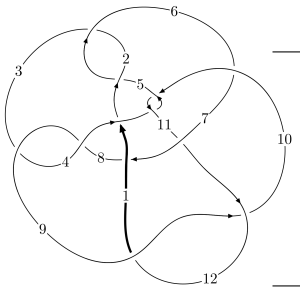
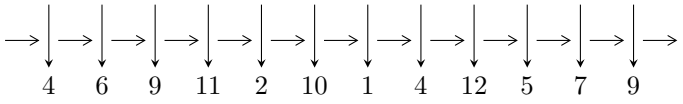
$12n_{0758}$ $(K12n_{0758})$



A knot diagram[1]

Linearized knot diagam



Solving Sequence

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

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

$$\begin{aligned} I_1^u = \langle & 8.72942 \times 10^{279} u^{83} - 3.70180 \times 10^{280} u^{82} + \cdots + 2.19369 \times 10^{283} b + 5.24856 \times 10^{283}, \\ & - 1.73871 \times 10^{284} u^{83} + 3.54688 \times 10^{284} u^{82} + \cdots + 8.62121 \times 10^{285} a + 9.41097 \times 10^{286}, \\ & u^{84} - 2u^{83} + \cdots - 931u + 393 \rangle \\ I_2^u = \langle & 5.19189 \times 10^{21} u^{32} - 9.68160 \times 10^{21} u^{31} + \cdots + 1.69614 \times 10^{22} b - 1.88611 \times 10^{23}, \\ & 9.63063 \times 10^{21} u^{32} - 6.63604 \times 10^{22} u^{31} + \cdots + 2.66537 \times 10^{22} a + 9.17471 \times 10^{23}, \ u^{33} - 3u^{32} + \cdots - 3u - 1 \end{aligned}$$

* 2 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 117 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. $\boldsymbol{I_1^u = \langle 8.73 \times 10^{279} u^{83} - 3.70 \times 10^{280} u^{82} + \cdots + 2.19 \times 10^{283} b + 5.25 \times 10^{283},\ -1.74 \times 10^{284} u^{83} + 3.55 \times 10^{284} u^{82} + \cdots + 8.62 \times 10^{285} a + 9.41 \times 10^{286},\ u^{84} - 2u^{83} + \cdots - 931u + 393 \rangle}$

(i) Arc colorings

$$a_9 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$

$$a_{12} = \begin{pmatrix} 0 \\ u \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} 1 \\ u^2 \end{pmatrix}$$

$$a_1 = \begin{pmatrix} -u \\ u \end{pmatrix}$$

$$a_4 = \begin{pmatrix} 0.0201678u^{83} - 0.0411413u^{82} + \cdots + 37.2561u - 10.9161 \\ -0.000397933u^{83} + 0.00168747u^{82} + \cdots - 1.39648u - 2.39257 \end{pmatrix}$$

$$a_2 = \begin{pmatrix} 0.0161633u^{83} - 0.0261933u^{82} + \cdots + 26.1042u - 11.4528 \\ 0.00781208u^{83} - 0.0178962u^{82} + \cdots + 12.4153u - 7.75229 \end{pmatrix}$$

$$a_3 = \begin{pmatrix} 0.0197698u^{83} - 0.0394538u^{82} + \cdots + 35.8597u - 13.3086 \\ -0.000397933u^{83} + 0.00168747u^{82} + \cdots - 1.39648u - 2.39257 \end{pmatrix}$$

$$a_8 = \begin{pmatrix} 0.0206064u^{83} - 0.0260386u^{82} + \cdots + 19.3445u + 2.04760 \\ -0.000880470u^{83} - 0.00560114u^{82} + \cdots + 7.71886u - 7.99711 \end{pmatrix}$$

$$a_7 = \begin{pmatrix} 0.0183344u^{83} - 0.0267967u^{82} + \cdots + 18.8652u - 1.02254 \\ 0.00139156u^{83} - 0.00484311u^{82} + \cdots + 8.19811u - 4.92696 \end{pmatrix}$$

$$a_6 = \begin{pmatrix} 0.0219774u^{83} - 0.0304770u^{82} + \cdots + 25.0778u - 2.06978 \\ 0.00306746u^{83} - 0.00998246u^{82} + \cdots + 10.1234u - 6.34404 \end{pmatrix}$$

