163950I$ $b=\ \ 0.90109-1.30615I$	$1.42028+7.04993I$	0
$u=-0.796443-0.356823I$ $a=-0.005199-0.163950I$ $b=\ \ 0.90109+1.30615I$	$1.42028-7.04993I$	0
$u=\ \ 0.924891+0.644676I$ $a=-0.1097850-0.0352637I$ $b=-0.294044+0.801988I$	$3.89547+11.56980I$	0
$u=\ \ 0.924891-0.644676I$ $a=-0.1097850+0.0352637I$ $b=-0.294044-0.801988I$	$3.89547-11.56980I$	0
$u=\ \ 0.057312+0.870519I$ $a=\ \ 1.04558-1.73347I$ $b=-0.118973+0.902428I$	$1.05722-2.05158I$	0
$u=\ \ 0.057312-0.870519I$ $a=\ \ 1.04558+1.73347I$ $b=-0.118973-0.902428I$	$1.05722+2.05158I$	0
$u=-0.674692+0.903559I$ $a=-1.00028+1.10608I$ $b=\ \ 0.367671+0.503893I$	$1.19429-3.59060I$	0
$u=-0.674692-0.903559I$ $a=-1.00028-1.10608I$ $b=\ \ 0.367671-0.503893I$	$1.19429+3.59060I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.804536+0.322574I$ $a=\ 0.135217+0.205693I$ $b=-0.220763-0.793241I$	$3.40696-0.80923I$	0
$u=-0.804536-0.322574I$ $a=\ 0.135217-0.205693I$ $b=-0.220763+0.793241I$	$3.40696+0.80923I$	0
$u=\ 0.525133+1.006770I$ $a=\ 1.04682+1.85118I$ $b=-0.715632+0.566799I$	$-1.39769+12.47630I$	0
$u=\ 0.525133-1.006770I$ $a=\ 1.04682-1.85118I$ $b=-0.715632-0.566799I$	$-1.39769-12.47630I$	0
$u=\ 0.417633+1.056530I$ $a=\ 1.49719-0.42341I$ $b=-0.854092+0.134448I$	$-3.48428+8.69076I$	0
$u=\ 0.417633-1.056530I$ $a=\ 1.49719+0.42341I$ $b=-0.854092-0.134448I$	$-3.48428-8.69076I$	0
$u=\ 0.343386+1.088440I$ $a=\ 0.037886+0.895707I$ $b=\ 0.0921589+0.0919298I$	$-3.84714-1.57370I$	0
$u=\ 0.343386-1.088440I$ $a=\ 0.037886-0.895707I$ $b=\ 0.0921589-0.0919298I$	$-3.84714+1.57370I$	0
$u=\ 0.794000+0.325718I$ $a=\ 0.069205+0.166172I$ $b=-0.079267+1.372600I$	$5.04218-4.27750I$	0
$u=\ 0.794000-0.325718I$ $a=\ 0.069205-0.166172I$ $b=-0.079267-1.372600I$	$5.04218+4.27750I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.630149+0.954458I$ $a=\ \ 2.21806-0.77637I$ $b=-1.80653-1.75384I$	$1.69762-11.17610I$	0
$u=-0.630149-0.954458I$ $a=\ \ 2.21806+0.77637I$ $b=-1.80653+1.75384I$	$1.69762+11.17610I$	0
$u=\ \ 0.520570+1.018970I$ $a=-1.52923-0.32871I$ $b=\ \ 0.55745-1.37316I$	$-2.19559+6.56113I$	0
$u=\ \ 0.520570-1.018970I$ $a=-1.52923+0.32871I$ $b=\ \ 0.55745+1.37316I$	$-2.19559-6.56113I$	0
$u=-0.386388+0.759787I$ $a=\ \ 2.02560-2.50655I$ $b=-2.61638+0.03151I$	$-0.55822+7.29975I$	0
$u=-0.386388-0.759787I$ $a=\ \ 2.02560+2.50655I$ $b=-2.61638-0.03151I$	$-0.55822-7.29975I$	0
$u=\ \ 0.512050+1.028330I$ $a=-0.576325+0.909729I$ $b=-0.66471-1.52323I$	$-2.58145+7.06251I$	0
$u=\ \ 0.512050-1.028330I$ $a=-0.576325-0.909729I$ $b=-0.66471+1.52323I$	$-2.58145-7.06251I$	0
$u=-0.829220+0.800791I$ $a=\ \ 0.148807-0.345117I$ $b=\ \ 0.173926-0.625226I$	$1.54651-2.00645I$	0
$u=-0.829220-0.800791I$ $a=\ \ 0.148807+0.345117I$ $b=\ \ 0.173926+0.625226I$	$1.54651+2.00645I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.436063+0.721472I$ $a=\ 1.27869-0.63159I$ $b=\ 0.713246-0.616805I$	$-1.73705-0.80024I$	0
$u=-0.436063-0.721472I$ $a=\ 1.27869+0.63159I$ $b=\ 0.713246+0.616805I$	$-1.73705+0.80024I$	0
$u=-0.137761+1.166250I$ $a=-0.074661+0.661174I$ $b=\ 0.703547-0.410938I$	$-2.38525-1.32724I$	0
$u=-0.137761-1.166250I$ $a=-0.074661-0.661174I$ $b=\ 0.703547+0.410938I$	$-2.38525+1.32724I$	0
$u=\ 0.784809+0.879548I$ $a=\ 0.524077+0.775988I$ $b=-1.127730-0.238149I$	$5.56302+2.94937I$	0
