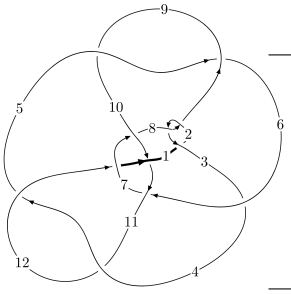
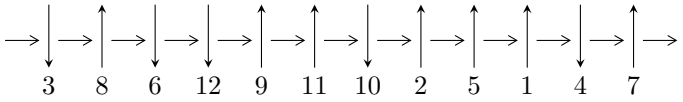
$12a_{0707}$ $(K12a_{0707})$



A knot diagram[1]

Linearized knot diagam



Solving Sequence

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

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

$$\begin{aligned}
I_1^u = \langle & 1.86827 \times 10^{582} u^{181} - 3.19856 \times 10^{582} u^{180} + \cdots + 4.55306 \times 10^{582} b - 5.56258 \times 10^{584}, \\
& 8.53302 \times 10^{584} u^{181} - 1.42871 \times 10^{585} u^{180} + \cdots + 2.94583 \times 10^{585} a - 7.55853 \times 10^{586}, \\
& u^{182} - 2u^{181} + \cdots - 3170u + 647 \rangle \\
I_2^u = \langle & 1.43964 \times 10^{20} u^{47} - 1.21238 \times 10^{20} u^{46} + \cdots + 6.08163 \times 10^{19} b - 2.83566 \times 10^{20}, \\
& - 1.37210 \times 10^{20} u^{47} - 1.58559 \times 10^{20} u^{46} + \cdots + 6.08163 \times 10^{19} a + 2.09575 \times 10^{18}, \ u^{48} + u^{47} + \cdots - 3u +
\end{aligned}$$

* 2 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 230 representations.

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

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

I. $\boldsymbol{I_1^u = \langle 1.87 \times 10^{582} u^{181} - 3.20 \times 10^{582} u^{180} + \cdots + 4.55 \times 10^{582} b - 5.56 \times 10^{584},\ 8.53 \times 10^{584} u^{181} - 1.43 \times 10^{585} u^{180} + \cdots + 2.95 \times 10^{585} a - 7.56 \times 10^{586},\ u^{182} - 2u^{181} + \cdots - 3170u + 647 \rangle}$

(i) Arc colorings

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

$$a_8 = \begin{pmatrix} 0 \\ u \end{pmatrix}$$

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

$$a_5 = \begin{pmatrix} -0.289665u^{181} + 0.484993u^{180} + \cdots - 329.497u + 25.6584 \\ -0.410334u^{181} + 0.702509u^{180} + \cdots - 786.078u + 122.172 \end{pmatrix}$$

$$a_9 = \begin{pmatrix} u \\ u \end{pmatrix}$$

$$a_6 = \begin{pmatrix} -0.205771u^{181} + 0.418521u^{180} + \cdots - 326.941u + 41.0715 \\ -0.326440u^{181} + 0.636037u^{180} + \cdots - 783.522u + 137.586 \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} -0.197935u^{181} + 0.138456u^{180} + \cdots + 70.3475u - 47.6382 \\ -0.147855u^{181} - 0.0420209u^{180} + \cdots + 536.279u - 159.236 \end{pmatrix}$$

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

$$a_{11} = \begin{pmatrix} -0.332327u^{181} + 0.333486u^{180} + \cdots - 87.4336u - 38.9923 \\ -0.298887u^{181} + 0.266562u^{180} + \cdots + 160.525u - 94.6823 \end{pmatrix}$$

$$a_7 = \begin{pmatrix} -0.0325621u^{181} - 0.0922697u^{180} + \cdots + 468.771u - 103.076 \\ -0.171974u^{181} + 0.0272787u^{180} + \cdots + 596.604u - 166.450 \end{pmatrix}$$

$$a_{12} = \begin{pmatrix} 0.205787u^{181} - 0.713579u^{180} + \cdots + 1510.06u - 324.131 \\ 0.164662u^{181} - 0.687047u^{180} + \cdots + 1411.00u - 302.943 \end{pmatrix}$$

