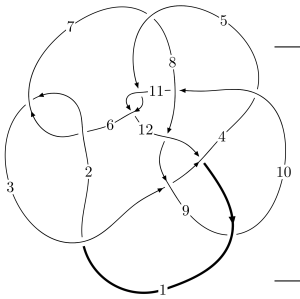
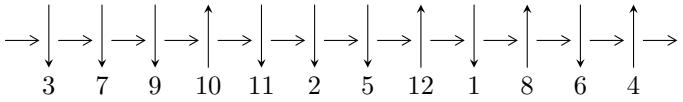
$12a_{0571}$ $(K12a_{0571})$



A knot diagram[1]

Linearized knot diagam



Solving Sequence

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

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

$$\begin{aligned}
I_1^u &= \langle 3.95686 \times 10^{684} u^{182} - 3.08751 \times 10^{684} u^{181} + \cdots + 4.57143 \times 10^{684} b - 1.11694 \times 10^{685}, \\
&\quad - 3.33768 \times 10^{683} u^{182} + 9.09273 \times 10^{683} u^{181} + \cdots + 4.57143 \times 10^{684} a + 1.34804 \times 10^{685}, \\
&\quad u^{183} - u^{182} + \cdots - 26u + 1 \rangle \\
I_2^u &= \langle -58996829294 u^{42} + 102880855500 u^{41} + \cdots + 11325634063 b - 92288392095, \\
&\quad - 198008949584 u^{42} + 286910003657 u^{41} + \cdots + 11325634063 a - 224634503866, \\
&\quad u^{43} - u^{42} + \cdots + u + 1 \rangle \\
I_3^u &= \langle b,\ a - 1,\ u + 1 \rangle
\end{aligned}$$

* 3 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 227 representations.

[1]The image of knot diagram is generated by the software "**Draw programme**" developed by Andrew Bartholomew(`http://www.layer8.co.uk/maths/draw/index.htm#Running-draw`), where we modified some parts for our purpose(`https://github.com/CATsTAILs/LinksPainter`).

[2]All coefficients of polynomials are rational numbers. But the coefficients are sometimes approximated in decimal forms when there is not enough margin.

I. $\boldsymbol{I_1^u = \langle 3.96 \times 10^{684} u^{182} - 3.09 \times 10^{684} u^{181} + \cdots + 4.57 \times 10^{684} b - 1.12 \times 10^{685},\ -3.34 \times 10^{683} u^{182} + 9.09 \times 10^{683} u^{181} + \cdots + 4.57 \times 10^{684} a + 1.35 \times 10^{685},\ u^{183} - u^{182} + \cdots - 26u + 1 \rangle}$

(i) Arc colorings

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

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

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

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

$$a_{11} = \begin{pmatrix} 0.0730118u^{182} - 0.198904u^{181} + \cdots + 90.5142u - 2.94884 \\ -0.865563u^{182} + 0.675393u^{181} + \cdots - 82.7947u + 2.44331 \end{pmatrix}$$

$$a_{12} = \begin{pmatrix} 0.938575u^{182} - 0.874297u^{181} + \cdots + 173.309u - 5.39215 \\ -0.865563u^{182} + 0.675393u^{181} + \cdots - 82.7947u + 2.44331 \end{pmatrix}$$

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

$$a_5 = \begin{pmatrix} 1.98433u^{182} - 1.70198u^{181} + \cdots + 256.368u - 7.59514 \\ -0.881093u^{182} + 0.671278u^{181} + \cdots - 69.2985u + 1.52425 \end{pmatrix}$$

$$a_8 = \begin{pmatrix} -1.97660u^{182} + 1.44326u^{181} + \cdots - 46.7057u - 5.66718 \\ -0.730808u^{182} + 0.708014u^{181} + \cdots - 163.139u + 9.24102 \end{pmatrix}$$

$$a_9 = \begin{pmatrix} -4.30363u^{182} + 3.58723u^{181} + \cdots - 503.736u + 16.0646 \\ -0.912461u^{182} + 0.810284u^{181} + \cdots - 164.734u + 10.5737 \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} -4.31508u^{182} + 3.59217u^{181} + \cdots - 504.738u + 16.1070 \\ -1.02164u^{182} + 0.890038u^{181} + \cdots - 177.623u + 11.2268 \end{pmatrix}$$