$u=\ 0.784809-0.879548I$ $a=\ 0.524077-0.775988I$ $b=-1.127730+0.238149I$	$5.56302-2.94937I$	0
$u=\ 0.693900+0.955614I$ $a=\ 1.294850+0.370001I$ $b=-0.823741+0.742873I$	$5.08668+3.19136I$	0
$u=\ 0.693900-0.955614I$ $a=\ 1.294850-0.370001I$ $b=-0.823741-0.742873I$	$5.08668-3.19136I$	0
$u=-0.318039+1.143680I$ $a=-1.28923-0.79711I$ $b=\ 0.31701+1.44744I$	$-1.16292-7.09256I$	0
$u=-0.318039-1.143680I$ $a=-1.28923+0.79711I$ $b=\ 0.31701-1.44744I$	$-1.16292+7.09256I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.256634 + 1.164410I$ $a = -0.96899 - 1.12098I$ $b = 1.058520 + 0.657314I$	$-4.54872 + 0.01030I$	0
$u = 0.256634 - 1.164410I$ $a = -0.96899 + 1.12098I$ $b = 1.058520 - 0.657314I$	$-4.54872 - 0.01030I$	0
$u = -0.550218 + 0.585023I$ $a = 0.921568 - 0.626729I$ $b = 0.283106 + 0.177093I$	$0.32153 - 1.40895I$	0
$u = -0.550218 - 0.585023I$ $a = 0.921568 + 0.626729I$ $b = 0.283106 - 0.177093I$	$0.32153 + 1.40895I$	0
$u = 0.083314 + 1.194530I$ $a = -1.42378 - 0.53190I$ $b = 1.291400 + 0.006219I$	$-5.85326 - 1.50971I$	0
$u = 0.083314 - 1.194530I$ $a = -1.42378 + 0.53190I$ $b = 1.291400 - 0.006219I$	$-5.85326 + 1.50971I$	0
$u = 0.698007 + 0.387439I$ $a = 0.384063 + 0.244982I$ $b = 0.720667 + 1.030830I$	$-0.20401 - 2.67270I$	0
$u = 0.698007 - 0.387439I$ $a = 0.384063 - 0.244982I$ $b = 0.720667 - 1.030830I$	$-0.20401 + 2.67270I$	0
$u = 0.445520 + 1.117170I$ $a = 1.23218 - 0.92084I$ $b = -0.215051 + 1.234230I$	$1.13547 - 1.21422I$	0
$u = 0.445520 - 1.117170I$ $a = 1.23218 + 0.92084I$ $b = -0.215051 - 1.234230I$	$1.13547 + 1.21422I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.625262+1.030810I$ $a=\ \ 2.19062-0.26406I$ $b=-0.755652-1.190170I$	$4.79313-3.52888I$	0
$u=-0.625262-1.030810I$ $a=\ \ 2.19062+0.26406I$ $b=-0.755652+1.190170I$	$4.79313+3.52888I$	0
$u=\ \ 0.537730+0.584218I$ $a=-0.293474+0.248432I$ $b=\ \ 0.076367-1.331240I$	$2.79083+5.05823I$	0
$u=\ \ 0.537730-0.584218I$ $a=-0.293474-0.248432I$ $b=\ \ 0.076367+1.331240I$	$2.79083-5.05823I$	0
$u=\ \ 0.650724+1.016010I$ $a=\ \ 1.327610+0.383494I$ $b=-0.692990+0.255714I$	$3.06793+7.18467I$	0
$u=\ \ 0.650724-1.016010I$ $a=\ \ 1.327610-0.383494I$ $b=-0.692990-0.255714I$	$3.06793-7.18467I$	0
$u=\ \ 0.625558+1.036840I$ $a=\ \ 2.03974+0.78662I$ $b=-1.44214+1.01916I$	$3.10318+8.71889I$	0
$u=\ \ 0.625558-1.036840I$ $a=\ \ 2.03974-0.78662I$ $b=-1.44214-1.01916I$	$3.10318-8.71889I$	0
$u=\ \ 0.659155+1.025050I$ $a=-1.99175-0.39065I$ $b=\ \ 0.527997-0.973074I$	$4.28238+12.49640I$	0
$u=\ \ 0.659155-1.025050I$ $a=-1.99175+0.39065I$ $b=\ \ 0.527997+0.973074I$	$4.28238-12.49640I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.706226+0.997746I$ $a=\ \ 1.060530+0.125892I$ $b=\ \ 0.081925-0.597376I$	$1.22389-2.23491I$	0
$u=-0.706226-0.997746I$ $a=\ \ 1.060530-0.125892I$ $b=\ \ 0.081925+0.597376I$	$1.22389+2.23491I$	0
$u=-0.216266+1.206430I$ $a=-0.72421+1.57219I$ $b=\ \ 0.932110-0.790788I$	$-3.51808+4.12145I$	0
$u=-0.216266-1.206430I$ $a=-0.72421-1.57219I$ $b=\ \ 0.932110+0.790788I$	$-3.51808-4.12145I$	0
$u=-0.012784+0.771712I$ $a=\ \ 2.23970+1.20106I$ $b=-0.745935+0.078524I$	$-0.54236-3.14286I$	0
$u=-0.012784-0.771712I$ $a=\ \ 2.23970-1.20106I$ $b=-0.745935-0.078524I$	$-0.54236+3.14286I$	0
$u=-0.883538+0.867345I$ $a=-0.206471+0.582579I$ $b=\ \ 0.785560-0.315087I$	$4.54421-3.25446I$	0