$$a_4 = \begin{pmatrix} -0.472037u^{181} + 1.14659u^{180} + \cdots - 1749.16u + 331.262 \\ -0.405221u^{181} + 1.17867u^{180} + \cdots - 2092.49u + 429.490 \end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= 0.486313u^{181} - 0.0903998u^{180} + \cdots - 1349.49u + 429.270$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{182} + 88u^{181} + \cdots + 9154060u + 418609$
c_2, c_8	$u^{182} + 2u^{181} + \cdots + 3170u + 647$
c_3	$u^{182} - 9u^{181} + \cdots - 4473834946u + 318667011$
c_4, c_{11}	$u^{182} - 65u^{180} + \cdots + 17454u + 6196$
c_5, c_9	$u^{182} + 48u^{180} + \cdots + 935357u + 53761$
c_6	$u^{182} - 3u^{181} + \cdots + 4259486u + 3695609$
c_7	$u^{182} - 9u^{181} + \cdots - 7454u + 3031$
c_{10}	$u^{182} + 28u^{181} + \cdots + 9541u + 457$
c_{12}	$u^{182} + u^{181} + \cdots + 10u + 3$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{182} + 28y^{181} + \cdots + 3612930806400y + 175233494881$
c_2, c_8	$y^{182} + 88y^{181} + \cdots + 9154060y + 418609$
c_3	$y^{182} - 49y^{181} + \cdots + 2.91 \times 10^{18}y + 1.02 \times 10^{17}$
c_4, c_{11}	$y^{182} - 130y^{181} + \cdots - 1577213772y + 38390416$
c_5, c_9	$y^{182} + 96y^{181} + \cdots + 152047431545y + 2890245121$
c_6	$y^{182} + 27y^{181} + \cdots + 3313957547436004y + 13657525880881$
c_7	$y^{182} - 7y^{181} + \cdots + 874676032y + 9186961$
c_{10}	$y^{182} - 6y^{181} + \cdots + 15585591y + 208849$
c_{12}	$y^{182} + 25y^{181} + \cdots - 508y + 9$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.256529+0.965217I$ $a=1.212430-0.659498I$ $b=1.004440-0.357173I$	$-1.93206-2.87680I$	0
$u=-0.256529-0.965217I$ $a=1.212430+0.659498I$ $b=1.004440+0.357173I$	$-1.93206+2.87680I$	0
$u=0.321283+0.960383I$ $a=-1.72160-1.88464I$ $b=-1.42332-1.65390I$	$-4.04300+7.35745I$	0
$u=0.321283-0.960383I$ $a=-1.72160+1.88464I$ $b=-1.42332+1.65390I$	$-4.04300-7.35745I$	0
$u=-0.959093+0.342048I$ $a=-0.11658-1.83837I$ $b=-0.017897-0.543037I$	$0.04523+8.72598I$	0
$u=-0.959093-0.342048I$ $a=-0.11658+1.83837I$ $b=-0.017897+0.543037I$	$0.04523-8.72598I$	0
$u=0.970839+0.334543I$ $a=0.11427-1.61623I$ $b=0.214960-0.356312I$	$-5.85337-2.71377I$	0
$u=0.970839-0.334543I$ $a=0.11427+1.61623I$ $b=0.214960+0.356312I$	$-5.85337+2.71377I$	0
$u=0.319026+0.917578I$ $a=3.14081+0.70461I$ $b=3.91127+1.02720I$	$-3.90447-4.81068I$	0
$u=0.319026-0.917578I$ $a=3.14081-0.70461I$ $b=3.91127-1.02720I$	$-3.90447+4.81068I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.963066 + 0.370945I$ $a = -0.00320 - 1.87437I$ $b = -0.131414 - 0.487661I$	$-3.8848 - 15.0556I$	0
$u = 0.963066 - 0.370945I$ $a = -0.00320 + 1.87437I$ $b = -0.131414 + 0.487661I$	$-3.8848 + 15.0556I$	0
$u = -0.215480 + 1.011660I$ $a = -0.95136 - 1.10794I$ $b = -2.30367 - 0.96336I$	$-8.52535 - 5.59306I$	0
$u = -0.215480 - 1.011660I$ $a = -0.95136 + 1.10794I$ $b = -2.30367 + 0.96336I$	$-8.52535 + 5.59306I$	0
$u = 0.416754 + 0.947098I$ $a = -1.84060 - 0.40313I$ $b = -2.99579 - 0.35572I$	$-2.45544 + 6.04571I$	0
$u = 0.416754 - 0.947098I$ $a = -1.84060 + 0.40313I$ $b = -2.99579 + 0.35572I$	$-2.45544 - 6.04571I$	0
$u = -0.408551 + 0.952318I$ $a = 0.141264 + 0.895448I$ $b = 0.959008 - 0.391747I$	$-2.83544 - 2.47905I$	0
$u = -0.408551 - 0.952318I$ $a = 0.141264 - 0.895448I$ $b = 0.959008 + 0.391747I$	$-2.83544 + 2.47905I$	0
$u = 0.755664 + 0.592081I$ $a = 0.44078 + 2.25804I$ $b = 0.232245 + 1.140070I$	$-0.20565 - 5.15931I$	0
$u = 0.755664 - 0.592081I$ $a = 0.44078 - 2.25804I$ $b = 0.232245 - 1.140070I$	$-0.20565 + 5.15931I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.368804+0.974258I$ $a=-2.05082+1.21378I$ $b=-2.96000+1.39186I$	$-2.49284+0.44505I$	0
$u=-0.368804-0.974258I$ $a=-2.05082-1.21378I$ $b=-2.96000-1.39186I$	$-2.49284-0.44505I$	0
$u=-0.333309+0.990772I$ $a=-1.71075-1.18845I$ $b=-2.97767-0.52283I$	$-9.06733+3.65813I$	0
$u=-0.333309-0.990772I$ $a=-1.71075+1.18845I$ $b=-2.97767+0.52283I$	$-9.06733-3.65813I$	0
$u=0.138390+0.932899I$ $a=-0.436637-0.107081I$ $b=-2.07183-0.66879I$	$-8.37172-5.25239I$	0
$u=0.138390-0.932899I$ $a=-0.436637+0.107081I$ $b=-2.07183+0.66879I$	$-8.37172+5.25239I$	0
$u=-0.811952+0.684382I$ $a=0.152594+0.455598I$ $b=-0.629575+0.558511I$	$0.843620+0.857755I$	0
$u=-0.811952-0.684382I$ $a=0.152594-0.455598I$ $b=-0.629575-0.558511I$	$0.843620-0.857755I$	0
$u=0.658901+0.834756I$ $a=-0.114461+0.485796I$ $b=0.183497-0.212440I$	$3.93302+0.52408I$	0
$u=0.658901-0.834756I$ $a=-0.114461-0.485796I$ $b=0.183497+0.212440I$	$3.93302-0.52408I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.493093+0.962507I$ $a=-0.192912+0.349341I$ $b=-1.24572-1.46013I$	$-1.88389-2.60833I$	0
$u=-0.493093-0.962507I$ $a=-0.192912-0.349341I$ $b=-1.24572+1.46013I$	$-1.88389+2.60833I$	0
$u=\ \ 0.777088+0.489267I$ $a=-0.164620-1.363070I$ $b=-0.055748+0.181182I$	$-3.36835-6.51503I$	0
$u=\ \ 0.777088-0.489267I$ $a=-0.164620+1.363070I$ $b=-0.055748-0.181182I$	$-3.36835+6.51503I$	0
$u=-0.787498+0.461357I$ $a=-0.28773-1.49689I$ $b=-0.327748-0.486408I$	$2.73572-0.70337I$	0
$u=-0.787498-0.461357I$ $a=-0.28773+1.49689I$ $b=-0.327748+0.486408I$	$2.73572+0.70337I$	0
$u=\ \ 0.706324+0.828826I$ $a=-0.188825+0.116889I$ $b=-0.871915+0.357366I$	$3.96907+4.70193I$	0
$u=\ \ 0.706324-0.828826I$ $a=-0.188825-0.116889I$ $b=-0.871915-0.357366I$	$3.96907-4.70193I$	0
$u=\ \ 0.325079+1.041610I$ $a=\ \ 1.36015-0.95861I$ $b=\ \ 2.43676-0.48875I$	$-5.32911+0.68825I$	0
$u=\ \ 0.325079-1.041610I$ $a=\ \ 1.36015+0.95861I$ $b=\ \ 2.43676+0.48875I$	$-5.32911-0.68825I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.191530+1.084320I$ $a=-0.823473+0.326919I$ $b=-0.810574-0.652656I$	$-5.37510+6.53386I$	0
$u=-0.191530-1.084320I$ $a=-0.823473-0.326919I$ $b=-0.810574+0.652656I$	$-5.37510-6.53386I$	0
$u=0.719448+0.530043I$ $a=0.52019-1.69968I$ $b=0.417648-0.853260I$	$-0.02194+6.24473I$	0
$u=0.719448-0.530043I$ $a=0.52019+1.69968I$ $b=0.417648+0.853260I$	$-0.02194-6.24473I$	0
$u=-0.324042+0.829369I$ $a=1.056160-0.040146I$ $b=2.63404-0.02893I$	$-2.25972-0.64288I$	0
$u=-0.324042-0.829369I$ $a=1.056160+0.040146I$ $b=2.63404+0.02893I$	$-2.25972+0.64288I$	0
$u=0.785872+0.786239I$ $a=-0.242549+0.418626I$ $b=0.336274+0.888423I$	$1.372790-0.122237I$	0
$u=0.785872-0.786239I$ $a=-0.242549-0.418626I$ $b=0.336274-0.888423I$	$1.372790+0.122237I$	0
$u=0.737790+0.492461I$ $a=0.345930+0.026591I$ $b=-0.639912+0.349896I$	$3.01770-3.51677I$	0
$u=0.737790-0.492461I$ $a=0.345930-0.026591I$ $b=-0.639912-0.349896I$	$3.01770+3.51677I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.788821+0.390879I$ $a=-1.07972+1.10131I$ $b=-0.344559+0.168399I$	$-3.85365-3.48929I$	0
$u=-0.788821-0.390879I$ $a=-1.07972-1.10131I$ $b=-0.344559-0.168399I$	$-3.85365+3.48929I$	0
$u=-0.535493+0.990011I$ $a=-0.362014+0.582134I$ $b=-1.52400+0.09166I$	$-1.91170-3.00635I$	0
$u=-0.535493-0.990011I$ $a=-0.362014-0.582134I$ $b=-1.52400-0.09166I$	$-1.91170+3.00635I$	0
$u=0.462803+1.029870I$ $a=-0.492012+0.113505I$ $b=-0.89362+1.44155I$	$0.52559+3.16200I$	0
$u=0.462803-1.029870I$ $a=-0.492012-0.113505I$ $b=-0.89362-1.44155I$	$0.52559-3.16200I$	0
$u=-0.542683+0.990584I$ $a=0.326897+0.168603I$ $b=0.520159+1.250960I$	$0.62605-2.30354I$	0
$u=-0.542683-0.990584I$ $a=0.326897-0.168603I$ $b=0.520159-1.250960I$	$0.62605+2.30354I$	0
$u=-0.868493+0.017213I$ $a=-0.057365-1.337690I$ $b=-0.709355-0.117998I$	$-3.47721-2.37734I$	0
$u=-0.868493-0.017213I$ $a=-0.057365+1.337690I$ $b=-0.709355+0.117998I$	$-3.47721+2.37734I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.398745 + 1.063230I$ $a = -1.080680 + 0.294267I$ $b = -2.47122 - 0.39892I$	$-9.96700 + 7.36444I$	0
$u = 0.398745 - 1.063230I$ $a = -1.080680 - 0.294267I$ $b = -2.47122 + 0.39892I$	$-9.96700 - 7.36444I$	0
$u = 0.220809 + 1.117270I$ $a = 1.61693 - 0.13299I$ $b = 2.51781 + 0.37798I$	$-4.29846 - 1.07449I$	0
$u = 0.220809 - 1.117270I$ $a = 1.61693 + 0.13299I$ $b = 2.51781 - 0.37798I$	$-4.29846 + 1.07449I$	0
$u = 0.333221 + 0.791199I$ $a = 1.14122 + 1.43106I$ $b = 0.487291 + 0.418115I$	$-1.82793 - 2.81146I$	0
$u = 0.333221 - 0.791199I$ $a = 1.14122 - 1.43106I$ $b = 0.487291 - 0.418115I$	$-1.82793 + 2.81146I$	0
$u = -0.658819 + 0.549326I$ $a = 0.376897 - 0.103555I$ $b = -0.663931 + 0.009059I$	$1.40731 - 1.37987I$	0
$u = -0.658819 - 0.549326I$ $a = 0.376897 + 0.103555I$ $b = -0.663931 - 0.009059I$	$1.40731 + 1.37987I$	0
$u = -0.757703 + 0.401729I$ $a = -0.521099 - 0.085871I$ $b = 0.804581 + 0.237617I$	$-0.67887 + 8.76569I$	0
$u = -0.757703 - 0.401729I$ $a = -0.521099 + 0.085871I$ $b = 0.804581 - 0.237617I$	$-0.67887 - 8.76569I$	0

	Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=$	$0.197885+1.127370I$		
$a=$	$0.061092-0.496396I$	$-6.12079+0.96304I$	0
$b=$	$0.405840+0.174285I$		
$u=$	$0.197885-1.127370I$		
$a=$	$0.061092+0.496396I$	$-6.12079-0.96304I$	0
$b=$	$0.405840-0.174285I$		
$u=$	$0.772578+0.355421I$		
$a=$	$0.01052+2.03459I$	$0.33205-3.68959I$	0
$b=$	$0.143729+0.599365I$		
$u=$	$0.772578-0.355421I$		
$a=$	$0.01052-2.03459I$	$0.33205+3.68959I$	0
$b=$	$0.143729-0.599365I$		
$u=$	$0.345125+1.105040I$		
$a=$	$0.91623-1.17290I$	$-5.57901+1.36934I$	0
$b=$	$1.61124-0.82798I$		
$u=$	$0.345125-1.105040I$		
$a=$	$0.91623+1.17290I$	$-5.57901-1.36934I$	0
$b=$	$1.61124+0.82798I$		
$u=$	$0.629411+0.557449I$		
$a=$	$0.785305+0.019652I$	$-1.84170-1.39573I$	0
$b=$	$1.179150+0.186374I$		
$u=$	$0.629411-0.557449I$		
$a=$	$0.785305-0.019652I$	$-1.84170+1.39573I$	0
$b=$	$1.179150-0.186374I$		
$u=$	$-0.545226+1.023710I$		
$a=$	$2.19638+0.51552I$	$-1.21493-6.35853I$	0
$b=$	$3.16802+0.16982I$		
$u=$	$-0.545226-1.023710I$		
$a=$	$2.19638-0.51552I$	$-1.21493+6.35853I$	0
$b=$	$3.16802-0.16982I$		

