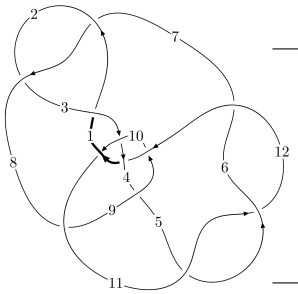
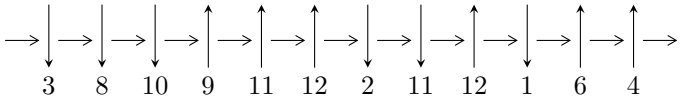
$12n_{0560}$ $(K12n_{0560})$



A knot diagram[1]

Linearized knot diagam



Solving Sequence

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

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

$$\begin{aligned} I_1^u = \langle & 1.42324 \times 10^{291} u^{90} - 7.99634 \times 10^{291} u^{89} + \cdots + 6.85609 \times 10^{290} b - 1.64543 \times 10^{293}, \\ & 1.60031 \times 10^{293} u^{90} - 1.04522 \times 10^{294} u^{89} + \cdots + 3.22236 \times 10^{292} a + 2.54763 \times 10^{294}, \\ & u^{91} - 7u^{90} + \cdots + 305u - 47 \rangle \\ I_2^u = \langle & -2.64305 \times 10^{19} u^{24} + 3.18164 \times 10^{19} u^{23} + \cdots + 8.71996 \times 10^{19} b - 3.13920 \times 10^{20}, \\ & 2.80082 \times 10^{20} u^{24} + 7.55212 \times 10^{19} u^{23} + \cdots + 8.71996 \times 10^{19} a + 5.21556 \times 10^{20}, \ u^{25} + 2u^{23} + \cdots + 4u - 1 \end{aligned}$$

* 2 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 116 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. $\boldsymbol{I_1^u = \langle 1.42 \times 10^{291} u^{90} - 8.00 \times 10^{291} u^{89} + \cdots + 6.86 \times 10^{290} b - 1.65 \times 10^{293},\ 1.60 \times 10^{293} u^{90} - 1.05 \times 10^{294} u^{89} + \cdots + 3.22 \times 10^{292} a + 2.55 \times 10^{294},\ u^{91} - 7u^{90} + \cdots + 305u - 47 \rangle}$

(i) Arc colorings

$$a_4 = \begin{pmatrix} 0 \\ u \end{pmatrix}$$

$$a_{12} = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$

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

$$a_{10} = \begin{pmatrix} -4.96626u^{90} + 32.4364u^{89} + \cdots + 711.369u - 79.0609 \\ -2.07587u^{90} + 11.6631u^{89} + \cdots - 1257.99u + 239.995 \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} -4.98333u^{90} + 33.0713u^{89} + \cdots + 1492.91u - 209.668 \\ -2.27023u^{90} + 12.8918u^{89} + \cdots - 1099.99u + 215.772 \end{pmatrix}$$

$$a_3 = \begin{pmatrix} 2.58074u^{90} - 20.1384u^{89} + \cdots - 790.887u + 148.913 \\ 1.94318u^{90} - 13.7938u^{89} + \cdots - 338.479u + 33.8324 \end{pmatrix}$$

$$a_9 = \begin{pmatrix} -2.89039u^{90} + 20.7733u^{89} + \cdots + 1969.36u - 319.056 \\ -2.07587u^{90} + 11.6631u^{89} + \cdots - 1257.99u + 239.995 \end{pmatrix}$$

$$a_5 = \begin{pmatrix} 1.50799u^{90} - 13.5634u^{89} + \cdots - 927.092u + 175.394 \\ -0.870427u^{90} + 7.21886u^{89} + \cdots + 476.684u - 60.3132 \end{pmatrix}$$

$$a_6 = \begin{pmatrix} -5.00106u^{90} + 32.5812u^{89} + \cdots + 1080.14u - 94.8173 \\ -0.980277u^{90} + 5.64049u^{89} + \cdots - 81.5790u + 47.6240 \end{pmatrix}$$

$$a_7 = \begin{pmatrix} -5.98134u^{90} + 38.2217u^{89} + \cdots + 998.557u - 47.1934 \\ -0.980277u^{90} + 5.64049u^{89} + \cdots - 81.5790u + 47.6240 \end{pmatrix}$$

$$a_8 = \begin{pmatrix} 6.01042u^{90} - 36.3053u^{89} + \cdots + 462.327u - 156.674 \\ 0.972663u^{90} - 4.59162u^{89} + \cdots + 973.368u - 177.396 \end{pmatrix}$$