$u=-0.883538-0.867345I$ $a=-0.206471-0.582579I$ $b=\ \ 0.785560+0.315087I$	$4.54421+3.25446I$	0
$u=-0.733172+0.998534I$ $a=-0.963131+0.210142I$ $b=\ \ 0.642444+0.836886I$	$3.67110-3.11861I$	0
$u=-0.733172-0.998534I$ $a=-0.963131-0.210142I$ $b=\ \ 0.642444-0.836886I$	$3.67110+3.11861I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.583223 + 1.099760I$ $a = -1.81178 - 0.36119I$ $b = 1.00089 - 1.22938I$	$-2.26178 + 7.63337I$	0
$u = 0.583223 - 1.099760I$ $a = -1.81178 + 0.36119I$ $b = 1.00089 + 1.22938I$	$-2.26178 - 7.63337I$	0
$u = 0.059787 + 1.255370I$ $a = -1.05212 - 1.18311I$ $b = 1.017260 + 0.937600I$	$-4.73606 - 5.18184I$	0
$u = 0.059787 - 1.255370I$ $a = -1.05212 + 1.18311I$ $b = 1.017260 - 0.937600I$	$-4.73606 + 5.18184I$	0
$u = 0.008393 + 1.269630I$ $a = 1.004850 + 0.758200I$ $b = -0.741797 - 0.491677I$	$-2.51291 - 5.18471I$	0
$u = 0.008393 - 1.269630I$ $a = 1.004850 - 0.758200I$ $b = -0.741797 + 0.491677I$	$-2.51291 + 5.18471I$	0
$u = 0.645624 + 1.094790I$ $a = -1.62077 - 0.73726I$ $b = 1.52102 - 0.89081I$	$-2.08947 + 9.13030I$	0
$u = 0.645624 - 1.094790I$ $a = -1.62077 + 0.73726I$ $b = 1.52102 + 0.89081I$	$-2.08947 - 9.13030I$	0
$u = -0.597284 + 1.128720I$ $a = -2.20682 + 0.12838I$ $b = 1.18882 + 1.36813I$	$-0.84738 - 12.27200I$	0
$u = -0.597284 - 1.128720I$ $a = -2.20682 - 0.12838I$ $b = 1.18882 - 1.36813I$	$-0.84738 + 12.27200I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.055204+1.294340I$ $a=\ \ 1.03117-1.10598I$ $b=-1.005430+0.824625I$	$-3.58503+13.52800I$	0
$u=-0.055204-1.294340I$ $a=\ \ 1.03117+1.10598I$ $b=-1.005430-0.824625I$	$-3.58503-13.52800I$	0
$u=\ \ 0.806605+1.021390I$ $a=-0.678744+0.205679I$ $b=-0.051685-0.463776I$	$2.77067-5.30062I$	0
$u=\ \ 0.806605-1.021390I$ $a=-0.678744-0.205679I$ $b=-0.051685+0.463776I$	$2.77067+5.30062I$	0
$u=\ \ 0.585772+1.165230I$ $a=-1.35331+0.68134I$ $b=\ \ 0.161784-1.362500I$	$2.53926+9.47832I$	0
$u=\ \ 0.585772-1.165230I$ $a=-1.35331-0.68134I$ $b=\ \ 0.161784+1.362500I$	$2.53926-9.47832I$	0
$u=\ \ 0.651564+1.130940I$ $a=-2.07170-0.30235I$ $b=\ \ 1.09816-1.53007I$	$-0.73705+13.48130I$	0
$u=\ \ 0.651564-1.130940I$ $a=-2.07170+0.30235I$ $b=\ \ 1.09816+1.53007I$	$-0.73705-13.48130I$	0
$u=-0.630285+1.144050I$ $a=\ \ 1.37032-0.39750I$ $b=-1.032370-0.690671I$	$-3.89188-4.28988I$	0
$u=-0.630285-1.144050I$ $a=\ \ 1.37032+0.39750I$ $b=-1.032370+0.690671I$	$-3.89188+4.28988I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.665947 + 1.128320I$ $a = 1.79122 + 0.36732I$ $b = -1.06427 + 1.07628I$	$1.88557 + 13.48000I$	0
$u = 0.665947 - 1.128320I$ $a = 1.79122 - 0.36732I$ $b = -1.06427 - 1.07628I$	$1.88557 - 13.48000I$	0
$u = 0.155374 + 0.667658I$ $a = 1.72707 + 0.87289I$ $b = 0.005242 + 0.628193I$	$-0.49619 - 2.61762I$	0
$u = 0.155374 - 0.667658I$ $a = 1.72707 - 0.87289I$ $b = 0.005242 - 0.628193I$	$-0.49619 + 2.61762I$	0
$u = -0.056197 + 1.319680I$ $a = 0.936016 - 0.035361I$ $b = -0.826256 - 0.174596I$	$-7.61862 - 4.45098I$	0
$u = -0.056197 - 1.319680I$ $a = 0.936016 + 0.035361I$ $b = -0.826256 + 0.174596I$	$-7.61862 + 4.45098I$	0
$u = -0.661615 + 1.144150I$ $a = 2.00164 - 0.31982I$ $b = -1.17102 - 1.41359I$	$0.5754 - 22.1632I$	0
$u = -0.661615 - 1.144150I$ $a = 2.00164 + 0.31982I$ $b = -1.17102 + 1.41359I$	$0.5754 + 22.1632I$	0