$$a_4 = \begin{pmatrix} -1.13902u^{182} + 0.855105u^{181} + \cdots - 104.038u - 2.14870 \\ 0.627441u^{182} - 0.503619u^{181} + \cdots + 38.3100u + 0.604035 \end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= -1.55871u^{182} + 1.98436u^{181} + \cdots - 601.882u + 26.8946$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{183} + 73u^{182} + \cdots + 140u + 1$
c_2, c_6	$u^{183} - u^{182} + \cdots - 26u + 1$
c_3	$u^{183} + 16u^{181} + \cdots + 13120u - 6587$
c_4	$u^{183} + 3u^{182} + \cdots + 23844880676u + 2117995963$
c_5, c_{11}	$u^{183} - 59u^{181} + \cdots + 49924u + 6638$
c_7	$u^{183} - 4u^{182} + \cdots - 79u + 1$
c_8	$u^{183} + u^{182} + \cdots - 49629456462u + 10428858667$
c_9	$u^{183} + 11u^{182} + \cdots - 25134u + 3142$
c_{10}	$u^{183} - 7u^{182} + \cdots - 7u - 1$
c_{12}	$u^{183} + 17u^{182} + \cdots + 3u + 1$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{183} + 71y^{182} + \cdots - 14140y - 1$
c_2, c_6	$y^{183} - 73y^{182} + \cdots + 140y - 1$
c_3	$y^{183} + 32y^{182} + \cdots - 197765172y - 43388569$
c_4	$y^{183} - 97y^{182} + \cdots + 5.30 \times 10^{20}y - 4.49 \times 10^{18}$
c_5, c_{11}	$y^{183} - 118y^{182} + \cdots + 4475548104y - 44063044$
c_7	$y^{183} + 4y^{182} + \cdots + 1331y - 1$
c_8	$y^{183} - 73y^{182} + \cdots + 3.70 \times 10^{21}y - 1.09 \times 10^{20}$
c_9	$y^{183} + 47y^{182} + \cdots + 8565230252y - 9872164$
c_{10}	$y^{183} - 17y^{182} + \cdots + 23y - 1$
c_{12}	$y^{183} - 49y^{182} + \cdots - 71y - 1$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.804086+0.597313I$ $a=-1.88182-1.85240I$ $b=-1.51604+0.72956I$	$0.78321+5.97914I$	0
$u=-0.804086-0.597313I$ $a=-1.88182+1.85240I$ $b=-1.51604-0.72956I$	$0.78321-5.97914I$	0
$u=-0.968465+0.204179I$ $a=\ \ 0.681431-0.690236I$ $b=\ \ 0.254549-1.090810I$	$-2.78855+0.17947I$	0
$u=-0.968465-0.204179I$ $a=\ \ 0.681431+0.690236I$ $b=\ \ 0.254549+1.090810I$	$-2.78855-0.17947I$	0
$u=\ \ 0.784543+0.583880I$ $a=-1.35379+1.73904I$ $b=-0.967185-0.955823I$	$-0.075537+0.190930I$	0
$u=\ \ 0.784543-0.583880I$ $a=-1.35379-1.73904I$ $b=-0.967185+0.955823I$	$-0.075537-0.190930I$	0
$u=\ \ 0.771537+0.677709I$ $a=-0.219574+0.755952I$ $b=-0.471848-0.886299I$	$4.28626+0.70719I$	0
$u=\ \ 0.771537-0.677709I$ $a=-0.219574-0.755952I$ $b=-0.471848+0.886299I$	$4.28626-0.70719I$	0
$u=-0.615624+0.744589I$ $a=\ \ 0.206463+0.385144I$ $b=-1.158630-0.701322I$	$-1.26582-6.65398I$	0
$u=-0.615624-0.744589I$ $a=\ \ 0.206463-0.385144I$ $b=-1.158630+0.701322I$	$-1.26582+6.65398I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.945595 + 0.185636I$ $a = -0.374523 - 0.991767I$ $b = 0.192487 + 0.021372I$	$-2.72218 - 3.83344I$	0
$u = 0.945595 - 0.185636I$ $a = -0.374523 + 0.991767I$ $b = 0.192487 - 0.021372I$	$-2.72218 + 3.83344I$	0
$u = 0.957428 + 0.082830I$ $a = 1.35226 - 1.44806I$ $b = 1.090440 + 0.388673I$	$-2.41546 - 5.59132I$	0
$u = 0.957428 - 0.082830I$ $a = 1.35226 + 1.44806I$ $b = 1.090440 - 0.388673I$	$-2.41546 + 5.59132I$	0
$u = 1.044680 + 0.083571I$ $a = 2.64047 - 0.64175I$ $b = 1.085590 - 0.408152I$	$-2.41862 + 5.61416I$	0
$u = 1.044680 - 0.083571I$ $a = 2.64047 + 0.64175I$ $b = 1.085590 + 0.408152I$	$-2.41862 - 5.61416I$	0
$u = -0.659362 + 0.686197I$ $a = -0.448274 + 0.614066I$ $b = -1.130220 - 0.617602I$	$2.20599 - 6.27476I$	0
$u = -0.659362 - 0.686197I$ $a = -0.448274 - 0.614066I$ $b = -1.130220 + 0.617602I$	$2.20599 + 6.27476I$	0
$u = 0.667868 + 0.659329I$ $a = -1.401060 - 0.059418I$ $b = -1.269760 + 0.374151I$	$-1.39366 + 5.27272I$	0
$u = 0.667868 - 0.659329I$ $a = -1.401060 + 0.059418I$ $b = -1.269760 - 0.374151I$	$-1.39366 - 5.27272I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.832572+0.659769I$ $a=-0.798710-0.102024I$ $b=-0.127155+1.264060I$	$5.11906+0.42514I$	0
$u=-0.832572-0.659769I$ $a=-0.798710+0.102024I$ $b=-0.127155-1.264060I$	$5.11906-0.42514I$	0
$u=-0.721508+0.781473I$ $a=\ \ 1.150080+0.773882I$ $b=-0.913552-0.200853I$	$3.37130-4.99253I$	0
$u=-0.721508-0.781473I$ $a=\ \ 1.150080-0.773882I$ $b=-0.913552+0.200853I$	$3.37130+4.99253I$	0
$u=-1.061230+0.074993I$ $a=\ \ 2.81778+1.07027I$ $b=\ \ 1.193020+0.134541I$	$-5.88372-4.47978I$	0
$u=-1.061230-0.074993I$ $a=\ \ 2.81778-1.07027I$ $b=\ \ 1.193020-0.134541I$	$-5.88372+4.47978I$	0
$u=\ \ 0.729768+0.580809I$ $a=-2.01374+3.77134I$ $b=-0.875001-0.160538I$	$3.59621+3.18555I$	0
$u=\ \ 0.729768-0.580809I$ $a=-2.01374-3.77134I$ $b=-0.875001+0.160538I$	$3.59621-3.18555I$	0
$u=\ \ 0.775056+0.741065I$ $a=\ \ 0.468878+0.589716I$ $b=-0.574447-0.328403I$	$4.07080-1.71524I$	0
$u=\ \ 0.775056-0.741065I$ $a=\ \ 0.468878-0.589716I$ $b=-0.574447+0.328403I$	$4.07080+1.71524I$	0

	Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=$	$0.855253+0.647139I$		
$a=$	$0.734078-0.607230I$	$2.37109-2.52576I$	0
$b=$	$0.095770+0.753563I$		
$u=$	$0.855253-0.647139I$		
$a=$	$0.734078+0.607230I$	$2.37109+2.52576I$	0
$b=$	$0.095770-0.753563I$		
$u=$	$-0.890607+0.602506I$		
$a=$	$0.257989+0.377581I$	$0.491769-1.227750I$	0
$b=$	$1.27916+0.78291I$		
$u=$	$-0.890607-0.602506I$		
$a=$	$0.257989-0.377581I$	$0.491769+1.227750I$	0
$b=$	$1.27916-0.78291I$		
$u=$	$-1.073610+0.089757I$		
$a=$	$2.26071+0.88250I$	$-3.01048-5.23037I$	0
$b=$	$1.275060+0.359848I$		
$u=$	$-1.073610-0.089757I$		
$a=$	$2.26071-0.88250I$	$-3.01048+5.23037I$	0
$b=$	$1.275060-0.359848I$		
$u=$	$-0.650827+0.646025I$		
$a=$	$-1.10330+1.14170I$	$3.12157-1.56300I$	0
$b=$	$-0.906991-0.382241I$		
$u=$	$-0.650827-0.646025I$		
$a=$	$-1.10330-1.14170I$	$3.12157+1.56300I$	0
$b=$	$-0.906991+0.382241I$		
$u=$	$-0.579718+0.707338I$		
$a=$	$0.440010-0.100121I$	$-1.07062-1.30229I$	0
$b=$	$1.171120+0.371476I$		
$u=$	$-0.579718-0.707338I$		
$a=$	$0.440010+0.100121I$	$-1.07062+1.30229I$	0
$b=$	$1.171120-0.371476I$		