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-1.081710+0.428341I$ $a=-0.21642+1.64363I$ $b=-0.206993+0.628296I$	$-4.24294+4.78561I$	0
$u=-1.081710-0.428341I$ $a=-0.21642-1.64363I$ $b=-0.206993-0.628296I$	$-4.24294-4.78561I$	0
$u=-0.528705+0.648125I$ $a=0.492409-0.328331I$ $b=0.440016+0.949759I$	$-0.83439-1.35172I$	0
$u=-0.528705-0.648125I$ $a=0.492409+0.328331I$ $b=0.440016-0.949759I$	$-0.83439+1.35172I$	0
$u=-0.265197+1.133190I$ $a=-1.45559+0.20380I$ $b=-2.60438+0.77701I$	$-6.02169+3.15651I$	0
$u=-0.265197-1.133190I$ $a=-1.45559-0.20380I$ $b=-2.60438-0.77701I$	$-6.02169-3.15651I$	0
$u=-0.471865+0.690017I$ $a=0.231006-0.331373I$ $b=1.05113+1.22978I$	$-1.00980-1.41843I$	0
$u=-0.471865-0.690017I$ $a=0.231006+0.331373I$ $b=1.05113-1.22978I$	$-1.00980+1.41843I$	0
$u=0.718118+0.925578I$ $a=-0.617745+0.236258I$ $b=-0.062326+0.589650I$	$0.93496+5.78908I$	0
$u=0.718118-0.925578I$ $a=-0.617745-0.236258I$ $b=-0.062326-0.589650I$	$0.93496-5.78908I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.106661 + 0.820168I$ $a = 1.40543 + 0.70916I$ $b = 0.839047 + 0.122314I$	$-1.76131 - 2.59599I$	0
$u = 0.106661 - 0.820168I$ $a = 1.40543 - 0.70916I$ $b = 0.839047 - 0.122314I$	$-1.76131 + 2.59599I$	0
$u = -0.602258 + 0.566695I$ $a = 0.714700 + 0.494365I$ $b = -0.676894 + 0.132678I$	$1.87423 - 2.24970I$	0
$u = -0.602258 - 0.566695I$ $a = 0.714700 - 0.494365I$ $b = -0.676894 - 0.132678I$	$1.87423 + 2.24970I$	0
$u = -0.558746 + 1.036350I$ $a = 1.45049 - 1.37725I$ $b = 2.53158 - 1.63295I$	$-7.45853 - 9.80643I$	0
$u = -0.558746 - 1.036350I$ $a = 1.45049 + 1.37725I$ $b = 2.53158 + 1.63295I$	$-7.45853 + 9.80643I$	0
$u = 0.498784 + 1.067310I$ $a = 0.767414 - 0.059300I$ $b = 1.028060 + 0.694894I$	$-2.24172 - 0.53858I$	0
$u = 0.498784 - 1.067310I$ $a = 0.767414 + 0.059300I$ $b = 1.028060 - 0.694894I$	$-2.24172 + 0.53858I$	0
$u = 0.509329 + 1.063480I$ $a = -1.49416 - 1.00749I$ $b = -2.43133 - 1.07711I$	$-4.10099 + 6.11129I$	0
$u = 0.509329 - 1.063480I$ $a = -1.49416 + 1.00749I$ $b = -2.43133 + 1.07711I$	$-4.10099 - 6.11129I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.565403+1.038380I$ $a=-0.057892-0.181559I$ $b=-0.036621+0.542983I$	$-0.07230-3.38727I$	0
$u=-0.565403-1.038380I$ $a=-0.057892+0.181559I$ $b=-0.036621-0.542983I$	$-0.07230+3.38727I$	0
$u=0.622653+1.008490I$ $a=1.48494-0.46155I$ $b=2.15192-0.24382I$	$-1.45495-1.11532I$	0
$u=0.622653-1.008490I$ $a=1.48494+0.46155I$ $b=2.15192+0.24382I$	$-1.45495+1.11532I$	0
$u=-0.577545+0.570032I$ $a=0.01330+2.33101I$ $b=0.645321+1.177600I$	$0.17910+1.84122I$	0
$u=-0.577545-0.570032I$ $a=0.01330-2.33101I$ $b=0.645321-1.177600I$	$0.17910-1.84122I$	0
$u=0.463006+1.097170I$ $a=1.216860+0.615636I$ $b=2.51400+0.69702I$	$-9.47777-0.23566I$	0
$u=0.463006-1.097170I$ $a=1.216860-0.615636I$ $b=2.51400-0.69702I$	$-9.47777+0.23566I$	0
$u=-0.188811+0.786373I$ $a=0.362752+0.488895I$ $b=0.282641+0.936930I$	$-0.89161-1.81927I$	0
$u=-0.188811-0.786373I$ $a=0.362752-0.488895I$ $b=0.282641-0.936930I$	$-0.89161+1.81927I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.611897 + 1.038710I$ $a = -2.38329 - 0.15231I$ $b = -3.32038 - 0.29943I$	$-1.59825 + 10.35860I$	0
$u = 0.611897 - 1.038710I$ $a = -2.38329 + 0.15231I$ $b = -3.32038 + 0.29943I$	$-1.59825 - 10.35860I$	0
$u = -0.588466 + 0.533637I$ $a = -1.75419 + 1.35596I$ $b = -0.893780 + 0.068604I$	$-5.95313 + 5.19045I$	0
$u = -0.588466 - 0.533637I$ $a = -1.75419 - 1.35596I$ $b = -0.893780 - 0.068604I$	$-5.95313 - 5.19045I$	0
$u = -0.721849 + 0.313086I$ $a = -0.01353 + 2.20778I$ $b = -0.029369 + 0.312327I$	$-1.74367 + 5.99906I$	0
$u = -0.721849 - 0.313086I$ $a = -0.01353 - 2.20778I$ $b = -0.029369 - 0.312327I$	$-1.74367 - 5.99906I$	0
$u = 0.600754 + 1.061430I$ $a = 0.031932 + 0.148689I$ $b = 0.412200 - 0.649351I$	$1.32508 + 8.61937I$	0
$u = 0.600754 - 1.061430I$ $a = 0.031932 - 0.148689I$ $b = 0.412200 + 0.649351I$	$1.32508 - 8.61937I$	0
$u = 0.506802 + 1.110930I$ $a = -1.32257 - 0.99998I$ $b = -1.97872 - 0.95481I$	$-4.46728 + 6.15114I$	0
$u = 0.506802 - 1.110930I$ $a = -1.32257 + 0.99998I$ $b = -1.97872 + 0.95481I$	$-4.46728 - 6.15114I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.716229+0.993558I$ $a=\ 0.543645+0.015384I$ $b=\ 0.396892+0.633993I$	$-0.09281-6.57396I$	0
$u=-0.716229-0.993558I$ $a=\ 0.543645-0.015384I$ $b=\ 0.396892-0.633993I$	$-0.09281+6.57396I$	0
$u=\ 0.590317+1.089850I$ $a=-0.313899-0.653732I$ $b=-0.491576-0.074613I$	$-3.64197+6.36765I$	0
$u=\ 0.590317-1.089850I$ $a=-0.313899+0.653732I$ $b=-0.491576+0.074613I$	$-3.64197-6.36765I$	0
$u=-0.621394+1.072660I$ $a=-1.380380-0.222409I$ $b=-2.30493-0.01748I$	$0.93469-4.59359I$	0
$u=-0.621394-1.072660I$ $a=-1.380380+0.222409I$ $b=-2.30493+0.01748I$	$0.93469+4.59359I$	0
$u=-0.397580+1.174210I$ $a=\ 1.32606-0.57084I$ $b=\ 2.35226-0.25650I$	$-7.26789-6.61407I$	0
$u=-0.397580-1.174210I$ $a=\ 1.32606+0.57084I$ $b=\ 2.35226+0.25650I$	$-7.26789+6.61407I$	0
$u=-0.962104+0.786472I$ $a=\ 0.062771+0.510933I$ $b=\ 0.792522+0.079015I$	$-1.26602-9.81025I$	0
$u=-0.962104-0.786472I$ $a=\ 0.062771-0.510933I$ $b=\ 0.792522-0.079015I$	$-1.26602+9.81025I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.615257 + 1.080480I$ $a = 1.152210 + 0.195549I$ $b = 2.45059 + 0.19569I$	$-5.14755 + 11.77930I$	0