$u = 0.410426 + 0.539249I$ $a = -1.25274 - 1.88700I$ $b = -0.656287 - 0.083444I$	$-0.01031 - 8.32990I$	0
$u = 0.410426 - 0.539249I$ $a = -1.25274 + 1.88700I$ $b = -0.656287 + 0.083444I$	$-0.01031 + 8.32990I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.603230+1.182640I$ $a=-0.692427-0.342444I$ $b=\ \ 0.262153+0.672899I$	$0.83365-4.48697I$	0
$u=-0.603230-1.182640I$ $a=-0.692427+0.342444I$ $b=\ \ 0.262153-0.672899I$	$0.83365+4.48697I$	0
$u=\ \ 0.668118+0.009197I$ $a=-0.010699-1.207680I$ $b=-0.315842+0.532684I$	$-0.54782+5.10871I$	0
$u=\ \ 0.668118-0.009197I$ $a=-0.010699+1.207680I$ $b=-0.315842-0.532684I$	$-0.54782-5.10871I$	0
$u=\ \ 0.675246+1.150220I$ $a=\ \ 1.43463+0.39598I$ $b=-0.828906+1.027480I$	$-2.86346+13.30770I$	0
$u=\ \ 0.675246-1.150220I$ $a=\ \ 1.43463-0.39598I$ $b=-0.828906-1.027480I$	$-2.86346-13.30770I$	0
$u=-0.651840+1.164750I$ $a=-1.70441+0.03640I$ $b=\ \ 0.93139+1.24040I$	$1.48457-12.57520I$	0
$u=-0.651840-1.164750I$ $a=-1.70441-0.03640I$ $b=\ \ 0.93139-1.24040I$	$1.48457+12.57520I$	0
$u=-0.135964+1.328820I$ $a=-0.463449+0.973630I$ $b=\ \ 0.621666-0.650342I$	$-2.21957+3.46316I$	0
$u=-0.135964-1.328820I$ $a=-0.463449-0.973630I$ $b=\ \ 0.621666+0.650342I$	$-2.21957-3.46316I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.709066+1.136930I$ $a=\ \ 0.898264+0.099612I$ $b=-0.032707-0.908894I$	$1.51380-2.83608I$	0
$u=-0.709066-1.136930I$ $a=\ \ 0.898264-0.099612I$ $b=-0.032707+0.908894I$	$1.51380+2.83608I$	0
$u=-0.649042+1.185650I$ $a=-1.189130+0.055392I$ $b=\ \ 0.69123+1.23622I$	$0.19854-7.27606I$	0
$u=-0.649042-1.185650I$ $a=-1.189130-0.055392I$ $b=\ \ 0.69123-1.23622I$	$0.19854+7.27606I$	0
$u=-0.383006+0.521106I$ $a=\ \ 0.907321-0.323375I$ $b=\ \ 0.058074+0.407514I$	$0.20395-1.41512I$	0
$u=-0.383006-0.521106I$ $a=\ \ 0.907321+0.323375I$ $b=\ \ 0.058074-0.407514I$	$0.20395+1.41512I$	0
$u=\ \ 0.444286+0.320256I$ $a=\ \ 1.04567+1.82059I$ $b=-0.431831+0.824303I$	$-0.81186-2.97891I$	0
$u=\ \ 0.444286-0.320256I$ $a=\ \ 1.04567-1.82059I$ $b=-0.431831-0.824303I$	$-0.81186+2.97891I$	0
$u=\ \ 0.425107+0.292017I$ $a=\ \ 0.79888+1.29759I$ $b=\ \ 0.466737+0.756005I$	$-0.51288-2.47453I$	0
$u=\ \ 0.425107-0.292017I$ $a=\ \ 0.79888-1.29759I$ $b=\ \ 0.466737-0.756005I$	$-0.51288+2.47453I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.03760+1.57845I$ $a=\ \ 0.197854+0.093618I$ $b=-0.268935-0.232589I$	$-7.88338-4.32397I$	0
$u=-0.03760-1.57845I$ $a=\ \ 0.197854-0.093618I$ $b=-0.268935+0.232589I$	$-7.88338+4.32397I$	0
$u=-0.365213+0.094430I$ $a=\ \ 1.99637-0.66640I$ $b=-0.532655+0.015515I$	$1.18839-1.52097I$	$3.85783+5.70423I$
$u=-0.365213-0.094430I$ $a=\ \ 1.99637+0.66640I$ $b=-0.532655-0.015515I$	$1.18839+1.52097I$	$3.85783-5.70423I$
$u=\ \ 0.365248+0.009709I$ $a=\ \ 0.888124+0.718246I$ $b=\ \ 1.189460+0.071244I$	$-2.50442-0.01365I$	$-8.46272-0.33799I$
$u=\ \ 0.365248-0.009709I$ $a=\ \ 0.888124-0.718246I$ $b=\ \ 1.189460-0.071244I$	$-2.50442+0.01365I$	$-8.46272+0.33799I$
$u=\ \ 0.364761$ $a=\ \ 0.626219$ $b=\ \ 1.25973$	-2.51567	-10.9340
$u=-0.139955+0.273184I$ $a=-3.95214-1.93483I$ $b=-1.058350+0.402350I$	$-0.20550-8.26599I$	$-0.18612+7.30559I$
$u=-0.139955-0.273184I$ $a=-3.95214+1.93483I$ $b=-1.058350-0.402350I$	$-0.20550+8.26599I$	$-0.18612-7.30559I$