$$a_5 = \begin{pmatrix} 0.0249425u^{83} - 0.0285448u^{82} + \cdots + 18.3761u + 11.2314 \\ -0.00242622u^{83} + 0.0000518733u^{82} + \cdots + 7.71179u - 4.90936 \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} -0.0267748u^{83} + 0.0522669u^{82} + \cdots - 49.2862u + 13.0525 \\ 0.00829693u^{83} - 0.0131191u^{82} + \cdots + 8.72583u + 0.990108 \end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= 0.0195060u^{83} - 0.0235693u^{82} + \cdots + 27.4576u - 11.4055$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{84} - 3u^{83} + \cdots + 8464u + 8464$
c_2, c_5	$u^{84} + 4u^{83} + \cdots - 959u - 69$
c_3, c_8	$u^{84} - u^{83} + \cdots - 231109u - 59333$
c_4, c_{10}	$u^{84} - u^{83} + \cdots - 99u - 85$
c_6	$u^{84} + 8u^{83} + \cdots + 13309u + 799$
c_7	$u^{84} + 2u^{83} + \cdots - 28656216u - 9025047$
c_9, c_{12}	$u^{84} - 2u^{83} + \cdots - 931u + 393$
c_{11}	$u^{84} - 2u^{83} + \cdots - 66u - 71$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{84} - 105y^{83} + \cdots - 4667929856y + 71639296$
c_2, c_5	$y^{84} - 54y^{83} + \cdots - 314551y + 4761$
c_3, c_8	$y^{84} - 91y^{83} + \cdots - 79247924731y + 3520404889$
c_4, c_{10}	$y^{84} + 43y^{83} + \cdots + 129599y + 7225$
c_6	$y^{84} + 4y^{83} + \cdots - 82932175y + 638401$
c_7	$y^{84} - 108y^{83} + \cdots - 5560618845808998y + 81451473352209$
c_9, c_{12}	$y^{84} + 36y^{83} + \cdots + 530747y + 154449$
c_{11}	$y^{84} + 20y^{83} + \cdots - 234396y + 5041$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.294887 + 0.952377I$ $a = 0.440850 + 1.193960I$ $b = 0.495235 + 0.003125I$	$2.54954 + 5.24160I$	0
$u = 0.294887 - 0.952377I$ $a = 0.440850 - 1.193960I$ $b = 0.495235 - 0.003125I$	$2.54954 - 5.24160I$	0
$u = -0.694610 + 0.707656I$ $a = 1.008470 - 0.624427I$ $b = -1.97615 - 0.19025I$	$-7.38511 - 2.76283I$	0
$u = -0.694610 - 0.707656I$ $a = 1.008470 + 0.624427I$ $b = -1.97615 + 0.19025I$	$-7.38511 + 2.76283I$	0
$u = 0.500809 + 0.888563I$ $a = -0.38984 - 1.62928I$ $b = 1.67416 + 0.12811I$	$-8.76932 - 2.02840I$	0
$u = 0.500809 - 0.888563I$ $a = -0.38984 + 1.62928I$ $b = 1.67416 - 0.12811I$	$-8.76932 + 2.02840I$	0
$u = 0.554522 + 0.858130I$ $a = -0.899708 - 0.388618I$ $b = -0.730243 - 0.171302I$	$2.11870 - 9.06028I$	0
$u = 0.554522 - 0.858130I$ $a = -0.899708 + 0.388618I$ $b = -0.730243 + 0.171302I$	$2.11870 + 9.06028I$	0
$u = 0.661636 + 0.717303I$ $a = -0.55456 + 2.11719I$ $b = -0.11809 - 1.64544I$	$1.06596 - 8.36354I$	0
$u = 0.661636 - 0.717303I$ $a = -0.55456 - 2.11719I$ $b = -0.11809 + 1.64544I$	$1.06596 + 8.36354I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.727502+0.631455I$ $a=\ 0.43599+1.99000I$ $b=\ 0.132082-1.308720I$	$-1.65955+2.50124I$	0