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.627576+0.889503I$ $a=\ \ 0.613731+0.583837I$ $b=\ \ 0.201181-1.124280I$	$6.86968-8.72601I$	0
$u=-0.627576-0.889503I$ $a=\ \ 0.613731-0.583837I$ $b=\ \ 0.201181+1.124280I$	$6.86968+8.72601I$	0
$u=\ \ 1.089170+0.004309I$ $a=\ \ 2.29605-0.19777I$ $b=\ \ 1.34165-0.51669I$	$-6.71040+5.77636I$	0
$u=\ \ 1.089170-0.004309I$ $a=\ \ 2.29605+0.19777I$ $b=\ \ 1.34165+0.51669I$	$-6.71040-5.77636I$	0
$u=-0.845242+0.688470I$ $a=\ \ 0.272507-0.178473I$ $b=\ \ 0.868210+0.212625I$	$-0.668854+0.328108I$	0
$u=-0.845242-0.688470I$ $a=\ \ 0.272507+0.178473I$ $b=\ \ 0.868210-0.212625I$	$-0.668854-0.328108I$	0
$u=-0.871720+0.659803I$ $a=-1.149790+0.097355I$ $b=-0.079998+1.289210I$	$4.99782+4.69561I$	0
$u=-0.871720-0.659803I$ $a=-1.149790-0.097355I$ $b=-0.079998-1.289210I$	$4.99782-4.69561I$	0
$u=-0.904516+0.053439I$ $a=\ \ 0.640466+1.121410I$ $b=\ \ 0.389672+0.665385I$	$-0.28611+1.59809I$	0
$u=-0.904516-0.053439I$ $a=\ \ 0.640466-1.121410I$ $b=\ \ 0.389672-0.665385I$	$-0.28611-1.59809I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.622313 + 0.653580I$ $a = -0.305034 + 0.132693I$ $b = -1.28668 + 0.68962I$	$1.57573 + 6.31832I$	0
$u = 0.622313 - 0.653580I$ $a = -0.305034 - 0.132693I$ $b = -1.28668 - 0.68962I$	$1.57573 - 6.31832I$	0
$u = -0.836262 + 0.715392I$ $a = -0.881213 - 0.326547I$ $b = -0.610782 + 0.802006I$	$3.47032 + 6.94246I$	0
$u = -0.836262 - 0.715392I$ $a = -0.881213 + 0.326547I$ $b = -0.610782 - 0.802006I$	$3.47032 - 6.94246I$	0
$u = 0.581389 + 0.936165I$ $a = 0.646479 - 0.595519I$ $b = 0.167723 + 1.025120I$	$6.68101 + 0.05061I$	0
$u = 0.581389 - 0.936165I$ $a = 0.646479 + 0.595519I$ $b = 0.167723 - 1.025120I$	$6.68101 - 0.05061I$	0
$u = 0.931243 + 0.599868I$ $a = -0.682656 - 0.275411I$ $b = 0.808521 - 1.117020I$	$-0.56324 - 4.88976I$	0
$u = 0.931243 - 0.599868I$ $a = -0.682656 + 0.275411I$ $b = 0.808521 + 1.117020I$	$-0.56324 + 4.88976I$	0
$u = 1.107390 + 0.045773I$ $a = -2.49976 + 0.23421I$ $b = -1.259940 + 0.064021I$	$-6.26958 + 0.10015I$	0
$u = 1.107390 - 0.045773I$ $a = -2.49976 - 0.23421I$ $b = -1.259940 - 0.064021I$	$-6.26958 - 0.10015I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.774080 + 0.797223I$ $a = 0.897507 - 0.250365I$ $b = -0.588803 + 0.436380I$	$3.87932 - 2.29960I$	0
$u = 0.774080 - 0.797223I$ $a = 0.897507 + 0.250365I$ $b = -0.588803 - 0.436380I$	$3.87932 + 2.29960I$	0
$u = -0.684988 + 0.565576I$ $a = -1.217240 + 0.438700I$ $b = -0.768663 - 0.508050I$	$3.54233 + 2.09873I$	0
$u = -0.684988 - 0.565576I$ $a = -1.217240 - 0.438700I$ $b = -0.768663 + 0.508050I$	$3.54233 - 2.09873I$	0
$u = 0.786078 + 0.787473I$ $a = -0.078362 + 0.381478I$ $b = -0.854273 - 0.355693I$	$3.35990 - 5.71800I$	0
$u = 0.786078 - 0.787473I$ $a = -0.078362 - 0.381478I$ $b = -0.854273 + 0.355693I$	$3.35990 + 5.71800I$	0
$u = -0.690384 + 0.549588I$ $a = -2.12381 - 4.03693I$ $b = -0.894453 + 0.251188I$	$3.35823 + 5.37464I$	0
$u = -0.690384 - 0.549588I$ $a = -2.12381 + 4.03693I$ $b = -0.894453 - 0.251188I$	$3.35823 - 5.37464I$	0
$u = -0.859618 + 0.716217I$ $a = -0.089129 + 0.288175I$ $b = 0.370265 + 0.757502I$	$3.39992 - 1.47988I$	0
$u = -0.859618 - 0.716217I$ $a = -0.089129 - 0.288175I$ $b = 0.370265 - 0.757502I$	$3.39992 + 1.47988I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.075302+0.868974I$ $a=1.365680-0.359231I$ $b=0.050464+0.310642I$	$4.27203+4.69198I$	0
$u=-0.075302-0.868974I$ $a=1.365680+0.359231I$ $b=0.050464-0.310642I$	$4.27203-4.69198I$	0
$u=-0.727939+0.461758I$ $a=-1.50335-1.58092I$ $b=-1.130880-0.380737I$	$-0.72886+2.94415I$	0
$u=-0.727939-0.461758I$ $a=-1.50335+1.58092I$ $b=-1.130880+0.380737I$	$-0.72886-2.94415I$	0
$u=0.639216+0.570367I$ $a=-0.115708-0.172824I$ $b=-0.669171+0.759190I$	$3.35772-1.25907I$	0
$u=0.639216-0.570367I$ $a=-0.115708+0.172824I$ $b=-0.669171-0.759190I$	$3.35772+1.25907I$	0
$u=-1.146440+0.063129I$ $a=-0.308983+0.148588I$ $b=0.308825-0.627728I$	$-0.19824-1.63291I$	0
$u=-1.146440-0.063129I$ $a=-0.308983-0.148588I$ $b=0.308825+0.627728I$	$-0.19824+1.63291I$	0
$u=0.927993+0.676423I$ $a=-0.960077-0.279359I$ $b=0.363758-0.892240I$	$3.80950-5.94710I$	0
$u=0.927993-0.676423I$ $a=-0.960077+0.279359I$ $b=0.363758+0.892240I$	$3.80950+5.94710I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.686652 + 0.500534I$ $a = -0.95150 + 2.41807I$ $b = -1.81120 + 0.22305I$	$-0.08217 + 3.42918I$	0
$u = 0.686652 - 0.500534I$ $a = -0.95150 - 2.41807I$ $b = -1.81120 - 0.22305I$	$-0.08217 - 3.42918I$	0
$u = 0.975940 + 0.609702I$ $a = 0.207008 + 1.318360I$ $b = 0.789006 - 0.337870I$	$2.78038 - 7.93575I$	0
$u = 0.975940 - 0.609702I$ $a = 0.207008 - 1.318360I$ $b = 0.789006 + 0.337870I$	$2.78038 + 7.93575I$	0
$u = -0.823980 + 0.807894I$ $a = -0.661366 - 1.182780I$ $b = -1.074960 + 0.309302I$	$-0.68075 + 5.27880I$	0
$u = -0.823980 - 0.807894I$ $a = -0.661366 + 1.182780I$ $b = -1.074960 - 0.309302I$	$-0.68075 - 5.27880I$	0
$u = -1.139910 + 0.213951I$ $a = 1.91706 + 0.32380I$ $b = 1.66770 - 0.79542I$	$-3.55957 - 1.18556I$	0
$u = -1.139910 - 0.213951I$ $a = 1.91706 - 0.32380I$ $b = 1.66770 + 0.79542I$	$-3.55957 + 1.18556I$	0
$u = 1.013210 + 0.568393I$ $a = 1.62756 - 0.95953I$ $b = 0.830652 + 0.499639I$	$2.20875 - 3.36417I$	0
$u = 1.013210 - 0.568393I$ $a = 1.62756 + 0.95953I$ $b = 0.830652 - 0.499639I$	$2.20875 + 3.36417I$	0

	Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=$	$1.151840+0.154662I$		
$a=$	$0.010016+0.398685I$	$-0.26884-7.85265I$	0
$b=$	$0.209573+0.978495I$		
$u=$	$1.151840-0.154662I$		
$a=$	$0.010016-0.398685I$	$-0.26884+7.85265I$	0
$b=$	$0.209573-0.978495I$		
$u=$	$-1.009310+0.577692I$		
$a=$	$2.07833+0.93833I$	$2.49438+2.50944I$	0
$b=$	$0.890024-0.287554I$		
$u=$	$-1.009310-0.577692I$		
$a=$	$2.07833-0.93833I$	$2.49438-2.50944I$	0
$b=$	$0.890024+0.287554I$		
$u=$	$1.010010+0.582201I$		
$a=$	$1.26803-1.31464I$	$-1.22638-7.91000I$	0
$b=$	$1.97259-0.08099I$		
$u=$	$1.010010-0.582201I$		
$a=$	$1.26803+1.31464I$	$-1.22638+7.91000I$	0
$b=$	$1.97259+0.08099I$		
$u=$	$0.602125+1.010350I$		
$a=$	$0.436257+0.244031I$	$3.4487+14.8188I$	0
$b=$	$1.28843-0.60858I$		
$u=$	$0.602125-1.010350I$		
$a=$	$0.436257-0.244031I$	$3.4487-14.8188I$	0
$b=$	$1.28843+0.60858I$		
$u=$	1.18146		
$a=$	2.68363	-1.54825	0
$b=$	0.963202		
$u=$	$0.942284+0.716877I$		
$a=$	$-0.666318-0.369851I$	$3.56771-3.83933I$	0
$b=$	$0.520947-0.232184I$		