$$a_2 = \begin{pmatrix} -0.270000u^{90} + 1.95357u^{89} + \cdots + 1656.96u - 236.764 \\ 1.24299u^{90} - 9.26255u^{89} + \cdots + 183.479u - 30.9742 \end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= 0.0659084u^{90} + 0.108969u^{89} + \cdots + 1395.40u - 251.958$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{91}+43u^{90}+\cdots+22u+1$
c_2, c_7	$u^{91}+u^{90}+\cdots-11u^2+1$
c_3	$u^{91}+2u^{90}+\cdots-23u+1$
c_4	$u^{91}+5u^{90}+\cdots+95u+82807$
c_5, c_6, c_{11}	$u^{91}-14u^{89}+\cdots-6u-11$
c_8	$u^{91}+11u^{90}+\cdots-151800u+12173$
c_9	$u^{91}-4u^{90}+\cdots-12908u+7912$
c_{10}	$u^{91}-3u^{90}+\cdots+21u-1$
c_{12}	$u^{91}+7u^{90}+\cdots+305u+47$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{91} + 17y^{90} + \cdots - 98y - 1$
c_2, c_7	$y^{91} - 43y^{90} + \cdots + 22y - 1$
c_3	$y^{91} + 8y^{90} + \cdots - 29y - 1$
c_4	$y^{91} + 77y^{90} + \cdots - 84473564657y - 6856999249$
c_5, c_6, c_{11}	$y^{91} - 28y^{90} + \cdots + 10728y - 121$
c_8	$y^{91} - 87y^{90} + \cdots + 8802996794y - 148181929$
c_9	$y^{91} + 28y^{90} + \cdots - 2966219056y - 62599744$
c_{10}	$y^{91} + 5y^{90} + \cdots - 85y - 1$
c_{12}	$y^{91} + 17y^{90} + \cdots - 72509y - 2209$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 1.01604$ $a = 1.19618$ $b = -0.619180$	-2.35258	0
$u = -0.535517 + 0.817566I$ $a = 0.40065 - 1.51679I$ $b = 0.79833 - 1.30743I$	$2.27808 - 2.47811I$	0
$u = -0.535517 - 0.817566I$ $a = 0.40065 + 1.51679I$ $b = 0.79833 + 1.30743I$	$2.27808 + 2.47811I$	0
$u = 0.502928 + 0.818348I$ $a = 0.26548 + 1.71837I$ $b = 0.71649 + 1.50318I$	$1.57510 + 7.93270I$	0
$u = 0.502928 - 0.818348I$ $a = 0.26548 - 1.71837I$ $b = 0.71649 - 1.50318I$	$1.57510 - 7.93270I$	0
$u = 0.511576 + 0.754182I$ $a = -0.282864 + 1.046630I$ $b = -0.15969 + 1.50698I$	$-3.58497 + 3.35574I$	0
$u = 0.511576 - 0.754182I$ $a = -0.282864 - 1.046630I$ $b = -0.15969 - 1.50698I$	$-3.58497 - 3.35574I$	0
$u = -0.340411 + 0.838886I$ $a = 2.01135 - 0.30444I$ $b = 0.224821 + 0.577269I$	$-5.14562 + 4.77451I$	0
$u = -0.340411 - 0.838886I$ $a = 2.01135 + 0.30444I$ $b = 0.224821 - 0.577269I$	$-5.14562 - 4.77451I$	0
$u = 0.402058 + 1.018890I$ $a = 0.309845 + 0.736789I$ $b = 0.920317 + 0.286799I$	$1.85645 + 0.03554I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.402058 - 1.018890I$ $a = 0.309845 - 0.736789I$ $b = 0.920317 - 0.286799I$	$1.85645 - 0.03554I$	0
$u = 0.285864 + 0.847239I$ $a = 1.201830 + 0.295601I$ $b = -0.237159 - 0.435090I$	$-3.55210 - 0.95036I$	0
$u = 0.285864 - 0.847239I$ $a = 1.201830 - 0.295601I$ $b = -0.237159 + 0.435090I$	$-3.55210 + 0.95036I$	0
$u = -0.713254 + 0.852005I$ $a = 0.590412 - 0.913948I$ $b = 1.40202 - 0.39992I$	$2.06775 - 4.11651I$	0
$u = -0.713254 - 0.852005I$ $a = 0.590412 + 0.913948I$ $b = 1.40202 + 0.39992I$	$2.06775 + 4.11651I$	0