$u=-0.727502-0.631455I$ $a=\ 0.43599-1.99000I$ $b=\ 0.132082+1.308720I$	$-1.65955-2.50124I$	0
$u=\ 0.646116+0.813367I$ $a=-0.865057-1.114140I$ $b=\ 1.95306+0.07640I$	$-9.54811-1.92793I$	0
$u=\ 0.646116-0.813367I$ $a=-0.865057+1.114140I$ $b=\ 1.95306-0.07640I$	$-9.54811+1.92793I$	0
$u=\ 0.859691+0.384127I$ $a=\ 0.058309+1.043550I$ $b=-1.60144-0.20746I$	$-3.80926+3.22658I$	$-12.00000+0.I$
$u=\ 0.859691-0.384127I$ $a=\ 0.058309-1.043550I$ $b=-1.60144+0.20746I$	$-3.80926-3.22658I$	$-12.00000+0.I$
$u=-0.758174+0.486652I$ $a=\ 0.20809+1.59324I$ $b=\ 1.305480-0.526811I$	$-5.03724+1.13583I$	$-16.8365-2.0066I$
$u=-0.758174-0.486652I$ $a=\ 0.20809-1.59324I$ $b=\ 1.305480+0.526811I$	$-5.03724-1.13583I$	$-16.8365+2.0066I$
$u=-0.477920+0.729132I$ $a=-0.017678-0.832177I$ $b=-1.70255-0.02946I$	$-6.28978+5.06326I$	$-14.0964-11.0858I$
$u=-0.477920-0.729132I$ $a=-0.017678+0.832177I$ $b=-1.70255+0.02946I$	$-6.28978-5.06326I$	$-14.0964+11.0858I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.724830+0.871030I$ $a=0.188923-0.513292I$ $b=0.800606+0.197504I$	$-0.97523+4.20327I$	0
$u=-0.724830-0.871030I$ $a=0.188923+0.513292I$ $b=0.800606-0.197504I$	$-0.97523-4.20327I$	0
$u=0.431842+0.751226I$ $a=0.035604+0.411641I$ $b=0.930341+0.119546I$	$4.15608-3.39999I$	$-8.12553+3.32156I$
$u=0.431842-0.751226I$ $a=0.035604-0.411641I$ $b=0.930341-0.119546I$	$4.15608+3.39999I$	$-8.12553-3.32156I$
$u=0.130197+1.176620I$ $a=-0.452940+0.792535I$ $b=0.335620-1.078210I$	$8.02881-0.15919I$	0
$u=0.130197-1.176620I$ $a=-0.452940-0.792535I$ $b=0.335620+1.078210I$	$8.02881+0.15919I$	0
$u=0.633110+1.001470I$ $a=-0.86554-1.72536I$ $b=1.69381+0.53177I$	$-8.92273-3.05638I$	0
$u=0.633110-1.001470I$ $a=-0.86554+1.72536I$ $b=1.69381-0.53177I$	$-8.92273+3.05638I$	0
$u=-0.166772+1.176770I$ $a=0.025390-1.080680I$ $b=-0.058126+0.634635I$	$2.44569+1.97696I$	0
$u=-0.166772-1.176770I$ $a=0.025390+1.080680I$ $b=-0.058126-0.634635I$	$2.44569-1.97696I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.554951 + 0.582546I$ $a = -0.390319 - 1.179360I$ $b = -0.095466 + 0.110201I$	$3.77440 - 0.27401I$	$-9.00425 + 3.62754I$
$u = 0.554951 - 0.582546I$ $a = -0.390319 + 1.179360I$ $b = -0.095466 - 0.110201I$	$3.77440 + 0.27401I$	$-9.00425 - 3.62754I$
$u = -0.542964 + 1.077790I$ $a = 0.88186 - 1.75494I$ $b = -1.37004 + 0.37482I$	$-5.04156 - 0.89545I$	0
$u = -0.542964 - 1.077790I$ $a = 0.88186 + 1.75494I$ $b = -1.37004 - 0.37482I$	$-5.04156 + 0.89545I$	0
$u = 0.786924 + 0.071577I$ $a = -0.372606 - 0.083145I$ $b = -0.740135 + 0.590064I$	$-2.30274 - 1.98452I$	$-14.0122 + 3.5761I$