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.942284 - 0.716877I$ $a = -0.666318 + 0.369851I$ $b = 0.520947 + 0.232184I$	$3.56771 + 3.83933I$	0
$u = 0.994283 + 0.644562I$ $a = 2.27949 - 1.45447I$ $b = 1.334210 + 0.319655I$	$-2.38828 - 10.38320I$	0
$u = 0.994283 - 0.644562I$ $a = 2.27949 + 1.45447I$ $b = 1.334210 - 0.319655I$	$-2.38828 + 10.38320I$	0
$u = 0.474515 + 0.656195I$ $a = 0.406059 + 0.098625I$ $b = -1.079700 + 0.698453I$	$1.91142 + 2.58746I$	0
$u = 0.474515 - 0.656195I$ $a = 0.406059 - 0.098625I$ $b = -1.079700 - 0.698453I$	$1.91142 - 2.58746I$	0
$u = -1.008370 + 0.638657I$ $a = 2.12903 + 1.73560I$ $b = 1.018580 - 0.326923I$	$2.02276 + 6.62718I$	0
$u = -1.008370 - 0.638657I$ $a = 2.12903 - 1.73560I$ $b = 1.018580 + 0.326923I$	$2.02276 - 6.62718I$	0
$u = 1.009840 + 0.636828I$ $a = 1.95063 - 1.37133I$ $b = 1.41880 + 0.63898I$	$0.41909 - 11.39740I$	0
$u = 1.009840 - 0.636828I$ $a = 1.95063 + 1.37133I$ $b = 1.41880 - 0.63898I$	$0.41909 + 11.39740I$	0
$u = -1.000030 + 0.652330I$ $a = 1.95082 + 1.70847I$ $b = 1.201080 - 0.593735I$	$1.17604 + 11.47750I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-1.000030-0.652330I$ $a=\ \ 1.95082-1.70847I$ $b=\ \ 1.201080+0.593735I$	$1.17604-11.47750I$	0
$u=-1.029430+0.610628I$ $a=\ \ 0.177299-0.854499I$ $b=\ \ 0.886085+0.520489I$	$2.20342-0.69220I$	0
$u=-1.029430-0.610628I$ $a=\ \ 0.177299+0.854499I$ $b=\ \ 0.886085-0.520489I$	$2.20342+0.69220I$	0
$u=\ \ 1.152990+0.326753I$ $a=-2.31475+0.67023I$ $b=-1.308180-0.403673I$	$-7.65124-4.86256I$	0
$u=\ \ 1.152990-0.326753I$ $a=-2.31475-0.67023I$ $b=-1.308180+0.403673I$	$-7.65124+4.86256I$	0
$u=\ \ 0.678139+0.412615I$ $a=\ \ 0.06485-1.54051I$ $b=-0.287578+0.138657I$	$1.68800-2.53652I$	0
$u=\ \ 0.678139-0.412615I$ $a=\ \ 0.06485+1.54051I$ $b=-0.287578-0.138657I$	$1.68800+2.53652I$	0
$u=\ \ 0.451630+1.120280I$ $a=\ \ 0.808467+0.128403I$ $b=\ \ 0.788966-0.329452I$	$4.96751+5.36441I$	0
$u=\ \ 0.451630-1.120280I$ $a=\ \ 0.808467-0.128403I$ $b=\ \ 0.788966+0.329452I$	$4.96751-5.36441I$	0
$u=\ \ 0.958960+0.737063I$ $a=\ \ 0.001012-0.791515I$ $b=\ \ 0.451592+0.495719I$	$3.31100-3.47789I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.958960 - 0.737063I$ $a = 0.001012 + 0.791515I$ $b = 0.451592 - 0.495719I$	$3.31100 + 3.47789I$	0
$u = -1.027550 + 0.650918I$ $a = -1.64691 - 1.47643I$ $b = -1.320130 + 0.382087I$	$-2.37351 + 6.55222I$	0
$u = -1.027550 - 0.650918I$ $a = -1.64691 + 1.47643I$ $b = -1.320130 - 0.382087I$	$-2.37351 - 6.55222I$	0
$u = 0.724913 + 0.977792I$ $a = -0.487917 - 0.307792I$ $b = -0.856062 + 0.007898I$	$0.93457 - 4.23267I$	0
$u = 0.724913 - 0.977792I$ $a = -0.487917 + 0.307792I$ $b = -0.856062 - 0.007898I$	$0.93457 + 4.23267I$	0
$u = -0.987883 + 0.715023I$ $a = -0.29672 + 1.92682I$ $b = 0.895427 - 0.263517I$	$2.55809 + 10.65380I$	0
$u = -0.987883 - 0.715023I$ $a = -0.29672 - 1.92682I$ $b = 0.895427 + 0.263517I$	$2.55809 - 10.65380I$	0
$u = -1.156980 + 0.391399I$ $a = -1.69844 - 0.96971I$ $b = -1.223180 - 0.156221I$	$-7.25441 + 3.06984I$	0
$u = -1.156980 - 0.391399I$ $a = -1.69844 + 0.96971I$ $b = -1.223180 + 0.156221I$	$-7.25441 - 3.06984I$	0
$u = 0.945774 + 0.773344I$ $a = 0.019925 - 0.699707I$ $b = 0.821639 - 0.199132I$	$2.89248 - 0.14439I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.945774 - 0.773344I$ $a = 0.019925 + 0.699707I$ $b = 0.821639 + 0.199132I$	$2.89248 + 0.14439I$	0
$u = -1.026270 + 0.668797I$ $a = 1.51971 + 1.52275I$ $b = 1.25354 - 0.76172I$	$-2.48909 + 12.05940I$	0
$u = -1.026270 - 0.668797I$ $a = 1.51971 - 1.52275I$ $b = 1.25354 + 0.76172I$	$-2.48909 - 12.05940I$	0
$u = -0.774246$ $a = 0.387812$ $b = 0.533669$	-1.12460	0
$u = -0.061535 + 0.770664I$ $a = 0.482902 + 0.202147I$ $b = 1.159890 - 0.320033I$	$-3.87589 + 1.10816I$	0
$u = -0.061535 - 0.770664I$ $a = 0.482902 - 0.202147I$ $b = 1.159890 + 0.320033I$	$-3.87589 - 1.10816I$	0
$u = 1.056670 + 0.626358I$ $a = 1.59362 - 1.11314I$ $b = 1.38531 + 0.77992I$	$0.28250 - 7.65382I$	0
$u = 1.056670 - 0.626358I$ $a = 1.59362 + 1.11314I$ $b = 1.38531 - 0.77992I$	$0.28250 + 7.65382I$	0
$u = -0.718495 + 0.999023I$ $a = 0.583288 + 0.432455I$ $b = 0.740289 - 0.388543I$	$5.05636 - 2.06416I$	0
$u = -0.718495 - 0.999023I$ $a = 0.583288 - 0.432455I$ $b = 0.740289 + 0.388543I$	$5.05636 + 2.06416I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-1.101840+0.618661I$ $a=\ 1.155310+0.703711I$ $b=\ 1.308720+0.109977I$	$-2.31671+1.03980I$	0
$u=-1.101840-0.618661I$ $a=\ 1.155310-0.703711I$ $b=\ 1.308720-0.109977I$	$-2.31671-1.03980I$	0
$u=-0.567882+1.138330I$ $a=\ 0.464957-0.226214I$ $b=\ 1.271600+0.553031I$	$3.22536-5.65535I$	0
$u=-0.567882-1.138330I$ $a=\ 0.464957+0.226214I$ $b=\ 1.271600-0.553031I$	$3.22536+5.65535I$	0
$u=-0.890872+0.922827I$ $a=-0.824566-0.991480I$ $b=-1.102060+0.260318I$	$-0.65137+5.29406I$	0
$u=-0.890872-0.922827I$ $a=-0.824566+0.991480I$ $b=-1.102060-0.260318I$	$-0.65137-5.29406I$	0
$u=-1.066560+0.724803I$ $a=\ 0.779754-0.127469I$ $b=-0.159945-1.245650I$	$5.5148+14.7014I$	0
$u=-1.066560-0.724803I$ $a=\ 0.779754+0.127469I$ $b=-0.159945+1.245650I$	$5.5148-14.7014I$	0
$u=\ 1.094810+0.683544I$ $a=\ 1.24038-1.41328I$ $b=\ 0.929503+0.148461I$	$-0.64896-2.02587I$	0
$u=\ 1.094810-0.683544I$ $a=\ 1.24038+1.41328I$ $b=\ 0.929503-0.148461I$	$-0.64896+2.02587I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-1.29607$ $a=\ \ 1.66723$ $b=\ \ 1.43415$	-3.28486	0
$u=-1.049840+0.795112I$ $a=-0.254218-0.214298I$ $b=-0.541359-0.415729I$	$3.98360+8.56154I$	0
$u=-1.049840-0.795112I$ $a=-0.254218+0.214298I$ $b=-0.541359+0.415729I$	$3.98360-8.56154I$	0
$u=\ \ 1.105210+0.737439I$ $a=\ \ 0.647621+0.045276I$ $b=-0.128943+1.208340I$	$5.07166-6.19256I$	0
$u=\ \ 1.105210-0.737439I$ $a=\ \ 0.647621-0.045276I$ $b=-0.128943-1.208340I$	$5.07166+6.19256I$	0
$u=-0.604599+0.250642I$ $a=\ \ 0.644588+0.211384I$ $b=\ \ 0.817836-0.129222I$	$-1.259980+0.149484I$	0
$u=-0.604599-0.250642I$ $a=\ \ 0.644588-0.211384I$ $b=\ \ 0.817836+0.129222I$	$-1.259980-0.149484I$	0
$u=\ \ 1.126000+0.757651I$ $a=-1.61331+1.32110I$ $b=-1.34030-0.63840I$	$1.7933-21.2356I$	0
$u=\ \ 1.126000-0.757651I$ $a=-1.61331-1.32110I$ $b=-1.34030+0.63840I$	$1.7933+21.2356I$	0
$u=-1.361780+0.223856I$ $a=-1.93804-0.21787I$ $b=-1.318710+0.435351I$	$-4.93300+12.66270I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-1.361780-0.223856I$ $a=-1.93804+0.21787I$ $b=-1.318710-0.435351I$	$-4.93300-12.66270I$	0
$u=0.238913+1.374860I$ $a=0.566919-0.233375I$ $b=1.165150+0.319347I$	$1.17300-7.49088I$	0
$u=0.238913-1.374860I$ $a=0.566919+0.233375I$ $b=1.165150-0.319347I$	$1.17300+7.49088I$	0
$u=-1.164170+0.792697I$ $a=-1.50375-1.23961I$ $b=-1.32265+0.61317I$	$1.34112+12.49530I$	0
$u=-1.164170-0.792697I$ $a=-1.50375+1.23961I$ $b=-1.32265-0.61317I$	$1.34112-12.49530I$	0
$u=1.193730+0.756530I$ $a=-1.48142+0.81141I$ $b=-0.976705-0.382751I$	$2.70277-12.00940I$	0
$u=1.193730-0.756530I$ $a=-1.48142-0.81141I$ $b=-0.976705+0.382751I$	$2.70277+12.00940I$	0
$u=0.086498+0.530594I$ $a=1.93928+0.64244I$ $b=-1.321440-0.082297I$	$0.26773+3.86278I$	$-6.74413-2.57295I$
$u=0.086498-0.530594I$ $a=1.93928-0.64244I$ $b=-1.321440+0.082297I$	$0.26773-3.86278I$	$-6.74413+2.57295I$
$u=1.55238+0.20933I$ $a=-1.47493+0.24262I$ $b=-1.147340+0.211201I$	$-4.69493+0.59225I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 1.55238 - 0.20933I$ $a = -1.47493 - 0.24262I$ $b = -1.147340 - 0.211201I$	$-4.69493 - 0.59225I$	0
$u = 0.017857 + 0.388441I$ $a = 1.387040 + 0.196354I$ $b = -0.228211 - 0.528489I$	$-0.14403 + 1.80274I$	$-1.56449 - 3.52200I$
$u = 0.017857 - 0.388441I$ $a = 1.387040 - 0.196354I$ $b = -0.228211 + 0.528489I$	$-0.14403 - 1.80274I$	$-1.56449 + 3.52200I$
$u = 0.376641 + 0.013225I$ $a = 1.62685 - 1.65575I$ $b = -0.641836 - 0.556086I$	$1.90579 - 2.18432I$	$0.54507 + 4.60290I$
$u = 0.376641 - 0.013225I$ $a = 1.62685 + 1.65575I$ $b = -0.641836 + 0.556086I$	$1.90579 + 2.18432I$	$0.54507 - 4.60290I$
$u = -1.76996$ $a = -1.43688$ $b = -0.870610$	-3.12003	0
$u = -0.102990 + 0.168780I$ $a = 4.10234 + 1.25167I$ $b = -1.102290 + 0.413864I$	$-2.45392 + 5.61938I$	$-4.22238 - 7.36188I$
$u = -0.102990 - 0.168780I$ $a = 4.10234 - 1.25167I$ $b = -1.102290 - 0.413864I$	$-2.45392 - 5.61938I$	$-4.22238 + 7.36188I$
$u = 0.163447 + 0.035203I$ $a = 1.80523 - 0.22659I$ $b = -0.430116 - 0.711070I$	$2.67064 + 1.18964I$	$-2.53117 + 2.81460I$
$u = 0.163447 - 0.035203I$ $a = 1.80523 + 0.22659I$ $b = -0.430116 + 0.711070I$	$2.67064 - 1.18964I$	$-2.53117 - 2.81460I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.0821362 + 0.0591797I$ $a = 3.18202 + 1.14042I$ $b = -1.072260 + 0.597795I$	$0.79590 + 6.19968I$	$-13.0969 - 6.6181I$
$u = 0.0821362 - 0.0591797I$ $a = 3.18202 - 1.14042I$ $b = -1.072260 - 0.597795I$	$0.79590 - 6.19968I$	$-13.0969 + 6.6181I$
$u = 1.99860$ $a = -1.24617$ $b = -1.41036$	-5.42551	0