II. $I_2^u = \langle -5.62\times 10^{24}u^{44} - 2.14\times 10^{24}u^{43} + \cdots + 1.91\times 10^{24}b - 4.18\times 10^{24},\ 1.39\times 10^{25}u^{44} - 7.73\times 10^{23}u^{43} + \cdots + 1.91\times 10^{24}a - 1.68\times 10^{25},\ u^{45} + 13u^{43} + \cdots + 3u + 1\rangle$

(i) Arc colorings

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

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

$$a_6 = \begin{pmatrix} 1 \\ u^2 \end{pmatrix}$$

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

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

$$a_{10} = \begin{pmatrix} -7.25091u^{44} + 0.404228u^{43} + \cdots + 21.2648u + 8.78400 \\ 2.94152u^{44} + 1.12101u^{43} + \cdots + 10.1558u + 2.18812 \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} -7.06517u^{44} + 0.996751u^{43} + \cdots + 23.8424u + 8.91852 \\ 1.66861u^{44} + 0.397112u^{43} + \cdots + 12.5877u + 3.09658 \end{pmatrix}$$

$$a_5 = \begin{pmatrix} 8.38704u^{44} - 9.65342u^{43} + \cdots - 50.4739u - 15.3123 \\ -5.03033u^{44} + 2.96729u^{43} + \cdots + 7.11747u + 2.70491 \end{pmatrix}$$

$$a_9 = \begin{pmatrix} -4.30938u^{44} + 1.52524u^{43} + \cdots + 31.4206u + 10.9721 \\ 2.94152u^{44} + 1.12101u^{43} + \cdots + 10.1558u + 2.18812 \end{pmatrix}$$

$$a_4 = \begin{pmatrix} 5.91708u^{44} - 1.28881u^{43} + \cdots - 32.6205u - 10.9348 \\ 0.650179u^{44} + 0.740233u^{43} + \cdots + 1.11248u - 1.41561 \end{pmatrix}$$

$$a_8 = \begin{pmatrix} -1.85215u^{44} + 3.47338u^{43} + \cdots + 43.5599u + 11.5958 \\ -2.87445u^{44} + 1.84880u^{43} + \cdots + 6.58377u + 0.174312 \end{pmatrix}$$

$$a_{12} = \begin{pmatrix} -11.5134u^{44} - 8.41274u^{43} + \cdots - 13.0063u + 1.28858 \\ 3.70276u^{44} + 0.579805u^{43} + \cdots + 1.77966u + 0.175320 \end{pmatrix}$$