$u = 0.786924 - 0.071577I$ $a = -0.372606 + 0.083145I$ $b = -0.740135 - 0.590064I$	$-2.30274 + 1.98452I$	$-14.0122 - 3.5761I$
$u = -0.672532 + 1.053140I$ $a = 0.80649 - 1.86180I$ $b = -1.59182 + 0.83021I$	$-6.27265 + 8.07086I$	0
$u = -0.672532 - 1.053140I$ $a = 0.80649 + 1.86180I$ $b = -1.59182 - 0.83021I$	$-6.27265 - 8.07086I$	0
$u = -0.744362 + 0.073072I$ $a = 0.697845 + 0.302573I$ $b = 0.064934 - 0.638988I$	$-2.55097 + 1.64807I$	$-14.0611 - 4.2086I$
$u = -0.744362 - 0.073072I$ $a = 0.697845 - 0.302573I$ $b = 0.064934 + 0.638988I$	$-2.55097 - 1.64807I$	$-14.0611 + 4.2086I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.173456+0.718283I$ $a=-0.032776+1.023540I$ $b=-0.777152-0.064260I$	$-0.042915-0.404585I$	$-13.05213+0.11444I$
$u=-0.173456-0.718283I$ $a=-0.032776-1.023540I$ $b=-0.777152+0.064260I$	$-0.042915+0.404585I$	$-13.05213-0.11444I$
$u=\ \ 0.641058+1.102710I$ $a=\ \ 0.249195+1.241840I$ $b=-1.311760-0.478156I$	$0.08416-2.58633I$	0
$u=\ \ 0.641058-1.102710I$ $a=\ \ 0.249195-1.241840I$ $b=-1.311760+0.478156I$	$0.08416+2.58633I$	0
$u=-0.290314+1.244790I$ $a=\ \ 0.275935+0.456597I$ $b=\ \ 0.373975-0.153030I$	$1.34700+5.25981I$	0
$u=-0.290314-1.244790I$ $a=\ \ 0.275935-0.456597I$ $b=\ \ 0.373975+0.153030I$	$1.34700-5.25981I$	0
$u=-0.617200+1.123120I$ $a=-0.097327+0.894259I$ $b=\ \ 1.297870-0.212302I$	$-2.08185+5.12268I$	0
$u=-0.617200-1.123120I$ $a=-0.097327-0.894259I$ $b=\ \ 1.297870+0.212302I$	$-2.08185-5.12268I$	0
$u=\ \ 0.480007+1.204710I$ $a=\ \ 0.87508-1.45094I$ $b=-0.733207+1.187610I$	$2.63050+3.51421I$	0
$u=\ \ 0.480007-1.204710I$ $a=\ \ 0.87508+1.45094I$ $b=-0.733207-1.187610I$	$2.63050-3.51421I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.369350+1.258530I$ $a=-0.590165-0.607206I$ $b=\ \ 0.391473+0.703417I$	$1.10901+2.54970I$	0
$u=-0.369350-1.258530I$ $a=-0.590165+0.607206I$ $b=\ \ 0.391473-0.703417I$	$1.10901-2.54970I$	0
$u=-0.415634+0.543818I$ $a=\ \ 0.89412+2.48326I$ $b=\ \ 0.884750-0.112569I$	$-4.20056-0.60057I$	$-16.6383-2.6615I$
$u=-0.415634-0.543818I$ $a=\ \ 0.89412-2.48326I$ $b=\ \ 0.884750+0.112569I$	$-4.20056+0.60057I$	$-16.6383+2.6615I$
$u=-0.704625+1.145320I$ $a=-0.879881+0.787804I$ $b=\ \ 1.71635-0.09528I$	$-3.05789+4.55898I$	0
$u=-0.704625-1.145320I$ $a=-0.879881-0.787804I$ $b=\ \ 1.71635+0.09528I$	$-3.05789-4.55898I$	0
$u=\ \ 0.372324+1.313810I$ $a=\ \ 1.080030-0.158632I$ $b=-0.824823+0.643218I$	$2.02799-6.25953I$	0
$u=\ \ 0.372324-1.313810I$ $a=\ \ 1.080030+0.158632I$ $b=-0.824823-0.643218I$	$2.02799+6.25953I$	0
$u=\ \ 0.167980+0.608575I$ $a=\ \ 0.68138-2.97181I$ $b=-0.03290+1.56661I$	$5.82823-1.27096I$	$-14.7250+7.1500I$