II.

$\boldsymbol{I_2^u = \langle -5.90\times10^{10}u^{42}+1.03\times10^{11}u^{41}+\cdots+1.13\times10^{10}b-9.23\times10^{10},\ -1.98\times10^{11}u^{42}+2.87\times10^{11}u^{41}+\cdots+1.13\times10^{10}a-2.25\times10^{11},\ u^{43}-u^{42}+\cdots+u+1\rangle}$

(i) Arc colorings

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

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

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

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

$$a_{11} = \begin{pmatrix} 17.4833u^{42} - 25.3328u^{41} + \cdots - 15.4109u + 19.8342 \\ 5.20914u^{42} - 9.08389u^{41} + \cdots - 1.50955u + 8.14863 \end{pmatrix}$$

$$a_{12} = \begin{pmatrix} 12.2741u^{42} - 16.2489u^{41} + \cdots - 13.9014u + 11.6855 \\ 5.20914u^{42} - 9.08389u^{41} + \cdots - 1.50955u + 8.14863 \end{pmatrix}$$

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

$$a_5 = \begin{pmatrix} -7.60086u^{42} + 14.9417u^{41} + \cdots - 2.42487u - 14.1116 \\ -5.24001u^{42} + 4.27286u^{41} + \cdots + 7.92517u - 4.03630 \end{pmatrix}$$

$$a_8 = \begin{pmatrix} 4.84118u^{42} - 13.2897u^{41} + \cdots + 3.15399u + 12.9360 \\ 8.22349u^{42} - 7.83110u^{41} + \cdots - 12.2461u + 1.07351 \end{pmatrix}$$

$$a_9 = \begin{pmatrix} 7.49761u^{42} - 15.2102u^{41} + \cdots - 3.56011u + 14.7565 \\ 10.2413u^{42} - 14.5955u^{41} + \cdots - 4.94828u + 8.90173 \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} 10.3626u^{42} - 20.7186u^{41} + \cdots - 2.00541u + 19.2742 \\ 9.71604u^{42} - 16.2519u^{41} + \cdots - 2.18273u + 12.8880 \end{pmatrix}$$

$$a_4 = \begin{pmatrix} -7.86332u^{42} + 10.5696u^{41} + \cdots + 3.42284u - 14.7404 \\ 0.596849u^{42} - 6.10319u^{41} + \cdots + 8.35468u + 7.79430 \end{pmatrix}$$