(ii) Obstruction class $= 1$

(iii) Cusp Shapes $= \frac{14708159629313054536142769 7}{191126524951782452736854 3}u^{44} - \frac{11724917414386156126035075}{191126524951782452736854 3}u^{43} + \cdots - \frac{5125959583348420784819048 37}{191126524951782452736854 3}u - \frac{161222640603836113608231864}{191126524951782452736854 3}$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{45} - 26u^{44} + \cdots + 11u + 1$
c_2	$u^{45} + 13u^{43} + \cdots + 3u - 1$
c_3	$u^{45} - 4u^{44} + \cdots - 8u - 1$
c_4	$u^{45} - u^{44} + \cdots + 6u - 1$
c_5	$u^{45} - 2u^{44} + \cdots - 3u - 1$
c_6	$u^{45} + 13u^{43} + \cdots + 3u + 1$
c_7	$u^{45} - 4u^{44} + \cdots - 27u - 1$
c_8	$u^{45} - 19u^{44} + \cdots - 8u - 1$
c_9	$u^{45} + 10u^{44} + \cdots + 3u + 1$
c_{10}	$u^{45} + 10u^{44} + \cdots + 3u + 1$
c_{11}	$u^{45} - u^{44} + \cdots - 3u - 1$
c_{12}	$u^{45} - 4u^{44} + \cdots - 14u + 1$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{45} + 2y^{44} + \cdots + 887y - 1$
c_2, c_6	$y^{45} + 26y^{44} + \cdots + 11y - 1$
c_3	$y^{45} + 6y^{44} + \cdots - 72y - 1$
c_4	$y^{45} + 7y^{44} + \cdots - 14y - 1$
c_5	$y^{45} - 8y^{44} + \cdots - 83y - 1$
c_7	$y^{45} - 18y^{44} + \cdots + 155y - 1$
c_8	$y^{45} - 23y^{44} + \cdots + 52y - 1$
c_9	$y^{45} - 24y^{44} + \cdots - 19y - 1$
c_{10}	$y^{45} - 30y^{44} + \cdots + 11y - 1$
c_{11}	$y^{45} + 17y^{44} + \cdots + y - 1$
c_{12}	$y^{45} + 10y^{44} + \cdots - 64y - 1$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.384450+0.949585I$ $a=\ \ 0.430071-0.753616I$ $b=-1.54475+0.62895I$	$-1.32753-9.90696I$	$-1.70890+8.40893I$
$u=-0.384450-0.949585I$ $a=\ \ 0.430071+0.753616I$ $b=-1.54475-0.62895I$	$-1.32753+9.90696I$	$-1.70890-8.40893I$
$u=\ \ 0.849542+0.472396I$ $a=-0.170752-0.333583I$ $b=\ \ 0.144665-1.130420I$	$3.47276+3.37395I$	$0.67323-8.27407I$
$u=\ \ 0.849542-0.472396I$ $a=-0.170752+0.333583I$ $b=\ \ 0.144665+1.130420I$	$3.47276-3.37395I$	$0.67323+8.27407I$
$u=\ \ 0.422348+0.874663I$ $a=-2.86912+1.14826I$ $b=\ \ 1.035950+0.082025I$	$-1.95552+1.76802I$	$-6.0436+118.4125I$
$u=\ \ 0.422348-0.874663I$ $a=-2.86912-1.14826I$ $b=\ \ 1.035950-0.082025I$	$-1.95552-1.76802I$	$-6.0436-118.4125I$
$u=-0.869443+0.408005I$ $a=-0.0536302+0.0554893I$ $b=\ \ 0.717457-1.209660I$	$2.59602+6.79849I$	$2.81074-6.00607I$
$u=-0.869443-0.408005I$ $a=-0.0536302-0.0554893I$ $b=\ \ 0.717457+1.209660I$	$2.59602-6.79849I$	$2.81074+6.00607I$
$u=-0.740144+0.745979I$ $a=-0.314565-0.426332I$ $b=-0.996825+0.697298I$	$1.34744+5.73994I$	$0.-5.37434I$
$u=-0.740144-0.745979I$ $a=-0.314565+0.426332I$ $b=-0.996825-0.697298I$	$1.34744-5.73994I$	$0.+5.37434I$