$u = -0.375828 + 0.777228I$ $a = 2.13286 + 0.69059I$ $b = 0.149648 + 1.035570I$	$-5.60570 - 1.85793I$	0
$u = -0.375828 - 0.777228I$ $a = 2.13286 - 0.69059I$ $b = 0.149648 - 1.035570I$	$-5.60570 + 1.85793I$	0
$u = 0.058258 + 1.148570I$ $a = -0.157026 + 0.120099I$ $b = -1.033890 - 0.104076I$	$-0.18986 - 2.74164I$	0
$u = 0.058258 - 1.148570I$ $a = -0.157026 - 0.120099I$ $b = -1.033890 + 0.104076I$	$-0.18986 + 2.74164I$	0
$u = -0.741814 + 0.880371I$ $a = 0.571332 - 1.268100I$ $b = 1.232440 - 0.542664I$	$1.99911 - 1.44766I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.741814-0.880371I$ $a=\ \ 0.571332+1.268100I$ $b=\ \ 1.232440+0.542664I$	$1.99911+1.44766I$	0
$u=-0.504843+0.650504I$ $a=-0.093611-1.221940I$ $b=\ \ 1.16969-2.24380I$	$-5.05641-1.58259I$	0
$u=-0.504843-0.650504I$ $a=-0.093611+1.221940I$ $b=\ \ 1.16969+2.24380I$	$-5.05641+1.58259I$	0
$u=\ \ 0.414171+0.694826I$ $a=-0.85543+1.18748I$ $b=\ \ 0.63014+1.40371I$	$-3.09163+4.24015I$	0
$u=\ \ 0.414171-0.694826I$ $a=-0.85543-1.18748I$ $b=\ \ 0.63014-1.40371I$	$-3.09163-4.24015I$	0
$u=\ \ 0.460264+1.102830I$ $a=-0.375405+0.085886I$ $b=-1.151740+0.417119I$	$-0.85952-3.02137I$	0
$u=\ \ 0.460264-1.102830I$ $a=-0.375405-0.085886I$ $b=-1.151740-0.417119I$	$-0.85952+3.02137I$	0
$u=\ \ 0.742276+0.943517I$ $a=\ \ 0.31758+1.38675I$ $b=\ \ 1.227720+0.697519I$	$1.14861+5.13293I$	0
$u=\ \ 0.742276-0.943517I$ $a=\ \ 0.31758-1.38675I$ $b=\ \ 1.227720-0.697519I$	$1.14861-5.13293I$	0
$u=\ \ 0.284021+0.743601I$ $a=\ \ 1.24425-0.68339I$ $b=-0.230665-1.105310I$	$-3.42068-1.44050I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.284021 - 0.743601I$ $a = 1.24425 + 0.68339I$ $b = -0.230665 + 1.105310I$	$-3.42068 + 1.44050I$	0
$u = 0.910189 + 0.791577I$ $a = -0.01089 - 1.43365I$ $b = -1.095740 - 0.429637I$	$0.52246 + 9.04938I$	0
$u = 0.910189 - 0.791577I$ $a = -0.01089 + 1.43365I$ $b = -1.095740 + 0.429637I$	$0.52246 - 9.04938I$	0
$u = -0.302014 + 0.713600I$ $a = -2.26078 - 1.63663I$ $b = 0.159232 - 1.216630I$	$-5.43065 - 8.18174I$	0
$u = -0.302014 - 0.713600I$ $a = -2.26078 + 1.63663I$ $b = 0.159232 + 1.216630I$	$-5.43065 + 8.18174I$	0
$u = -0.480089 + 0.602783I$ $a = 0.353743 - 0.681474I$ $b = 2.04861 - 1.58222I$	$-4.22204 - 8.04480I$	0
$u = -0.480089 - 0.602783I$ $a = 0.353743 + 0.681474I$ $b = 2.04861 + 1.58222I$	$-4.22204 + 8.04480I$	0
$u = -0.497589 + 0.584067I$ $a = 0.377588 - 0.738280I$ $b = 0.097090 - 0.481940I$	$0.092786 - 1.282950I$	0
$u = -0.497589 - 0.584067I$ $a = 0.377588 + 0.738280I$ $b = 0.097090 + 0.481940I$	$0.092786 + 1.282950I$	0
$u = -0.673714 + 0.358408I$ $a = 0.06705 + 1.69725I$ $b = -0.034930 + 0.383069I$	$3.79905 - 0.34651I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.673714-0.358408I$ $a=\ \ 0.06705-1.69725I$ $b=-0.034930-0.383069I$	$3.79905+0.34651I$	0