(ii) Obstruction class $= 1$

(iii) Cusp Shapes

$$= -\frac{117890973818}{11325634063}u^{42} + \frac{593240466599}{11325634063}u^{41} + \cdots - \frac{278122520224}{11325634063}u - \frac{949600266536}{11325634063}$$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{43} - 23u^{42} + \cdots + 13u - 1$
c_2	$u^{43} + u^{42} + \cdots + u - 1$
c_3	$u^{43} + 5u^{41} + \cdots - 5u - 1$
c_4	$u^{43} + u^{42} + \cdots + 7u - 1$
c_5	$u^{43} + u^{42} + \cdots + 83u^2 - 6$
c_6	$u^{43} - u^{42} + \cdots + u + 1$
c_7	$u^{43} + 6u^{42} + \cdots + 14u - 1$
c_8	$u^{43} - 5u^{42} + \cdots + 19u + 1$
c_9	$u^{43} - 4u^{42} + \cdots - 54u + 6$
c_{10}	$u^{43} - 11u^{42} + \cdots - 2u - 1$
c_{11}	$u^{43} - u^{42} + \cdots - 83u^2 + 6$
c_{12}	$u^{43} - 3u^{42} + \cdots - 8u - 1$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{43} - 11y^{42} + \cdots - 11y - 1$
c_2, c_6	$y^{43} - 23y^{42} + \cdots + 13y - 1$
c_3	$y^{43} + 10y^{42} + \cdots + 73y - 1$
c_4	$y^{43} - 31y^{42} + \cdots - 23y - 1$
c_5, c_{11}	$y^{43} - 37y^{42} + \cdots + 996y - 36$
c_7	$y^{43} + 6y^{42} + \cdots + 44y - 1$
c_8	$y^{43} - 19y^{42} + \cdots + 21y - 1$
c_9	$y^{43} + 20y^{42} + \cdots + 1176y - 36$
c_{10}	$y^{43} - 23y^{42} + \cdots - 4y - 1$
c_{12}	$y^{43} - 31y^{42} + \cdots + 30y - 1$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.593704+0.772143I$ $a=\ 0.05909-1.65495I$ $b=\ 0.797889+0.124251I$	$3.78678-4.28642I$	$0.87277+2.85849I$
$u=-0.593704-0.772143I$ $a=\ 0.05909+1.65495I$ $b=\ 0.797889-0.124251I$	$3.78678+4.28642I$	$0.87277-2.85849I$
$u=\ 0.786997+0.665602I$ $a=-0.322398+0.298474I$ $b=-0.238482-0.892056I$	$4.15090-0.08237I$	$1.04840+1.75387I$
$u=\ 0.786997-0.665602I$ $a=-0.322398-0.298474I$ $b=-0.238482+0.892056I$	$4.15090+0.08237I$	$1.04840-1.75387I$
$u=\ 0.945937+0.090678I$ $a=\ 2.84013-1.16301I$ $b=\ 1.237470-0.331297I$	$-4.19210+5.16579I$	$-11.11302-5.77828I$
$u=\ 0.945937-0.090678I$ $a=\ 2.84013+1.16301I$ $b=\ 1.237470+0.331297I$	$-4.19210-5.16579I$	$-11.11302+5.77828I$
$u=-0.935928+0.493953I$ $a=\ 2.17752+1.40150I$ $b=\ 0.917797-0.387230I$	$1.52579+4.00998I$	$-4.00000-8.03137I$
$u=-0.935928-0.493953I$ $a=\ 2.17752-1.40150I$ $b=\ 0.917797+0.387230I$	$1.52579-4.00998I$	$-4.00000+8.03137I$
$u=-0.939773+0.499011I$ $a=-0.073023+0.547692I$ $b=-0.802635-0.610792I$	$1.52089-0.04613I$	$-2.17015-1.56886I$
$u=-0.939773-0.499011I$ $a=-0.073023-0.547692I$ $b=-0.802635+0.610792I$	$1.52089+0.04613I$	$-2.17015+1.56886I$

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.587833+0.717675I$ $a=0.49817+1.73103I$ $b=1.309910-0.327155I$	$0.52375+5.04710I$	$-2.85683-6.13110I$
$u=-0.587833-0.717675I$ $a=0.49817-1.73103I$ $b=1.309910+0.327155I$	$0.52375-5.04710I$	$-2.85683+6.13110I$
$u=0.879713+0.691057I$ $a=0.136099-0.225063I$ $b=-0.486803-0.163267I$	$3.33633-4.57776I$	$0.+6.71220I$
$u=0.879713-0.691057I$ $a=0.136099+0.225063I$ $b=-0.486803+0.163267I$	$3.33633+4.57776I$	$0.-6.71220I$
$u=0.678810+0.543511I$ $a=0.93349-1.80077I$ $b=1.65060-0.39327I$	$0.24440+3.44569I$	$5.46029-6.46156I$
$u=0.678810-0.543511I$ $a=0.93349+1.80077I$ $b=1.65060+0.39327I$	$0.24440-3.44569I$	$5.46029+6.46156I$
$u=-1.126780+0.157029I$ $a=-1.86203-0.23615I$ $b=-1.46901+0.72495I$	$-3.49950-1.03555I$	$-2.8077-13.8904I$
$u=-1.126780-0.157029I$ $a=-1.86203+0.23615I$ $b=-1.46901-0.72495I$	$-3.49950+1.03555I$	$-2.8077+13.8904I$
$u=0.893449+0.704673I$ $a=0.197321-0.976881I$ $b=0.559152-0.089820I$	$3.29761-0.78228I$	$1.96085+1.47809I$
$u=0.893449-0.704673I$ $a=0.197321+0.976881I$ $b=0.559152+0.089820I$	$3.29761+0.78228I$	$1.96085-1.47809I$

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.313653 + 0.787485I$ $a = -0.550529 + 0.303905I$ $b = -1.038130 - 0.473348I$	$1.41456 - 6.33950I$	$0.41745 + 8.96807I$
$u = 0.313653 - 0.787485I$ $a = -0.550529 - 0.303905I$ $b = -1.038130 + 0.473348I$	$1.41456 + 6.33950I$	$0.41745 - 8.96807I$
$u = 0.930246 + 0.682309I$ $a = -0.822579 - 0.164924I$ $b = 0.098857 - 0.871878I$	$3.70614 - 5.13803I$	$0. + 4.55606I$
$u = 0.930246 - 0.682309I$ $a = -0.822579 + 0.164924I$ $b = 0.098857 + 0.871878I$	$3.70614 + 5.13803I$	$0. - 4.55606I$
$u = -0.583377 + 0.605798I$ $a = -0.319372 + 0.220817I$ $b = -1.176130 - 0.651951I$	$1.32646 - 5.72703I$	$-3.22085 - 1.02388I$
$u = -0.583377 - 0.605798I$ $a = -0.319372 - 0.220817I$ $b = -1.176130 + 0.651951I$	$1.32646 + 5.72703I$	$-3.22085 + 1.02388I$
$u = 1.013920 + 0.589783I$ $a = -1.60012 + 1.16308I$ $b = -1.80153 - 0.25787I$	$-0.88177 - 8.04919I$	$0. + 15.0415I$
$u = 1.013920 - 0.589783I$ $a = -1.60012 - 1.16308I$ $b = -1.80153 + 0.25787I$	$-0.88177 + 8.04919I$	$0. - 15.0415I$
$u = 0.802046 + 0.052722I$ $a = -0.455494 + 1.009480I$ $b = -1.042860 - 0.426223I$	$-3.56490 - 5.78777I$	$-13.3027 + 8.6088I$
$u = 0.802046 - 0.052722I$ $a = -0.455494 - 1.009480I$ $b = -1.042860 + 0.426223I$	$-3.56490 + 5.78777I$	$-13.3027 - 8.6088I$