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.432712 + 0.970154I$ $a = -1.25712 - 1.29032I$ $b = 0.167318 - 0.310728I$	$-0.64267 + 3.91663I$	$6.39880 + 2.89343I$
$u = 0.432712 - 0.970154I$ $a = -1.25712 + 1.29032I$ $b = 0.167318 + 0.310728I$	$-0.64267 - 3.91663I$	$6.39880 - 2.89343I$
$u = -0.380808 + 0.848898I$ $a = 2.67921 - 2.17488I$ $b = -2.01328 - 0.25313I$	$-0.97007 + 6.73190I$	$-3.34971 - 2.37226I$
$u = -0.380808 - 0.848898I$ $a = 2.67921 + 2.17488I$ $b = -2.01328 + 0.25313I$	$-0.97007 - 6.73190I$	$-3.34971 + 2.37226I$
$u = 0.431132 + 0.813101I$ $a = 2.57190 + 2.54617I$ $b = -0.162987 + 0.172499I$	$-0.156686 - 0.381983I$	$-58.4769 + 82.5568I$
$u = 0.431132 - 0.813101I$ $a = 2.57190 - 2.54617I$ $b = -0.162987 - 0.172499I$	$-0.156686 + 0.381983I$	$-58.4769 - 82.5568I$
$u = 0.168371 + 1.077620I$ $a = -1.61626 - 0.72937I$ $b = 1.144580 + 0.424584I$	$-4.47710 + 0.76877I$	$-6.95366 - 4.38678I$
$u = 0.168371 - 1.077620I$ $a = -1.61626 + 0.72937I$ $b = 1.144580 - 0.424584I$	$-4.47710 - 0.76877I$	$-6.95366 + 4.38678I$
$u = -0.441542 + 1.006750I$ $a = -2.39984 + 1.83309I$ $b = 2.14293 + 0.45282I$	$-4.01588 - 3.05230I$	$-3.30139 + 4.98312I$
$u = -0.441542 - 1.006750I$ $a = -2.39984 - 1.83309I$ $b = 2.14293 - 0.45282I$	$-4.01588 + 3.05230I$	$-3.30139 - 4.98312I$

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.017032 + 1.118730I$ $a = -0.105796 + 0.595647I$ $b = 0.653947 - 0.099886I$	$-2.30059 - 1.79597I$	$0. + 11.41036I$
$u = 0.017032 - 1.118730I$ $a = -0.105796 - 0.595647I$ $b = 0.653947 + 0.099886I$	$-2.30059 + 1.79597I$	$0. - 11.41036I$
$u = -0.627209 + 0.941611I$ $a = 1.47721 - 1.45062I$ $b = -1.61235 - 0.73616I$	$0.73757 - 10.93940I$	$0. + 10.46454I$
$u = -0.627209 - 0.941611I$ $a = 1.47721 + 1.45062I$ $b = -1.61235 + 0.73616I$	$0.73757 + 10.93940I$	$0. - 10.46454I$
$u = -0.824448 + 0.881646I$ $a = -0.468629 + 0.839886I$ $b = 1.228710 - 0.181895I$	$5.10085 - 3.06423I$	0
$u = -0.824448 - 0.881646I$ $a = -0.468629 - 0.839886I$ $b = 1.228710 + 0.181895I$	$5.10085 + 3.06423I$	0
$u = -0.164326 + 0.753741I$ $a = -0.099337 + 0.922002I$ $b = 1.35579 - 0.58358I$	$-2.63176 - 0.02746I$	$-3.99148 - 0.54345I$
$u = -0.164326 - 0.753741I$ $a = -0.099337 - 0.922002I$ $b = 1.35579 + 0.58358I$	$-2.63176 + 0.02746I$	$-3.99148 + 0.54345I$
$u = 0.915761 + 0.843238I$ $a = 0.175396 + 0.425861I$ $b = -0.512460 - 0.335998I$	$4.70194 + 3.33544I$	0
$u = 0.915761 - 0.843238I$ $a = 0.175396 - 0.425861I$ $b = -0.512460 + 0.335998I$	$4.70194 - 3.33544I$	0

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.153250+1.238860I$ $a=-0.71960+1.23111I$ $b=\ \ 0.754245-0.682047I$	$-3.00583+3.93689I$	0
$u=-0.153250-1.238860I$ $a=-0.71960-1.23111I$ $b=\ \ 0.754245+0.682047I$	$-3.00583-3.93689I$	0
$u=\ \ 0.561537+1.169860I$ $a=-1.380170+0.156294I$ $b=\ \ 0.71571-1.39844I$	$-0.22556+7.38195I$	0
$u=\ \ 0.561537-1.169860I$ $a=-1.380170-0.156294I$ $b=\ \ 0.71571+1.39844I$	$-0.22556-7.38195I$	0
$u=-0.635659+1.139880I$ $a=-1.90080+0.11731I$ $b=\ \ 0.96142+1.28951I$	$0.39604-12.36660I$	0
$u=-0.635659-1.139880I$ $a=-1.90080-0.11731I$ $b=\ \ 0.96142-1.28951I$	$0.39604+12.36660I$	0
$u=\ \ 0.772744+1.051810I$ $a=\ \ 0.826136+0.091097I$ $b=-0.025042+0.794343I$	$1.79042+2.67084I$	0
$u=\ \ 0.772744-1.051810I$ $a=\ \ 0.826136-0.091097I$ $b=-0.025042-0.794343I$	$1.79042-2.67084I$	0
$u=\ \ 0.346170+0.510786I$ $a=\ \ 2.04992-0.27951I$ $b=\ \ 0.14082+1.59693I$	$2.31672-3.26344I$	$3.80997+5.54330I$
$u=\ \ 0.346170-0.510786I$ $a=\ \ 2.04992+0.27951I$ $b=\ \ 0.14082-1.59693I$	$2.31672+3.26344I$	$3.80997-5.54330I$