$u=\ \ 0.446976+0.607186I$ $a=-0.141520+0.286604I$ $b=\ \ 1.50527+1.04718I$	$-2.59552+3.93278I$	0
$u=\ \ 0.446976-0.607186I$ $a=-0.141520-0.286604I$ $b=\ \ 1.50527-1.04718I$	$-2.59552-3.93278I$	0
$u=\ \ 0.363853+0.660110I$ $a=-1.45967+0.78808I$ $b=\ \ 0.537801+1.081090I$	$-3.13954+4.13473I$	0
$u=\ \ 0.363853-0.660110I$ $a=-1.45967-0.78808I$ $b=\ \ 0.537801-1.081090I$	$-3.13954-4.13473I$	0
$u=\ \ 0.028752+0.743600I$ $a=\ \ 0.90014-1.11196I$ $b=\ \ 1.025710-0.494567I$	$1.57975-5.06929I$	$3.40615+6.58792I$
$u=\ \ 0.028752-0.743600I$ $a=\ \ 0.90014+1.11196I$ $b=\ \ 1.025710+0.494567I$	$1.57975+5.06929I$	$3.40615-6.58792I$
$u=\ \ 0.594560+0.426667I$ $a=-0.04951-1.87310I$ $b=\ \ 0.143426-0.493407I$	$2.86065+6.12466I$	$4.32139-3.78741I$
$u=\ \ 0.594560-0.426667I$ $a=-0.04951+1.87310I$ $b=\ \ 0.143426+0.493407I$	$2.86065-6.12466I$	$4.32139+3.78741I$
$u=\ \ 0.218750+0.688010I$ $a=\ \ 0.645428-1.061520I$ $b=-0.68419-1.74369I$	$-3.36300-1.77948I$	$-3.50603+0.I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.218750 - 0.688010I$ $a = 0.645428 + 1.061520I$ $b = -0.68419 + 1.74369I$	$-3.36300 + 1.77948I$	$-3.50603 + 0.I$
$u = 0.545467 + 0.431685I$ $a = -0.074540 + 0.701667I$ $b = 0.889500 + 0.070322I$	$1.96216 + 0.22695I$	$4.23087 + 0.I$
$u = 0.545467 - 0.431685I$ $a = -0.074540 - 0.701667I$ $b = 0.889500 - 0.070322I$	$1.96216 - 0.22695I$	$4.23087 + 0.I$
$u = -0.102087 + 0.676145I$ $a = -0.233110 + 0.687881I$ $b = -2.15100 + 1.28770I$	$-6.63479 - 0.59130I$	$-12.98882 + 3.14697I$
$u = -0.102087 - 0.676145I$ $a = -0.233110 - 0.687881I$ $b = -2.15100 - 1.28770I$	$-6.63479 + 0.59130I$	$-12.98882 - 3.14697I$
$u = 0.998262 + 0.869039I$ $a = 0.067358 - 0.815973I$ $b = -0.299483 - 1.286640I$	$3.31066 + 7.23468I$	0
$u = 0.998262 - 0.869039I$ $a = 0.067358 + 0.815973I$ $b = -0.299483 + 1.286640I$	$3.31066 - 7.23468I$	0
$u = -1.033450 + 0.831448I$ $a = -0.038034 + 0.942725I$ $b = -1.029820 + 0.324116I$	$3.34151 - 3.93858I$	0
$u = -1.033450 - 0.831448I$ $a = -0.038034 - 0.942725I$ $b = -1.029820 - 0.324116I$	$3.34151 + 3.93858I$	0
$u = -0.261728 + 0.615539I$ $a = -2.94921 - 0.18053I$ $b = 0.109955 - 0.715148I$	$-6.25736 - 0.83262I$	$-7.87690 + 5.16658I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.261728-0.615539I$ $a=-2.94921+0.18053I$ $b=\ 0.109955+0.715148I$	$-6.25736+0.83262I$	$-7.87690-5.16658I$
$u=-0.194564+0.638280I$ $a=\ 0.28089+1.43719I$ $b=-1.12572+2.51057I$	$-5.23507+6.16040I$	$-8.39174-2.47750I$
$u=-0.194564-0.638280I$ $a=\ 0.28089-1.43719I$ $b=-1.12572-2.51057I$	$-5.23507-6.16040I$	$-8.39174+2.47750I$
$u=-0.986413+0.910702I$ $a=-0.221007+0.799561I$ $b=-0.770257+0.912345I$	$4.97604-3.20928I$	0
$u=-0.986413-0.910702I$ $a=-0.221007-0.799561I$ $b=-0.770257-0.912345I$	$4.97604+3.20928I$	0