$u=\ \ 0.167980-0.608575I$ $a=\ \ 0.68138+2.97181I$ $b=-0.03290-1.56661I$	$5.82823+1.27096I$	$-14.7250-7.1500I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.687697 + 1.184100I$ $a = 0.98819 + 1.24337I$ $b = -1.86840 - 0.39246I$	$-1.48207 - 9.06979I$	0
$u = 0.687697 - 1.184100I$ $a = 0.98819 - 1.24337I$ $b = -1.86840 + 0.39246I$	$-1.48207 + 9.06979I$	0
$u = 0.513564 + 0.324791I$ $a = -0.74244 + 1.77974I$ $b = 0.491909 - 1.087890I$	$4.35293 + 1.81909I$	$-12.5856 - 7.0446I$
$u = 0.513564 - 0.324791I$ $a = -0.74244 - 1.77974I$ $b = 0.491909 + 1.087890I$	$4.35293 - 1.81909I$	$-12.5856 + 7.0446I$
$u = 0.249177 + 1.382250I$ $a = -0.314905 - 1.183540I$ $b = 0.249096 + 0.681502I$	$8.37804 - 4.78916I$	0
$u = 0.249177 - 1.382250I$ $a = -0.314905 + 1.183540I$ $b = 0.249096 - 0.681502I$	$8.37804 + 4.78916I$	0
$u = 0.29257 + 1.39174I$ $a = 0.543919 + 0.847268I$ $b = -0.906092 - 0.068662I$	$1.47257 - 1.02886I$	0
$u = 0.29257 - 1.39174I$ $a = 0.543919 - 0.847268I$ $b = -0.906092 + 0.068662I$	$1.47257 + 1.02886I$	0
$u = 1.43426 + 0.49546I$ $a = -0.818674 - 0.319409I$ $b = 1.87334 - 0.08896I$	$-8.06573 + 9.12714I$	0
$u = 1.43426 - 0.49546I$ $a = -0.818674 + 0.319409I$ $b = 1.87334 + 0.08896I$	$-8.06573 - 9.12714I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.234443 + 0.380976I$ $a = -1.84626 + 2.80271I$ $b = -1.046060 - 0.024623I$	$-3.18480 - 2.73332I$	$-12.05403 + 5.98503I$
$u = 0.234443 - 0.380976I$ $a = -1.84626 - 2.80271I$ $b = -1.046060 + 0.024623I$	$-3.18480 + 2.73332I$	$-12.05403 - 5.98503I$
$u = 0.82750 + 1.34118I$ $a = -0.94562 - 1.44691I$ $b = 1.81256 + 0.64877I$	$-5.2595 - 16.9363I$	0
$u = 0.82750 - 1.34118I$ $a = -0.94562 + 1.44691I$ $b = 1.81256 - 0.64877I$	$-5.2595 + 16.9363I$	0
$u = -0.26128 + 1.64077I$ $a = -0.835871 - 1.085830I$ $b = 0.887576 + 0.676070I$	$1.73512 + 3.03684I$	0
$u = -0.26128 - 1.64077I$ $a = -0.835871 + 1.085830I$ $b = 0.887576 - 0.676070I$	$1.73512 - 3.03684I$	0
$u = -0.92014 + 1.38379I$ $a = 1.05538 - 1.29487I$ $b = -1.83164 + 0.57155I$	$-8.22061 + 10.14930I$	0
$u = -0.92014 - 1.38379I$ $a = 1.05538 + 1.29487I$ $b = -1.83164 - 0.57155I$	$-8.22061 - 10.14930I$	0
$u = 1.17080 + 1.22285I$ $a = -1.008100 - 0.971486I$ $b = 1.78040 + 0.43010I$	$-0.81519 - 4.49750I$	0
$u = 1.17080 - 1.22285I$ $a = -1.008100 + 0.971486I$ $b = 1.78040 - 0.43010I$	$-0.81519 + 4.49750I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.238294$ $a=\ \ 1.10963$ $b=-0.360138$	-0.555440	-17.7430
$u=-1.68658+0.74957I$ $a=\ \ 1.071620-0.461588I$ $b=-1.94447+0.11664I$	$-10.77950-1.32110I$	0
$u=-1.68658-0.74957I$ $a=\ \ 1.071620+0.461588I$ $b=-1.94447-0.11664I$	$-10.77950+1.32110I$	0
$u=-2.11735$ $a=-0.666267$ $b=\ \ 1.59201$	-7.38413	0