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-1.029030+0.648834I$ $a=\ 1.89202+1.43001I$ $b=\ 1.32308-0.60763I$	$-0.03524+10.81540I$	$0.-6.53524I$
$u=-1.029030-0.648834I$ $a=\ 1.89202-1.43001I$ $b=\ 1.32308+0.60763I$	$-0.03524-10.81540I$	$0.+6.53524I$
$u=-1.033970+0.726497I$ $a=-0.38653-1.68969I$ $b=-0.828124+0.196197I$	$2.53070+10.01650I$	0
$u=-1.033970-0.726497I$ $a=-0.38653+1.68969I$ $b=-0.828124-0.196197I$	$2.53070-10.01650I$	0
$u=-0.587795+0.405890I$ $a=-0.766518+0.601073I$ $b=-0.594443-0.617518I$	$2.67480+1.95669I$	$-2.76871-5.11977I$
$u=-0.587795-0.405890I$ $a=-0.766518-0.601073I$ $b=-0.594443+0.617518I$	$2.67480-1.95669I$	$-2.76871+5.11977I$
$u=-0.659282+0.038879I$ $a=\ 0.36238+2.22186I$ $b=\ 0.623858+0.561916I$	$-1.46058+1.83864I$	$-11.79157-4.08279I$
$u=-0.659282-0.038879I$ $a=\ 0.36238-2.22186I$ $b=\ 0.623858-0.561916I$	$-1.46058-1.83864I$	$-11.79157+4.08279I$
$u=\ 0.269972+0.533438I$ $a=\ 2.90886+3.12500I$ $b=\ 0.777591+0.032790I$	$3.18729-4.54113I$	$-2.55007+3.28825I$
$u=\ 0.269972-0.533438I$ $a=\ 2.90886-3.12500I$ $b=\ 0.777591-0.032790I$	$3.18729+4.54113I$	$-2.55007-3.28825I$

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-1.61508$ $a=-1.36068$ $b=-1.13613$	-4.13305	0
$u=\ \ 1.72844$ $a=-1.57010$ $b=-0.922423$	-3.33947	0
$u=\ \ 2.01210$ $a=\ \ 1.23780$ $b=\ \ 1.42244$	-5.39317	0

III. $I_3^u = \langle b,\ a-1,\ u+1 \rangle$

(i) Arc colorings

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

(ii) Obstruction class $= 1$

(iii) Cusp Shapes $= 0$

(iv) u-Polynomials at the component

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

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_2, c_3 c_4, c_6, c_7 c_8, c_{10}, c_{12}	$y-1$
c_5, c_9, c_{11}	y

(vi) Complex Volumes and Cusp Shapes

Solutions to I_3^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = -1.00000$		
$a = \quad 1.00000$	0	0
$b = \quad 0$		

IV. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1	$(u-1)(u^{43}-23u^{42}+\cdots+13u-1)(u^{183}+73u^{182}+\cdots+140u+1)$
c_2	$(u-1)(u^{43}+u^{42}+\cdots+u-1)(u^{183}-u^{182}+\cdots-26u+1)$
c_3	$(u-1)(u^{43}+5u^{41}+\cdots-5u-1)(u^{183}+16u^{181}+\cdots+13120u-6587)$
c_4	$(u-1)(u^{43}+u^{42}+\cdots+7u-1)$ $\cdot(u^{183}+3u^{182}+\cdots+23844880676u+2117995963)$
c_5	$u(u^{43}+u^{42}+\cdots+83u^2-6)(u^{183}-59u^{181}+\cdots+49924u+6638)$
c_6	$(u+1)(u^{43}-u^{42}+\cdots+u+1)(u^{183}-u^{182}+\cdots-26u+1)$
c_7	$(u+1)(u^{43}+6u^{42}+\cdots+14u-1)(u^{183}-4u^{182}+\cdots-79u+1)$
c_8	$(u+1)(u^{43}-5u^{42}+\cdots+19u+1)$ $\cdot(u^{183}+u^{182}+\cdots-49629456462u+10428858667)$
c_9	$u(u^{43}-4u^{42}+\cdots-54u+6)(u^{183}+11u^{182}+\cdots-25134u+3142)$
c_{10}	$(u-1)(u^{43}-11u^{42}+\cdots-2u-1)(u^{183}-7u^{182}+\cdots-7u-1)$
c_{11}	$u(u^{43}-u^{42}+\cdots-83u^2+6)(u^{183}-59u^{181}+\cdots+49924u+6638)$
c_{12}	$(u-1)(u^{43}-3u^{42}+\cdots-8u-1)(u^{183}+17u^{182}+\cdots+3u+1)$

V. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1	$(y-1)(y^{43}-11y^{42}+\cdots-11y-1)(y^{183}+71y^{182}+\cdots-14140y-1)$
c_2, c_6	$(y-1)(y^{43}-23y^{42}+\cdots+13y-1)(y^{183}-73y^{182}+\cdots+140y-1)$
c_3	$(y-1)(y^{43}+10y^{42}+\cdots+73y-1)$ $\cdot(y^{183}+32y^{182}+\cdots-197765172y-43388569)$
c_4	$(y-1)(y^{43}-31y^{42}+\cdots-23y-1)$ $\cdot(y^{183}-97y^{182}+\cdots+5.30\times10^{20}y-4.49\times10^{18})$
c_5, c_{11}	$y(y^{43}-37y^{42}+\cdots+996y-36)$ $\cdot(y^{183}-118y^{182}+\cdots+4475548104y-44063044)$
c_7	$(y-1)(y^{43}+6y^{42}+\cdots+44y-1)(y^{183}+4y^{182}+\cdots+1331y-1)$
c_8	$(y-1)(y^{43}-19y^{42}+\cdots+21y-1)$ $\cdot(y^{183}-73y^{182}+\cdots+3.70\times10^{21}y-1.09\times10^{20})$
c_9	$y(y^{43}+20y^{42}+\cdots+1176y-36)$ $\cdot(y^{183}+47y^{182}+\cdots+8565230252y-9872164)$
c_{10}	$(y-1)(y^{43}-23y^{42}+\cdots-4y-1)(y^{183}-17y^{182}+\cdots+23y-1)$
c_{12}	$(y-1)(y^{43}-31y^{42}+\cdots+30y-1)(y^{183}-49y^{182}+\cdots-71y-1)$