$u=-0.991243+0.963315I$ $a=-0.446900+0.584288I$ $b=-0.598317+0.267301I$	$4.80687-3.95661I$	0
$u=-0.991243-0.963315I$ $a=-0.446900-0.584288I$ $b=-0.598317-0.267301I$	$4.80687+3.95661I$	0
$u=\ 0.90962+1.16042I$ $a=\ 0.078620+1.053680I$ $b=\ 1.05321+1.57050I$	$-6.10439+10.63170I$	0
$u=\ 0.90962-1.16042I$ $a=\ 0.078620-1.053680I$ $b=\ 1.05321-1.57050I$	$-6.10439-10.63170I$	0
$u=\ 0.428497+0.292362I$ $a=\ 1.77420-1.75353I$ $b=\ 0.028181-0.367461I$	$-2.56443+0.09717I$	$-5.59647+2.57495I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.428497 - 0.292362I$ $a = 1.77420 + 1.75353I$ $b = 0.028181 + 0.367461I$	$-2.56443 - 0.09717I$	$-5.59647 - 2.57495I$
$u = -0.87514 + 1.22658I$ $a = 0.144233 - 0.854884I$ $b = 0.96894 - 1.32160I$	$-3.36726 - 4.90530I$	0
$u = -0.87514 - 1.22658I$ $a = 0.144233 + 0.854884I$ $b = 0.96894 + 1.32160I$	$-3.36726 + 4.90530I$	0
$u = 0.94331 + 1.19971I$ $a = -0.169263 - 1.089060I$ $b = -1.33197 - 1.37362I$	$-4.5800 + 17.8673I$	0
$u = 0.94331 - 1.19971I$ $a = -0.169263 + 1.089060I$ $b = -1.33197 + 1.37362I$	$-4.5800 - 17.8673I$	0
$u = -0.94052 + 1.24202I$ $a = -0.174744 + 0.929431I$ $b = -1.25394 + 1.23411I$	$-2.27694 - 11.69080I$	0
$u = -0.94052 - 1.24202I$ $a = -0.174744 - 0.929431I$ $b = -1.25394 - 1.23411I$	$-2.27694 + 11.69080I$	0
$u = 1.41485 + 0.77869I$ $a = 0.547555 + 0.138125I$ $b = 0.067268 - 0.722636I$	$-4.62300 - 2.85364I$	0
$u = 1.41485 - 0.77869I$ $a = 0.547555 - 0.138125I$ $b = 0.067268 + 0.722636I$	$-4.62300 + 2.85364I$	0
$u = 1.44495 + 0.79736I$ $a = -0.509329 - 0.265566I$ $b = -0.478594 + 0.693261I$	$-3.06039 - 9.76728I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 1.44495 - 0.79736I$ $a = -0.509329 + 0.265566I$ $b = -0.478594 - 0.693261I$	$-3.06039 + 9.76728I$	0
$u = 1.06507 + 1.26835I$ $a = 0.143056 - 0.747980I$ $b = -0.86720 - 1.24106I$	$-9.27014 + 8.28225I$	0
$u = 1.06507 - 1.26835I$ $a = 0.143056 + 0.747980I$ $b = -0.86720 + 1.24106I$	$-9.27014 - 8.28225I$	0
$u = 1.04610 + 1.32186I$ $a = -0.151116 + 0.596915I$ $b = 0.481748 + 1.262360I$	$-9.28249 + 1.00021I$	0
$u = 1.04610 - 1.32186I$ $a = -0.151116 - 0.596915I$ $b = 0.481748 - 1.262360I$	$-9.28249 - 1.00021I$	0
$u = 1.37255 + 1.03578I$ $a = -0.0804674 - 0.0826292I$ $b = 0.248762 - 0.181381I$	$2.54445 + 0.33057I$	0
$u = 1.37255 - 1.03578I$ $a = -0.0804674 + 0.0826292I$ $b = 0.248762 + 0.181381I$	$2.54445 - 0.33057I$	0
$u = -1.73516 + 0.39741I$ $a = -0.134060 + 0.341837I$ $b = -0.254729 - 0.475398I$	$-0.07241 + 3.27810I$	0
$u = -1.73516 - 0.39741I$ $a = -0.134060 - 0.341837I$ $b = -0.254729 + 0.475398I$	$-0.07241 - 3.27810I$	0
$u = -1.11582 + 1.99033I$ $a = -0.048659 + 0.189309I$ $b = -0.737678 + 0.505950I$	$-0.98131 - 4.61659I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-1.11582-1.99033I$		
$a=-0.048659-0.189309I$	$-0.98131+4.61659I$	0
$b=-0.737678-0.505950I$		