II. $I_2^u =$
$\langle 5.19\times10^{21}u^{32}-9.68\times10^{21}u^{31}+\cdots+1.70\times10^{22}b-1.89\times10^{23},\ 9.63\times10^{21}u^{32}-6.64\times10^{22}u^{31}+\cdots+2.67\times10^{22}a+9.17\times10^{23},\ u^{33}-3u^{32}+\cdots-3u-11\rangle$

(i) Arc colorings

$$a_9 = \begin{pmatrix}1\\0\end{pmatrix}$$
$$a_{12} = \begin{pmatrix}0\\u\end{pmatrix}$$
$$a_{10} = \begin{pmatrix}1\\u^2\end{pmatrix}$$
$$a_1 = \begin{pmatrix}-u\\u\end{pmatrix}$$
$$a_4 = \begin{pmatrix}-0.361324u^{32}+2.48973u^{31}+\cdots+27.4713u-34.4219\\-0.306100u^{32}+0.570801u^{31}+\cdots+6.12789u+11.1200\end{pmatrix}$$
$$a_2 = \begin{pmatrix}-0.883120u^{32}+2.84019u^{31}+\cdots+47.3126u-15.8633\\0.0177951u^{32}+0.440778u^{31}+\cdots+2.04823u-2.25569\end{pmatrix}$$
$$a_3 = \begin{pmatrix}-0.667424u^{32}+3.06053u^{31}+\cdots+33.5992u-23.3019\\-0.306100u^{32}+0.570801u^{31}+\cdots+6.12789u+11.1200\end{pmatrix}$$
$$a_8 = \begin{pmatrix}-1.06983u^{32}+2.82773u^{31}+\cdots+1.48987u+8.00809\\0.864764u^{32}-2.19475u^{31}+\cdots-10.8117u-5.34467\end{pmatrix}$$
$$a_7 = \begin{pmatrix}-0.575663u^{32}+1.30304u^{31}+\cdots-0.712432u+8.20383\\0.370601u^{32}-0.670060u^{31}+\cdots-8.60944u-5.54041\end{pmatrix}$$
$$a_6 = \begin{pmatrix}-0.761489u^{32}+2.09630u^{31}+\cdots-1.71773u+7.32684\\0.594062u^{32}-1.51722u^{31}+\cdots-9.94618u-2.94683\end{pmatrix}$$
$$a_5 = \begin{pmatrix}-1.15234u^{32}+4.53564u^{31}+\cdots+38.8556u-30.8553\\0.461484u^{32}-1.56817u^{31}+\cdots-5.73776u-0.574177\end{pmatrix}$$
$$a_{11} = \begin{pmatrix}0.844408u^{32}-4.18554u^{31}+\cdots-24.8597u+32.7171\\-0.233714u^{32}+1.17394u^{31}+\cdots+7.38558u-13.6829\end{pmatrix}$$

(ii) Obstruction class $= 1$

(iii) Cusp Shapes $= \frac{16825122534945883551404}{16961432124929635941773}u^{32}-\frac{7348768677880849584332 5}{16961432124929635941773}u^{31}+\cdots-\frac{4922553039442917393 1634}{892706953943665049567}u+\frac{16606743679821360892 2909}{16961432124929635941773}$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{33} - 12u^{32} + \cdots - 104u + 16$
c_2	$u^{33} + 3u^{32} + \cdots - 3u - 1$
c_3	$u^{33} - 9u^{31} + \cdots - 5u + 1$
c_4	$u^{33} + 10u^{31} + \cdots - 3u - 1$
c_5	$u^{33} - 3u^{32} + \cdots - 3u + 1$
c_6	$u^{33} - u^{32} + \cdots + 177u + 41$
c_7	$u^{33} + u^{32} + \cdots + 92u - 13$
c_8	$u^{33} - 9u^{31} + \cdots - 5u - 1$
c_9	$u^{33} - 3u^{32} + \cdots - 3u - 11$
c_{10}	$u^{33} + 10u^{31} + \cdots - 3u + 1$
c_{11}	$u^{33} + u^{32} + \cdots - 8u + 1$
c_{12}	$u^{33} + 3u^{32} + \cdots - 3u + 11$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{33} - 40y^{32} + \cdots - 4288y - 256$
c_2, c_5	$y^{33} - 17y^{32} + \cdots + 21y - 1$
c_3, c_8	$y^{33} - 18y^{32} + \cdots + 5y - 1$
c_4, c_{10}	$y^{33} + 20y^{32} + \cdots + 19y - 1$
c_6	$y^{33} + 9y^{32} + \cdots + 333y - 1681$
c_7	$y^{33} - 23y^{32} + \cdots - 4016y - 169$
c_9, c_{12}	$y^{33} + 21y^{32} + \cdots - 2125y - 121$
c_{11}	$y^{33} + 13y^{32} + \cdots + 22y - 1$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.459052 + 0.905733I$ $a = -0.56066 - 1.70826I$ $b = 1.72209 + 0.16447I$	$-8.51907 - 1.87974I$	$-1.03019 - 5.88561I$
$u = 0.459052 - 0.905733I$ $a = -0.56066 + 1.70826I$ $b = 1.72209 - 0.16447I$	$-8.51907 + 1.87974I$	$-1.03019 + 5.88561I$
$u = -0.245360 + 1.061590I$ $a = 0.930247 - 0.636269I$ $b = 0.074224 + 0.799741I$	$3.51668 + 7.97897I$	$-7.39109 - 6.52906I$
$u = -0.245360 - 1.061590I$ $a = 0.930247 + 0.636269I$ $b = 0.074224 - 0.799741I$	$3.51668 - 7.97897I$	$-7.39109 + 6.52906I$
$u = -0.610076 + 0.668441I$ $a = -0.217068 - 1.379820I$ $b = 0.662456 + 1.019410I$	$4.64509 - 1.25556I$	$-6.42802 - 3.34918I$
$u = -0.610076 - 0.668441I$ $a = -0.217068 + 1.379820I$ $b = 0.662456 - 1.019410I$	$4.64509 + 1.25556I$	$-6.42802 + 3.34918I$
$u = 0.454768 + 0.770417I$ $a = 0.27414 + 2.29897I$ $b = -1.036150 - 0.409481I$	$-2.95118 + 1.41193I$	$-9.56268 - 0.25561I$
$u = 0.454768 - 0.770417I$ $a = 0.27414 - 2.29897I$ $b = -1.036150 + 0.409481I$	$-2.95118 - 1.41193I$	$-9.56268 + 0.25561I$
$u = -0.029969 + 1.160230I$ $a = -0.240386 + 0.550783I$ $b = -0.048969 - 1.022730I$	$7.83061 + 1.07084I$	$-7.89231 - 6.76156I$
$u = -0.029969 - 1.160230I$ $a = -0.240386 - 0.550783I$ $b = -0.048969 + 1.022730I$	$7.83061 - 1.07084I$	$-7.89231 + 6.76156I$

