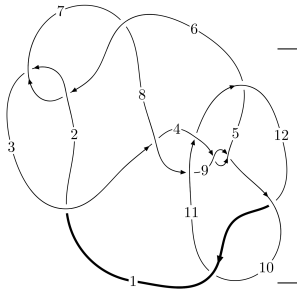
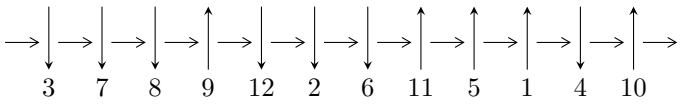
$12a_{0523}$ $(K12a_{0523})$



A knot diagram[1]

Linearized knot diagam



Solving Sequence

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

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

$$\begin{aligned} I_1^u = \langle & -6.53596 \times 10^{293} u^{104} + 7.87917 \times 10^{293} u^{103} + \cdots + 2.51893 \times 10^{295} b + 4.10389 \times 10^{293}, \\ & 5.19190 \times 10^{296} u^{104} - 1.30156 \times 10^{297} u^{103} + \cdots + 7.80867 \times 10^{296} a + 2.98862 \times 10^{296}, \\ & u^{105} - 2u^{104} + \cdots + 3u^2 + 1 \rangle \\ I_2^u = \langle & b,\ a+1,\ u+1 \rangle \end{aligned}$$

* 2 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 106 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. $\boldsymbol{I_1^u = \langle -6.54 \times 10^{293} u^{104} + 7.88 \times 10^{293} u^{103} + \cdots + 2.52 \times 10^{295} b + 4.10 \times 10^{293},\ 5.19 \times 10^{296} u^{104} - 1.30 \times 10^{297} u^{103} + \cdots + 7.81 \times 10^{296} a + 2.99 \times 10^{296},\ u^{105} - 2u^{104} + \cdots + 3u^2 + 1 \rangle}$

(i) Arc colorings

$$a_4 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$

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

$$a_5 = \begin{pmatrix} 1 \\ -u^2 \end{pmatrix}$$

$$a_{12} = \begin{pmatrix} -0.664889u^{104} + 1.66681u^{103} + \cdots + 1.49798u - 0.382731 \\ 0.0259474u^{104} - 0.0312799u^{103} + \cdots + 2.02082u - 0.0162922 \end{pmatrix}$$

$$a_6 = \begin{pmatrix} -4.30965u^{104} + 4.08364u^{103} + \cdots + 3.79930u + 8.10925 \\ 0.0507263u^{104} - 0.0723374u^{103} + \cdots - 0.0688675u - 0.0910713 \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} u \\ -u^3 + u \end{pmatrix}$$

$$a_1 = \begin{pmatrix} -0.675206u^{104} + 1.69171u^{103} + \cdots + 0.487482u - 0.370705 \\ -u^3 + u \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} -0.638941u^{104} + 1.63553u^{103} + \cdots + 3.51880u - 0.399023 \\ 0.0259474u^{104} - 0.0312799u^{103} + \cdots + 2.02082u - 0.0162922 \end{pmatrix}$$

$$a_8 = \begin{pmatrix} 5.02213u^{104} - 5.76629u^{103} + \cdots - 14.5025u - 3.74387 \\ -0.0685443u^{104} + 0.0806585u^{103} + \cdots - 0.927508u + 0.0754778 \end{pmatrix}$$

$$a_3 = \begin{pmatrix} 1.84791u^{104} - 1.44973u^{103} + \cdots - 1.12604u - 1.51565 \\ -0.104549u^{104} + 0.0699046u^{103} + \cdots + 0.0417599u + 0.0704983 \end{pmatrix}$$

$$a_7 = \begin{pmatrix} 5.89546u^{104} - 6.94305u^{103} + \cdots - 11.8346u - 4.93404 \\ -0.278081u^{104} + 0.312953u^{103} + \cdots - 0.771699u + 0.279228 \end{pmatrix}$$