II.

$\boldsymbol{I_2^u = \langle -2.64\times10^{19}u^{24}+3.18\times10^{19}u^{23}+\cdots+8.72\times10^{19}b-3.14\times10^{20},\ 2.80\times10^{20}u^{24}+7.55\times10^{19}u^{23}+\cdots+8.72\times10^{19}a+5.22\times10^{20},\ u^{25}+2u^{23}+\cdots+4u-1\rangle}$

(i) Arc colorings

$$a_4 = \begin{pmatrix} 0 \\ u \end{pmatrix}$$

$$a_{12} = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$

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

$$a_{10} = \begin{pmatrix} -3.21197u^{24} - 0.866073u^{23} + \cdots + 16.9203u - 5.98118 \\ 0.303103u^{24} - 0.364868u^{23} + \cdots - 5.38385u + 3.60002 \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} -3.82838u^{24} - 0.788978u^{23} + \cdots + 22.0518u - 8.71512 \\ -0.101126u^{24} - 0.624329u^{23} + \cdots - 4.45906u + 3.52292 \end{pmatrix}$$

$$a_3 = \begin{pmatrix} 1.66182u^{24} + 0.658680u^{23} + \cdots - 8.52517u + 2.36146 \\ 0.0602588u^{24} + 0.229053u^{23} + \cdots - 2.03906u + 0.680994 \end{pmatrix}$$

$$a_9 = \begin{pmatrix} -3.51507u^{24} - 0.501204u^{23} + \cdots + 22.3042u - 9.58120 \\ 0.303103u^{24} - 0.364868u^{23} + \cdots - 5.38385u + 3.60002 \end{pmatrix}$$

$$a_5 = \begin{pmatrix} 0.593776u^{24} + 0.232884u^{23} + \cdots + 4.39695u - 1.88991 \\ 1.00779u^{24} + 0.196742u^{23} + \cdots - 8.88306u + 3.57037 \end{pmatrix}$$

$$a_6 = \begin{pmatrix} -2.00624u^{24} - 0.0702191u^{23} + \cdots + 18.2833u - 6.90613 \\ 0.508993u^{24} - 0.581731u^{23} + \cdots - 4.36214u + 3.08544 \end{pmatrix}$$

$$a_7 = \begin{pmatrix} -1.49725u^{24} - 0.651950u^{23} + \cdots + 13.9212u - 3.82069 \\ 0.508993u^{24} - 0.581731u^{23} + \cdots - 4.36214u + 3.08544 \end{pmatrix}$$

$$a_8 = \begin{pmatrix} 3.90173u^{24} + 1.01120u^{23} + \cdots - 17.2606u + 5.63795 \\ -0.127927u^{24} + 0.342888u^{23} + \cdots + 4.01910u - 3.58318 \end{pmatrix}$$

$$a_2 = \begin{pmatrix} 2.18487u^{24} + 1.41269u^{23} + \cdots - 6.74107u + 1.97101 \\ -0.499169u^{24} - 0.167673u^{23} + \cdots + 1.13386u - 1.21729 \end{pmatrix}$$