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.046952+0.778136I$ $a=\ \ 0.18434-2.62639I$ $b=\ \ 0.05144+1.43505I$	$6.31075-0.74758I$	$-5.46772-0.87004I$
$u=-0.046952-0.778136I$ $a=\ \ 0.18434+2.62639I$ $b=\ \ 0.05144-1.43505I$	$6.31075+0.74758I$	$-5.46772+0.87004I$
$u=-0.333275+1.193090I$ $a=-0.27031+1.62232I$ $b=-0.277614-0.782132I$	$3.69256-5.45915I$	$-5.46961+5.79594I$
$u=-0.333275-1.193090I$ $a=-0.27031-1.62232I$ $b=-0.277614+0.782132I$	$3.69256+5.45915I$	$-5.46961-5.79594I$
$u=\ \ 0.553223+1.118550I$ $a=\ \ 0.197888+0.797204I$ $b=-1.350490-0.096338I$	$-1.51828-5.36008I$	$-7.21231+8.64726I$
$u=\ \ 0.553223-1.118550I$ $a=\ \ 0.197888-0.797204I$ $b=-1.350490+0.096338I$	$-1.51828+5.36008I$	$-7.21231-8.64726I$
$u=\ \ 0.285884+1.215990I$ $a=-0.187548-0.002564I$ $b=-0.228537+0.409155I$	$0.97377-3.53160I$	$-11.50426+5.16930I$
$u=\ \ 0.285884-1.215990I$ $a=-0.187548+0.002564I$ $b=-0.228537-0.409155I$	$0.97377+3.53160I$	$-11.50426-5.16930I$
$u=\ \ 0.665375$ $a=-0.938279$ $b=-0.233345$	-2.65548	-15.0300
$u=-0.373186+0.529413I$ $a=-0.24508-1.41919I$ $b=-1.71902+0.10927I$	$-6.11499+4.40709I$	$-10.75692-0.28206I$

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.373186-0.529413I$ $a=-0.24508+1.41919I$ $b=-1.71902-0.10927I$	$-6.11499-4.40709I$	$-10.75692+0.28206I$
$u=\ 1.36215$ $a=-0.700896$ $b=\ 1.92850$	-10.6105	-14.9290
$u=\ 0.26216+1.39678I$ $a=-0.009915+1.296920I$ $b=\ 0.237993-0.526775I$	$1.50022-0.84587I$	$-12.00000+0.I$
$u=\ 0.26216-1.39678I$ $a=-0.009915-1.296920I$ $b=\ 0.237993+0.526775I$	$1.50022+0.84587I$	$-12.00000+0.I$
$u=-0.217483+0.524802I$ $a=\ 0.56077+3.45838I$ $b=\ 0.851151-0.357375I$	$-3.87405+1.39425I$	$-10.67403-4.79504I$
$u=-0.217483-0.524802I$ $a=\ 0.56077-3.45838I$ $b=\ 0.851151+0.357375I$	$-3.87405-1.39425I$	$-10.67403+4.79504I$
$u=\ 0.48836+1.34669I$ $a=\ 0.522857-0.665638I$ $b=-0.716644+0.590418I$	$0.77285-3.95768I$	$-12.00000+4.64056I$
$u=\ 0.48836-1.34669I$ $a=\ 0.522857+0.665638I$ $b=-0.716644-0.590418I$	$0.77285+3.95768I$	$-12.00000-4.64056I$
$u=-0.93001+1.09186I$ $a=-0.543452+0.798842I$ $b=\ 1.44498-0.28184I$	$0.88870+3.81447I$	$-7.70305-4.44957I$
$u=-0.93001-1.09186I$ $a=-0.543452-0.798842I$ $b=\ 1.44498+0.28184I$	$0.88870-3.81447I$	$-7.70305+4.44957I$