$u = 0.615257 - 1.080480I$ $a = 1.152210 - 0.195549I$ $b = 2.45059 - 0.19569I$	$-5.14755 - 11.77930I$	0
$u = -0.555292 + 1.119610I$ $a = 1.82334 - 0.10668I$ $b = 3.13530 - 0.17631I$	$-4.07515 - 10.86580I$	0
$u = -0.555292 - 1.119610I$ $a = 1.82334 + 0.10668I$ $b = 3.13530 + 0.17631I$	$-4.07515 + 10.86580I$	0
$u = -0.587559 + 1.104290I$ $a = -0.171375 + 0.041924I$ $b = -0.500655 - 0.997079I$	$-2.75464 - 13.86320I$	0
$u = -0.587559 - 1.104290I$ $a = -0.171375 - 0.041924I$ $b = -0.500655 + 0.997079I$	$-2.75464 + 13.86320I$	0
$u = 0.514252 + 0.539249I$ $a = -1.132140 - 0.491686I$ $b = 0.396606 - 0.237572I$	$-0.60459 + 4.64816I$	0
$u = 0.514252 - 0.539249I$ $a = -1.132140 + 0.491686I$ $b = 0.396606 + 0.237572I$	$-0.60459 - 4.64816I$	0
$u = 0.694887 + 0.261386I$ $a = -0.36235 + 1.95053I$ $b = 0.178863 + 0.572956I$	$0.74172 - 3.74761I$	0
$u = 0.694887 - 0.261386I$ $a = -0.36235 - 1.95053I$ $b = 0.178863 - 0.572956I$	$0.74172 + 3.74761I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.574975+1.120180I$ $a=\ 1.15051-0.87915I$ $b=\ 1.86526-1.24940I$	$-6.06402-1.63897I$	0
$u=-0.574975-1.120180I$ $a=\ 1.15051+0.87915I$ $b=\ 1.86526+1.24940I$	$-6.06402+1.63897I$	0
$u=-0.395150+1.196710I$ $a=-0.814327-0.373022I$ $b=-1.66842+0.28653I$	$-7.27036-1.99640I$	0
$u=-0.395150-1.196710I$ $a=-0.814327+0.373022I$ $b=-1.66842-0.28653I$	$-7.27036+1.99640I$	0
$u=\ 0.574016+1.126190I$ $a=-1.92429-0.08054I$ $b=-2.99168-0.04306I$	$-1.95475+8.76971I$	0
$u=\ 0.574016-1.126190I$ $a=-1.92429+0.08054I$ $b=-2.99168+0.04306I$	$-1.95475-8.76971I$	0
$u=\ 0.544410+1.170240I$ $a=-1.83274+0.01352I$ $b=-2.74545+0.12088I$	$-1.91650+8.54202I$	0
$u=\ 0.544410-1.170240I$ $a=-1.83274-0.01352I$ $b=-2.74545-0.12088I$	$-1.91650-8.54202I$	0
$u=\ 0.667109+0.181337I$ $a=\ 0.60272+1.38020I$ $b=\ 0.804746+0.302157I$	$-1.93967-1.74592I$	0
$u=\ 0.667109-0.181337I$ $a=\ 0.60272-1.38020I$ $b=\ 0.804746-0.302157I$	$-1.93967+1.74592I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.369289+1.265300I$ $a=1.61857+0.09609I$ $b=2.24068+0.16304I$	$-2.20027-3.58179I$	0
$u=-0.369289-1.265300I$ $a=1.61857-0.09609I$ $b=2.24068-0.16304I$	$-2.20027+3.58179I$	0
$u=0.344232+0.572879I$ $a=-0.41346+1.36455I$ $b=0.911335+0.015996I$	$2.05919+0.49453I$	$4.03596+3.76551I$
$u=0.344232-0.572879I$ $a=-0.41346-1.36455I$ $b=0.911335-0.015996I$	$2.05919-0.49453I$	$4.03596-3.76551I$
$u=0.984802+0.911160I$ $a=-0.303400+0.586499I$ $b=-0.760893+0.194619I$	$3.81963+3.53397I$	0
$u=0.984802-0.911160I$ $a=-0.303400-0.586499I$ $b=-0.760893-0.194619I$	$3.81963-3.53397I$	0
$u=-0.942451+0.955376I$ $a=0.282218+0.547680I$ $b=0.677960-0.034103I$	$-1.73681+3.02376I$	0
$u=-0.942451-0.955376I$ $a=0.282218-0.547680I$ $b=0.677960+0.034103I$	$-1.73681-3.02376I$	0
$u=0.630221+1.189060I$ $a=1.48775-0.12117I$ $b=2.56301+0.10998I$	$-8.47270+8.49096I$	0
$u=0.630221-1.189060I$ $a=1.48775+0.12117I$ $b=2.56301-0.10998I$	$-8.47270-8.49096I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.635450+1.187820I$ $a=-1.74268-0.04419I$ $b=-2.81308+0.04219I$	$-2.5342-14.5056I$	0
$u=-0.635450-1.187820I$ $a=-1.74268+0.04419I$ $b=-2.81308-0.04219I$	$-2.5342+14.5056I$	0
$u=0.645996+1.184020I$ $a=1.76204+0.10697I$ $b=2.89752+0.14474I$	$-6.3767+20.8986I$	0
$u=0.645996-1.184020I$ $a=1.76204-0.10697I$ $b=2.89752-0.14474I$	$-6.3767-20.8986I$	0
$u=0.130611+1.351380I$ $a=-1.50954+0.01181I$ $b=-2.44165-0.41318I$	$-10.0090-11.5034I$	0
$u=0.130611-1.351380I$ $a=-1.50954-0.01181I$ $b=-2.44165+0.41318I$	$-10.0090+11.5034I$	0
$u=0.560639+0.266398I$ $a=1.13611+1.68595I$ $b=0.717915+0.298184I$	$-1.97983-1.88746I$	$-0.78533+3.26809I$
$u=0.560639-0.266398I$ $a=1.13611-1.68595I$ $b=0.717915-0.298184I$	$-1.97983+1.88746I$	$-0.78533-3.26809I$
$u=-0.160767+1.374080I$ $a=1.57737-0.04219I$ $b=2.41230-0.35941I$	$-5.93565+4.96536I$	0
$u=-0.160767-1.374080I$ $a=1.57737+0.04219I$ $b=2.41230+0.35941I$	$-5.93565-4.96536I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.111388 + 1.388180I$ $a = -1.55028 - 0.17705I$ $b = -2.47048 - 0.24260I$	$-12.00310 + 1.06095I$	0
$u = 0.111388 - 1.388180I$ $a = -1.55028 + 0.17705I$ $b = -2.47048 + 0.24260I$	$-12.00310 - 1.06095I$	0
$u = -0.694732 + 1.207230I$ $a = 1.59598 - 0.23667I$ $b = 2.52552 - 0.34401I$	$-6.70928 - 11.13190I$	0
$u = -0.694732 - 1.207230I$ $a = 1.59598 + 0.23667I$ $b = 2.52552 + 0.34401I$	$-6.70928 + 11.13190I$	0
$u = 0.570475 + 0.197415I$ $a = -0.80893 - 1.94522I$ $b = -0.399143 + 0.318276I$	$-6.95820 + 4.30471I$	$-2.90651 - 4.31657I$
$u = 0.570475 - 0.197415I$ $a = -0.80893 + 1.94522I$ $b = -0.399143 - 0.318276I$	$-6.95820 - 4.30471I$	$-2.90651 + 4.31657I$
$u = 0.384135 + 0.454875I$ $a = 1.006570 + 0.038065I$ $b = 0.979938 + 0.447821I$	$-1.87969 - 1.40308I$	$-2.30382 + 1.28082I$
$u = 0.384135 - 0.454875I$ $a = 1.006570 - 0.038065I$ $b = 0.979938 - 0.447821I$	$-1.87969 + 1.40308I$	$-2.30382 - 1.28082I$
$u = -0.470995 + 0.055352I$ $a = 1.16942 + 0.91884I$ $b = -0.041223 + 0.220037I$	$1.274910 + 0.210049I$	$9.06029 - 0.23994I$
$u = -0.470995 - 0.055352I$ $a = 1.16942 - 0.91884I$ $b = -0.041223 - 0.220037I$	$1.274910 - 0.210049I$	$9.06029 + 0.23994I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.07521+1.66469I$		
$a=-1.82399-0.29293I$	$-11.85890+0.51680I$	0
$b=-2.42364-0.18061I$		
$u=-0.07521-1.66469I$		
$a=-1.82399+0.29293I$	$-11.85890-0.51680I$	0
$b=-2.42364+0.18061I$		