(ii) Obstruction class $= 1$

(iii) Cusp Shapes $= \frac{226713202827690363303}{8719962383207824017 5}u^{24} + \frac{142242531702877178101}{871996238320782401 75}u^{23} + \cdots - \frac{1287113238265159786709}{871996238320782401 75}u - \frac{312795063825558794366}{871996238320782401 75}$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{25} - 12u^{24} + \cdots + 11u - 1$
c_2	$u^{25} - 6u^{23} + \cdots + u - 1$
c_3	$u^{25} - u^{24} + \cdots - 6u - 1$
c_4	$u^{25} + 4u^{23} + \cdots + 10u^2 - 1$
c_5, c_6	$u^{25} - u^{24} + \cdots + u - 1$
c_7	$u^{25} - 6u^{23} + \cdots + u + 1$
c_8	$u^{25} - 12u^{24} + \cdots + 55u - 11$
c_9	$u^{25} + 5u^{24} + \cdots - 19u + 7$
c_{10}	$u^{25} + 4u^{23} + \cdots - 2u - 1$
c_{11}	$u^{25} + u^{24} + \cdots + u + 1$
c_{12}	$u^{25} + 2u^{23} + \cdots + 4u - 1$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{25} + 8y^{24} + \cdots - 17y - 1$
c_2, c_7	$y^{25} - 12y^{24} + \cdots + 11y - 1$
c_3	$y^{25} + 7y^{24} + \cdots - 4y - 1$
c_4	$y^{25} + 8y^{24} + \cdots + 20y - 1$
c_5, c_6, c_{11}	$y^{25} - 17y^{24} + \cdots + 25y - 1$
c_8	$y^{25} - 12y^{24} + \cdots + 2827y - 121$
c_9	$y^{25} + 7y^{24} + \cdots + 543y - 49$
c_{10}	$y^{25} + 8y^{24} + \cdots + 4y - 1$
c_{12}	$y^{25} + 4y^{24} + \cdots - 4y - 1$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.594045+0.814039I$ $a=\ 0.53132-1.59025I$ $b=\ 1.081530-0.869155I$	$2.93258-1.95019I$	$7.82007+2.01519I$
$u=-0.594045-0.814039I$ $a=\ 0.53132+1.59025I$ $b=\ 1.081530+0.869155I$	$2.93258+1.95019I$	$7.82007-2.01519I$
$u=\ 0.538291+0.751718I$ $a=\ 0.39607+1.90997I$ $b=\ 0.797048+0.981753I$	$1.95197+7.16615I$	$2.90902-6.80575I$
$u=\ 0.538291-0.751718I$ $a=\ 0.39607-1.90997I$ $b=\ 0.797048-0.981753I$	$1.95197-7.16615I$	$2.90902+6.80575I$
$u=\ 0.864174$ $a=-1.62959$ $b=\ 0.622350$	-2.14592	21.2160
$u=\ 0.947075+0.727756I$ $a=\ 0.013709-1.033340I$ $b=-0.380948-0.838829I$	$4.69595+7.24346I$	$6.03224-7.22892I$
$u=\ 0.947075-0.727756I$ $a=\ 0.013709+1.033340I$ $b=-0.380948+0.838829I$	$4.69595-7.24346I$	$6.03224+7.22892I$
$u=-0.079520+0.783942I$ $a=\ 1.141000+0.816744I$ $b=-0.420493+0.834585I$	$-4.22454+1.80784I$	$-8.81746-4.58655I$
$u=-0.079520-0.783942I$ $a=\ 1.141000-0.816744I$ $b=-0.420493-0.834585I$	$-4.22454-1.80784I$	$-8.81746+4.58655I$
$u=-0.724982+0.986618I$ $a=\ 0.485739-0.853337I$ $b=\ 1.281890-0.397340I$	$2.09907-3.15118I$	$1.73998+1.99553I$

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.724982-0.986618I$ $a=\ 0.485739+0.853337I$ $b=\ 1.281890+0.397340I$	$2.09907+3.15118I$	$1.73998-1.99553I$
$u=-0.919892+0.831035I$ $a=-0.270543+0.982338I$ $b=-0.638247+0.810825I$	$5.52238-2.41952I$	$6.29336-0.75030I$
$u=-0.919892-0.831035I$ $a=-0.270543-0.982338I$ $b=-0.638247-0.810825I$	$5.52238+2.41952I$	$6.29336+0.75030I$
$u=-0.304186+0.553410I$ $a=-0.99070-1.15121I$ $b=\ 1.00682-1.49599I$	$-3.06423-3.43413I$	$-4.97318-1.32012I$
$u=-0.304186-0.553410I$ $a=-0.99070+1.15121I$ $b=\ 1.00682+1.49599I$	$-3.06423+3.43413I$	$-4.97318+1.32012I$
$u=-0.96691+1.04522I$ $a=-0.444220+0.523173I$ $b=-0.817605+0.396031I$	$4.85237-4.48785I$	$5.60105+11.81038I$
$u=-0.96691-1.04522I$ $a=-0.444220-0.523173I$ $b=-0.817605-0.396031I$	$4.85237+4.48785I$	$5.60105-11.81038I$
$u=\ 0.331149+0.381308I$ $a=\ 1.60281+1.31788I$ $b=-0.603217-1.050850I$	$-5.74992+0.21247I$	$-3.47530-0.69345I$
$u=\ 0.331149-0.381308I$ $a=\ 1.60281-1.31788I$ $b=-0.603217+1.050850I$	$-5.74992-0.21247I$	$-3.47530+0.69345I$
$u=\ 0.391972+0.266611I$ $a=-2.09352-0.02266I$ $b=\ 0.49841+1.80349I$	$-4.65699+7.09838I$	$-2.88763-5.93601I$