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.344499 + 0.428602I$ $a = -2.39934 + 0.03478I$ $b = 0.174162 + 0.364793I$	$-0.06360 + 2.97633I$	$9.58570 - 8.09179I$
$u = 0.344499 - 0.428602I$ $a = -2.39934 - 0.03478I$ $b = 0.174162 - 0.364793I$	$-0.06360 - 2.97633I$	$9.58570 + 8.09179I$
$u = 0.05025 + 1.60337I$ $a = 0.064120 - 0.155044I$ $b = -0.172934 + 0.263327I$	$-7.82431 + 4.30557I$	0
$u = 0.05025 - 1.60337I$ $a = 0.064120 + 0.155044I$ $b = -0.172934 - 0.263327I$	$-7.82431 - 4.30557I$	0
$u = -0.181648$ $a = 2.96199$ $b = 1.40585$	-2.17460	12.7770

III. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1	$(u^{45}-26u^{44}+\cdots+11u+1)(u^{209}+95u^{208}+\cdots-21355u-961)$
c_2	$(u^{45}+13u^{43}+\cdots+3u-1)(u^{209}-u^{208}+\cdots+157u+31)$
c_3	$(u^{45}-4u^{44}+\cdots-8u-1)(u^{209}+u^{208}+\cdots+1.04191\times10^{7}u+304643)$
c_4	$(u^{45}-u^{44}+\cdots+6u-1)(u^{209}+6u^{208}+\cdots-116u+8)$
c_5	$(u^{45}-2u^{44}+\cdots-3u-1)(u^{209}-u^{208}+\cdots+2641791u+518269)$
c_6	$(u^{45}+13u^{43}+\cdots+3u+1)(u^{209}-u^{208}+\cdots+157u+31)$
c_7	$(u^{45}-4u^{44}+\cdots-27u-1)(u^{209}+3u^{208}+\cdots+41u+1)$
c_8	$(u^{45}-19u^{44}+\cdots-8u-1)(u^{209}+10u^{208}+\cdots-360u+13)$
c_9	$(u^{45}+10u^{44}+\cdots+3u+1)$ $\cdot(u^{209}+5u^{208}+\cdots+23494787u+2058527)$
c_{10}	$(u^{45}+10u^{44}+\cdots+3u+1)(u^{209}-5u^{208}+\cdots+23728u+1856)$
c_{11}	$(u^{45}-u^{44}+\cdots-3u-1)(u^{209}+4u^{208}+\cdots+71u-173)$
c_{12}	$(u^{45}-4u^{44}+\cdots-14u+1)(u^{209}+3u^{208}+\cdots+132u+1)$

IV. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1	$(y^{45}+2y^{44}+\cdots+887y-1)$ $\cdot(y^{209}+55y^{208}+\cdots+62744853y-923521)$
c_2, c_6	$(y^{45}+26y^{44}+\cdots+11y-1)(y^{209}+95y^{208}+\cdots-21355y-961)$
c_3	$(y^{45}+6y^{44}+\cdots-72y-1)$ $\cdot(y^{209}+47y^{208}+\cdots-7664051227998y-92807357449)$
c_4	$(y^{45}+7y^{44}+\cdots-14y-1)(y^{209}+28y^{208}+\cdots-2608y-64)$
c_5	$(y^{45}-8y^{44}+\cdots-83y-1)$ $\cdot(y^{209}+29y^{208}+\cdots-14754978917513y-268602756361)$
c_7	$(y^{45}-18y^{44}+\cdots+155y-1)(y^{209}-13y^{208}+\cdots+169y-1)$
c_8	$(y^{45}-23y^{44}+\cdots+52y-1)(y^{209}-14y^{208}+\cdots-67974y-169)$
c_9	$(y^{45}-24y^{44}+\cdots-19y-1)$ $\cdot(y^{209}+y^{208}+\cdots-123218028405125y-4237533409729)$
c_{10}	$(y^{45}-30y^{44}+\cdots+11y-1)$ $\cdot(y^{209}-37y^{208}+\cdots+94845696y-3444736)$
c_{11}	$(y^{45}+17y^{44}+\cdots+y-1)(y^{209}-2y^{208}+\cdots+2076543y-29929)$
c_{12}	$(y^{45}+10y^{44}+\cdots-64y-1)(y^{209}-41y^{208}+\cdots+5070y-1)$