II.

$\boldsymbol{I_2^u = \langle 1.44\times10^{20}u^{47}-1.21\times10^{20}u^{46}+\cdots+6.08\times10^{19}b-2.84\times10^{20},\ -1.37\times10^{20}u^{47}-1.59\times10^{20}u^{46}+\cdots+6.08\times10^{19}a+2.10\times10^{18},\ u^{48}+u^{47}+\cdots-3u+1\rangle}$

(i) Arc colorings

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

$$a_8 = \begin{pmatrix}0\\u\end{pmatrix}$$

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

$$a_5 = \begin{pmatrix}2.25613u^{47}+2.60717u^{46}+\cdots-27.9525u-0.0344603\\-2.36718u^{47}+1.99352u^{46}+\cdots-36.3337u+4.66267\end{pmatrix}$$

$$a_9 = \begin{pmatrix}u\\u\end{pmatrix}$$

$$a_6 = \begin{pmatrix}6.70627u^{47}+2.19069u^{46}+\cdots-11.3002u-4.04412\\2.08295u^{47}+1.57703u^{46}+\cdots-19.6814u+0.653008\end{pmatrix}$$

$$a_{10} = \begin{pmatrix}8.49316u^{47}+10.0716u^{46}+\cdots+18.7815u+4.95026\\6.90906u^{47}+11.9125u^{46}+\cdots-17.0161u+8.69668\end{pmatrix}$$

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

$$a_{11} = \begin{pmatrix}9.17185u^{47}+11.5282u^{46}+\cdots+27.6988u+3.49291\\6.86573u^{47}+11.4807u^{46}+\cdots-15.5446u+8.32282\end{pmatrix}$$

$$a_7 = \begin{pmatrix}-3.78375u^{47}-24.7695u^{46}+\cdots+70.0160u-36.2104\\15.5871u^{47}-14.5114u^{46}+\cdots+95.0207u-27.6390\end{pmatrix}$$

$$a_{12} = \begin{pmatrix}17.6915u^{47}+26.6294u^{46}+\cdots+38.9288u+6.75506\\20.2070u^{47}+26.8426u^{46}+\cdots-10.2697u+8.80231\end{pmatrix}$$

$$a_4 = \begin{pmatrix}-5.15455u^{47}-12.5282u^{46}+\cdots+30.9383u+0.600150\\0.529754u^{47}-11.8012u^{46}+\cdots+24.4298u-5.20553\end{pmatrix}$$