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = \quad 0.391972 - 0.266611I$ $a = -2.09352 + 0.02266I$ $b = \quad 0.49841 - 1.80349I$	$-4.65699 - 7.09838I$	$-2.88763 + 5.93601I$
$u = -0.73476 + 1.57921I$ $a = -0.000323 - 0.207749I$ $b = \quad 0.814071 - 0.568843I$	$-1.04239 - 4.37759I$	$-5.37088 - 1.88091I$
$u = -0.73476 - 1.57921I$ $a = -0.000323 + 0.207749I$ $b = \quad 0.814071 + 0.568843I$	$-1.04239 + 4.37759I$	$-5.37088 + 1.88091I$
$u = \quad 1.68372 + 1.34594I$ $a = -0.056553 - 0.166122I$ $b = -0.430441 - 0.060197I$	$2.69151 + 0.49029I$	$22.0208 - 17.8472I$
$u = \quad 1.68372 - 1.34594I$ $a = -0.056553 + 0.166122I$ $b = -0.430441 + 0.060197I$	$2.69151 - 0.49029I$	$22.0208 + 17.8472I$

III. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1	$(u^{25}-12u^{24}+\cdots+11u-1)(u^{91}+43u^{90}+\cdots+22u+1)$
c_2	$(u^{25}-6u^{23}+\cdots+u-1)(u^{91}+u^{90}+\cdots-11u^2+1)$
c_3	$(u^{25}-u^{24}+\cdots-6u-1)(u^{91}+2u^{90}+\cdots-23u+1)$
c_4	$(u^{25}+4u^{23}+\cdots+10u^2-1)(u^{91}+5u^{90}+\cdots+95u+82807)$
c_5, c_6	$(u^{25}-u^{24}+\cdots+u-1)(u^{91}-14u^{89}+\cdots-6u-11)$
c_7	$(u^{25}-6u^{23}+\cdots+u+1)(u^{91}+u^{90}+\cdots-11u^2+1)$
c_8	$(u^{25}-12u^{24}+\cdots+55u-11)(u^{91}+11u^{90}+\cdots-151800u+12173)$
c_9	$(u^{25}+5u^{24}+\cdots-19u+7)(u^{91}-4u^{90}+\cdots-12908u+7912)$
c_{10}	$(u^{25}+4u^{23}+\cdots-2u-1)(u^{91}-3u^{90}+\cdots+21u-1)$
c_{11}	$(u^{25}+u^{24}+\cdots+u+1)(u^{91}-14u^{89}+\cdots-6u-11)$
c_{12}	$(u^{25}+2u^{23}+\cdots+4u-1)(u^{91}+7u^{90}+\cdots+305u+47)$

IV. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1	$(y^{25}+8y^{24}+\cdots-17y-1)(y^{91}+17y^{90}+\cdots-98y-1)$
c_2, c_7	$(y^{25}-12y^{24}+\cdots+11y-1)(y^{91}-43y^{90}+\cdots+22y-1)$
c_3	$(y^{25}+7y^{24}+\cdots-4y-1)(y^{91}+8y^{90}+\cdots-29y-1)$
c_4	$(y^{25}+8y^{24}+\cdots+20y-1)$ $\cdot(y^{91}+77y^{90}+\cdots-84473564657y-6856999249)$
c_5, c_6, c_{11}	$(y^{25}-17y^{24}+\cdots+25y-1)(y^{91}-28y^{90}+\cdots+10728y-121)$
c_8	$(y^{25}-12y^{24}+\cdots+2827y-121)$ $\cdot(y^{91}-87y^{90}+\cdots+8802996794y-148181929)$
c_9	$(y^{25}+7y^{24}+\cdots+543y-49)$ $\cdot(y^{91}+28y^{90}+\cdots-2966219056y-62599744)$
c_{10}	$(y^{25}+8y^{24}+\cdots+4y-1)(y^{91}+5y^{90}+\cdots-85y-1)$
c_{12}	$(y^{25}+4y^{24}+\cdots-4y-1)(y^{91}+17y^{90}+\cdots-72509y-2209)$