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.27081+1.41098I$ $a=-0.338582+1.197300I$ $b=\ \ 0.268339-0.592788I$	$8.14231+4.67717I$	$-20.9718+2.5564I$
$u=-0.27081-1.41098I$ $a=-0.338582-1.197300I$ $b=\ \ 0.268339+0.592788I$	$8.14231-4.67717I$	$-20.9718-2.5564I$
$u=\ \ 2.07982$ $a=\ \ 0.615608$ $b=-1.56567$	-7.45635	0

III. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1	$(u^{33}-12u^{32}+\cdots-104u+16)(u^{84}-3u^{83}+\cdots+8464u+8464)$
c_2	$(u^{33}+3u^{32}+\cdots-3u-1)(u^{84}+4u^{83}+\cdots-959u-69)$
c_3	$(u^{33}-9u^{31}+\cdots-5u+1)(u^{84}-u^{83}+\cdots-231109u-59333)$
c_4	$(u^{33}+10u^{31}+\cdots-3u-1)(u^{84}-u^{83}+\cdots-99u-85)$
c_5	$(u^{33}-3u^{32}+\cdots-3u+1)(u^{84}+4u^{83}+\cdots-959u-69)$
c_6	$(u^{33}-u^{32}+\cdots+177u+41)(u^{84}+8u^{83}+\cdots+13309u+799)$
c_7	$(u^{33}+u^{32}+\cdots+92u-13)$ $\cdot(u^{84}+2u^{83}+\cdots-28656216u-9025047)$
c_8	$(u^{33}-9u^{31}+\cdots-5u-1)(u^{84}-u^{83}+\cdots-231109u-59333)$
c_9	$(u^{33}-3u^{32}+\cdots-3u-11)(u^{84}-2u^{83}+\cdots-931u+393)$
c_{10}	$(u^{33}+10u^{31}+\cdots-3u+1)(u^{84}-u^{83}+\cdots-99u-85)$
c_{11}	$(u^{33}+u^{32}+\cdots-8u+1)(u^{84}-2u^{83}+\cdots-66u-71)$
c_{12}	$(u^{33}+3u^{32}+\cdots-3u+11)(u^{84}-2u^{83}+\cdots-931u+393)$

IV. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1	$(y^{33} - 40y^{32} + \cdots - 4288y - 256)$ $\cdot (y^{84} - 105y^{83} + \cdots - 4667929856y + 71639296)$
c_2, c_5	$(y^{33} - 17y^{32} + \cdots + 21y - 1)(y^{84} - 54y^{83} + \cdots - 314551y + 4761)$
c_3, c_8	$(y^{33} - 18y^{32} + \cdots + 5y - 1)$ $\cdot (y^{84} - 91y^{83} + \cdots - 79247924731y + 3520404889)$
c_4, c_{10}	$(y^{33} + 20y^{32} + \cdots + 19y - 1)(y^{84} + 43y^{83} + \cdots + 129599y + 7225)$
c_6	$(y^{33} + 9y^{32} + \cdots + 333y - 1681)$ $\cdot (y^{84} + 4y^{83} + \cdots - 82932175y + 638401)$
c_7	$(y^{33} - 23y^{32} + \cdots - 4016y - 169)$ $\cdot (y^{84} - 108y^{83} + \cdots - 5560618845808998y + 81451473352209)$
c_9, c_{12}	$(y^{33} + 21y^{32} + \cdots - 2125y - 121)$ $\cdot (y^{84} + 36y^{83} + \cdots + 530747y + 154449)$
c_{11}	$(y^{33} + 13y^{32} + \cdots + 22y - 1)(y^{84} + 20y^{83} + \cdots - 234396y + 5041)$