(ii) Obstruction class $= 1$

(iii) Cusp Shapes $= -\frac{561986657334369807367}{152040871640904822 88}u^{47}-\frac{659950458826206152701}{7602043582045241144}u^{46}+\cdots-\frac{152988620147014659225}{7602043582045241144}u-\frac{246853958488671964 69}{152040871640904822 88}$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{48} - 27u^{47} + \cdots - 29u + 1$
c_2	$u^{48} + u^{47} + \cdots - 3u + 1$
c_3	$u^{48} - 10u^{47} + \cdots - 93u + 1$
c_4	$u^{48} - u^{47} + \cdots - 10u + 4$
c_5	$u^{48} - u^{47} + \cdots + 4u + 1$
c_6	$u^{48} - 7u^{46} + \cdots - 3u + 1$
c_7	$u^{48} - 4u^{47} + \cdots - 91u + 11$
c_8	$u^{48} - u^{47} + \cdots + 3u + 1$
c_9	$u^{48} + u^{47} + \cdots - 4u + 1$
c_{10}	$u^{48} - 7u^{47} + \cdots - 8u + 1$
c_{11}	$u^{48} + u^{47} + \cdots + 10u + 4$
c_{12}	$u^{48} + 10u^{46} + \cdots - 11u + 1$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{48} + 3y^{47} + \cdots + 5y + 1$
c_2, c_8	$y^{48} + 27y^{47} + \cdots + 29y + 1$
c_3	$y^{48} + 2y^{47} + \cdots - 3787y + 1$
c_4, c_{11}	$y^{48} - 43y^{47} + \cdots - 572y + 16$
c_5, c_9	$y^{48} + 15y^{47} + \cdots + 46y + 1$
c_6	$y^{48} - 14y^{47} + \cdots + 9y + 1$
c_7	$y^{48} - 12y^{47} + \cdots - 471y + 121$
c_{10}	$y^{48} - 19y^{47} + \cdots - 24y + 1$
c_{12}	$y^{48} + 20y^{47} + \cdots - 31y + 1$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.303433+0.948276I$ $a=-1.55689-0.60913I$ $b=-2.99562+0.05362I$	$-8.50439+3.93763I$	$-1.77248-3.10729I$
$u=-0.303433-0.948276I$ $a=-1.55689+0.60913I$ $b=-2.99562-0.05362I$	$-8.50439-3.93763I$	$-1.77248+3.10729I$
$u=-0.934790+0.469546I$ $a=-0.25839+1.51941I$ $b=-0.111043+0.362241I$	$-3.75098+4.42844I$	$2.00000-2.63674I$
$u=-0.934790-0.469546I$ $a=-0.25839-1.51941I$ $b=-0.111043-0.362241I$	$-3.75098-4.42844I$	$2.00000+2.63674I$
$u=-0.732503+0.751016I$ $a=\ \ 0.351147+0.746249I$ $b=-0.143246+0.967507I$	$2.04714+0.17029I$	$9.59498+0.I$
$u=-0.732503-0.751016I$ $a=\ \ 0.351147-0.746249I$ $b=-0.143246-0.967507I$	$2.04714-0.17029I$	$9.59498+0.I$
$u=-0.263596+0.910305I$ $a=-0.187847-1.081860I$ $b=-1.72402-0.67821I$	$-8.29710-6.29968I$	$-3.67660+11.44227I$
$u=-0.263596-0.910305I$ $a=-0.187847+1.081860I$ $b=-1.72402+0.67821I$	$-8.29710+6.29968I$	$-3.67660-11.44227I$
$u=\ \ 0.499730+0.967895I$ $a=-0.196436-0.339907I$ $b=-1.31087+1.27505I$	$-1.86446+2.63152I$	$94.8314-59.9780I$
$u=\ \ 0.499730-0.967895I$ $a=-0.196436+0.339907I$ $b=-1.31087-1.27505I$	$-1.86446-2.63152I$	$94.8314+59.9780I$

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.483801+0.987882I$ $a=\ 0.518637+0.274971I$ $b=\ 0.92104+1.46146I$	$1.19616-2.82997I$	$10.53759+0.I$
$u=-0.483801-0.987882I$ $a=\ 0.518637-0.274971I$ $b=\ 0.92104-1.46146I$	$1.19616+2.82997I$	$10.53759+0.I$
$u=\ 0.388252+1.040580I$ $a=-2.33527-1.45499I$ $b=-3.01640-1.37032I$	$-4.29115+8.15493I$	$0.-12.86094I$
$u=\ 0.388252-1.040580I$ $a=-2.33527+1.45499I$ $b=-3.01640+1.37032I$	$-4.29115-8.15493I$	$0.+12.86094I$
$u=\ 0.731956+0.855367I$ $a=-0.610630-1.015360I$ $b=-0.219289-0.764594I$	$-0.91263+7.84040I$	0
$u=\ 0.731956-0.855367I$ $a=-0.610630+1.015360I$ $b=-0.219289+0.764594I$	$-0.91263-7.84040I$	0
$u=\ 0.287594+1.089960I$ $a=\ 1.81469+0.16553I$ $b=\ 2.73757+0.67917I$	$-4.40520-1.94324I$	0
$u=\ 0.287594-1.089960I$ $a=\ 1.81469-0.16553I$ $b=\ 2.73757-0.67917I$	$-4.40520+1.94324I$	0
$u=\ 0.225339+1.106270I$ $a=\ 0.633820-0.354515I$ $b=\ 1.57283+0.02477I$	$-4.25806+2.01998I$	0
$u=\ 0.225339-1.106270I$ $a=\ 0.633820+0.354515I$ $b=\ 1.57283-0.02477I$	$-4.25806-2.01998I$	0

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.511471 + 0.699613I$ $a = 0.229346 + 0.287731I$ $b = 0.75729 - 1.45330I$	$-0.99617 + 1.50262I$	$-21.5777 - 67.8215I$
$u = 0.511471 - 0.699613I$ $a = 0.229346 - 0.287731I$ $b = 0.75729 + 1.45330I$	$-0.99617 - 1.50262I$	$-21.5777 + 67.8215I$
$u = -0.471206 + 0.691065I$ $a = 0.396822 + 1.062820I$ $b = -0.590710 + 0.109204I$	$2.20372 - 1.11724I$	$6.49040 + 5.45351I$
$u = -0.471206 - 0.691065I$ $a = 0.396822 - 1.062820I$ $b = -0.590710 - 0.109204I$	$2.20372 + 1.11724I$	$6.49040 - 5.45351I$
$u = -0.682309 + 0.947265I$ $a = 0.803850 + 0.447989I$ $b = 0.491864 + 0.744170I$	$1.44684 - 5.57537I$	0
$u = -0.682309 - 0.947265I$ $a = 0.803850 - 0.447989I$ $b = 0.491864 - 0.744170I$	$1.44684 + 5.57537I$	0
$u = -0.224364 + 0.796884I$ $a = -1.47244 + 1.72908I$ $b = -0.73164 + 1.26101I$	$-1.77751 + 1.63696I$	$-1.45103 + 1.63575I$
$u = -0.224364 - 0.796884I$ $a = -1.47244 - 1.72908I$ $b = -0.73164 - 1.26101I$	$-1.77751 - 1.63696I$	$-1.45103 - 1.63575I$
$u = 0.698254 + 0.442073I$ $a = 0.20592 + 2.31888I$ $b = 0.107292 + 0.861682I$	$-0.46940 - 4.23779I$	$-1.21636 + 3.88867I$
$u = 0.698254 - 0.442073I$ $a = 0.20592 - 2.31888I$ $b = 0.107292 - 0.861682I$	$-0.46940 + 4.23779I$	$-1.21636 - 3.88867I$

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.271231+1.148630I$ $a=\ 2.18954-0.27031I$ $b=\ 2.95363-0.26660I$	$-3.13187-3.59797I$	0
$u=-0.271231-1.148630I$ $a=\ 2.18954+0.27031I$ $b=\ 2.95363+0.26660I$	$-3.13187+3.59797I$	0
$u=\ 0.329673+0.748558I$ $a=\ 2.71229+1.24168I$ $b=\ 2.27947+0.62511I$	$-3.16558-5.11767I$	$1.77759+6.14021I$
$u=\ 0.329673-0.748558I$ $a=\ 2.71229-1.24168I$ $b=\ 2.27947-0.62511I$	$-3.16558+5.11767I$	$1.77759-6.14021I$
$u=\ 0.845805+0.896265I$ $a=\ 0.937719-0.242472I$ $b=\ 1.341300+0.079271I$	$-1.00761-1.97666I$	0
$u=\ 0.845805-0.896265I$ $a=\ 0.937719+0.242472I$ $b=\ 1.341300-0.079271I$	$-1.00761+1.97666I$	0
$u=\ 0.570075+1.098570I$ $a=-2.11210-0.08382I$ $b=-3.19618-0.09978I$	$-2.46074+9.16277I$	0
$u=\ 0.570075-1.098570I$ $a=-2.11210+0.08382I$ $b=-3.19618+0.09978I$	$-2.46074-9.16277I$	0
$u=-0.622844+1.101790I$ $a=\ 1.46314-0.38230I$ $b=\ 2.57635-0.55071I$	$-5.73000-10.03320I$	0
$u=-0.622844-1.101790I$ $a=\ 1.46314+0.38230I$ $b=\ 2.57635+0.55071I$	$-5.73000+10.03320I$	0

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.935378+0.914685I$ $a=-0.323116-0.609092I$ $b=-0.724257-0.259938I$	$4.01318-3.40707I$	0
$u=-0.935378-0.914685I$ $a=-0.323116+0.609092I$ $b=-0.724257+0.259938I$	$4.01318+3.40707I$	0
$u=\ \ 0.318683+0.381488I$ $a=-0.523127-0.133481I$ $b=\ \ 1.47956+0.13669I$	$-1.71021-0.01168I$	$0.461939-0.885010I$
$u=\ \ 0.318683-0.381488I$ $a=-0.523127+0.133481I$ $b=\ \ 1.47956-0.13669I$	$-1.71021+0.01168I$	$0.461939+0.885010I$
$u=\ \ 0.099436+0.414406I$ $a=-2.84174+0.24619I$ $b=-0.541798-0.405718I$	$-1.61883+4.02014I$	$-1.10429-6.93041I$
$u=\ \ 0.099436-0.414406I$ $a=-2.84174-0.24619I$ $b=-0.541798+0.405718I$	$-1.61883-4.02014I$	$-1.10429+6.93041I$
$u=-0.08081+1.69185I$ $a=-1.83894-0.23724I$ $b=-2.41311-0.12350I$	$-11.77280+0.58996I$	0
$u=-0.08081-1.69185I$ $a=-1.83894+0.23724I$ $b=-2.41311+0.12350I$	$-11.77280-0.58996I$	0

III. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1	$(u^{48}-27u^{47}+\cdots-29u+1)$ $\cdot(u^{182}+88u^{181}+\cdots+9154060u+418609)$
c_2	$(u^{48}+u^{47}+\cdots-3u+1)(u^{182}+2u^{181}+\cdots+3170u+647)$
c_3	$(u^{48}-10u^{47}+\cdots-93u+1)$ $\cdot(u^{182}-9u^{181}+\cdots-4473834946u+318667011)$
c_4	$(u^{48}-u^{47}+\cdots-10u+4)(u^{182}-65u^{180}+\cdots+17454u+6196)$
c_5	$(u^{48}-u^{47}+\cdots+4u+1)(u^{182}+48u^{180}+\cdots+935357u+53761)$
c_6	$(u^{48}-7u^{46}+\cdots-3u+1)(u^{182}-3u^{181}+\cdots+4259486u+3695609)$
c_7	$(u^{48}-4u^{47}+\cdots-91u+11)(u^{182}-9u^{181}+\cdots-7454u+3031)$
c_8	$(u^{48}-u^{47}+\cdots+3u+1)(u^{182}+2u^{181}+\cdots+3170u+647)$
c_9	$(u^{48}+u^{47}+\cdots-4u+1)(u^{182}+48u^{180}+\cdots+935357u+53761)$
c_{10}	$(u^{48}-7u^{47}+\cdots-8u+1)(u^{182}+28u^{181}+\cdots+9541u+457)$
c_{11}	$(u^{48}+u^{47}+\cdots+10u+4)(u^{182}-65u^{180}+\cdots+17454u+6196)$
c_{12}	$(u^{48}+10u^{46}+\cdots-11u+1)(u^{182}+u^{181}+\cdots+10u+3)$

IV. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1	$(y^{48}+3y^{47}+\cdots+5y+1)$ $\cdot(y^{182}+28y^{181}+\cdots+3612930806400y+175233494881)$
c_2, c_8	$(y^{48}+27y^{47}+\cdots+29y+1)$ $\cdot(y^{182}+88y^{181}+\cdots+9154060y+418609)$
c_3	$(y^{48}+2y^{47}+\cdots-3787y+1)$ $\cdot(y^{182}-49y^{181}+\cdots+2.91\times10^{18}y+1.02\times10^{17})$
c_4, c_{11}	$(y^{48}-43y^{47}+\cdots-572y+16)$ $\cdot(y^{182}-130y^{181}+\cdots-1577213772y+38390416)$
c_5, c_9	$(y^{48}+15y^{47}+\cdots+46y+1)$ $\cdot(y^{182}+96y^{181}+\cdots+152047431545y+2890245121)$
c_6	$(y^{48}-14y^{47}+\cdots+9y+1)$ $\cdot(y^{182}+27y^{181}+\cdots+3313957547436004y+13657525880881)$
c_7	$(y^{48}-12y^{47}+\cdots-471y+121)$ $\cdot(y^{182}-7y^{181}+\cdots+874676032y+9186961)$
c_{10}	$(y^{48}-19y^{47}+\cdots-24y+1)$ $\cdot(y^{182}-6y^{181}+\cdots+15585591y+208849)$
c_{12}	$(y^{48}+20y^{47}+\cdots-31y+1)(y^{182}+25y^{181}+\cdots-508y+9)$