$$a_2 = \begin{pmatrix} 1.53539u^{104} - 0.555872u^{103} + \cdots - 2.03889u - 2.74853 \\ -0.0668628u^{104} + 0.0559341u^{103} + \cdots + 0.951702u + 0.0225999 \end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= 3.59047u^{104} - 1.27532u^{103} + \cdots + 8.64459u - 8.12545$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1, c_7	$u^{105} + 34u^{104} + \cdots - 6u + 1$
c_2, c_6	$u^{105} - 2u^{104} + \cdots + 2u - 1$
c_3	$u^{105} + 4u^{104} + \cdots - 317390u - 19141$
c_4, c_9	$u^{105} - 2u^{104} + \cdots + 3u^2 + 1$
c_5	$31(31u^{105} + 196u^{104} + \cdots + 3.96866 \times 10^7 u + 4806371)$
c_8	$31(31u^{105} - 196u^{104} + \cdots - 554872u - 22063)$
c_{10}, c_{12}	$u^{105} + 3u^{104} + \cdots + 1098u - 81$
c_{11}	$u^{105} + 3u^{104} + \cdots + 1440u + 279$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_7	$y^{105} + 74y^{104} + \cdots + 18y - 1$
c_2, c_6	$y^{105} - 34y^{104} + \cdots - 6y - 1$
c_3	$y^{105} - 22y^{104} + \cdots + 16340336002y - 366377881$
c_4, c_9	$y^{105} - 78y^{104} + \cdots - 6y - 1$
c_5	$961 \cdot (961y^{105} + 107098y^{104} + \cdots - 351460639183822y - 23101202189641)$
c_8	$961(961y^{105} + 31830y^{104} + \cdots + 2.58328 \times 10^{10}y - 4.86776 \times 10^8)$
c_{10}, c_{12}	$y^{105} - 75y^{104} + \cdots + 599886y - 6561$
c_{11}	$y^{105} + 9y^{104} + \cdots - 4365162y - 77841$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-1.001250+0.088635I$ $a=-2.64914+5.35272I$ $b=-0.038011-0.343487I$	$4.00760-5.28754I$	0
$u=-1.001250-0.088635I$ $a=-2.64914-5.35272I$ $b=-0.038011+0.343487I$	$4.00760+5.28754I$	0
$u=1.037460+0.104080I$ $a=1.02767+3.93015I$ $b=-0.075087-0.439132I$	$4.74875+0.03581I$	0
$u=1.037460-0.104080I$ $a=1.02767-3.93015I$ $b=-0.075087+0.439132I$	$4.74875-0.03581I$	0
$u=1.047450+0.159162I$ $a=1.32246+0.67047I$ $b=-0.040020-0.427091I$	$3.59853-0.03988I$	0
$u=1.047450-0.159162I$ $a=1.32246-0.67047I$ $b=-0.040020+0.427091I$	$3.59853+0.03988I$	0
$u=1.029210+0.252615I$ $a=0.504533+1.067150I$ $b=0.348579-0.558726I$	$1.77503+1.08366I$	0
$u=1.029210-0.252615I$ $a=0.504533-1.067150I$ $b=0.348579+0.558726I$	$1.77503-1.08366I$	0
$u=-1.066080+0.143000I$ $a=-1.39931+0.46826I$ $b=0.123128-0.376700I$	$2.65966+5.47007I$	0
$u=-1.066080-0.143000I$ $a=-1.39931-0.46826I$ $b=0.123128+0.376700I$	$2.65966-5.47007I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.183896+1.081830I$ $a=-0.119743+0.157510I$ $b=-0.891981-0.657983I$	$-3.14658-6.82487I$	0
$u=-0.183896-1.081830I$ $a=-0.119743-0.157510I$ $b=-0.891981+0.657983I$	$-3.14658+6.82487I$	0
$u=-0.138219+1.094920I$ $a=-0.147917+0.115663I$ $b=-0.905202-0.860589I$	$2.52804-12.97190I$	0
$u=-0.138219-1.094920I$ $a=-0.147917-0.115663I$ $b=-0.905202+0.860589I$	$2.52804+12.97190I$	0
$u=0.143059+1.107000I$ $a=0.133437+0.111080I$ $b=0.843222-0.849587I$	$3.64054+7.10836I$	0
$u=0.143059-1.107000I$ $a=0.133437-0.111080I$ $b=0.843222+0.849587I$	$3.64054-7.10836I$	0
$u=-0.351677+1.075110I$ $a=-0.023335+0.193334I$ $b=-0.702928-0.316022I$	$-1.404440-0.105905I$	0
$u=-0.351677-1.075110I$ $a=-0.023335-0.193334I$ $b=-0.702928+0.316022I$	$-1.404440+0.105905I$	0
$u=1.14082$ $a=-1.00687$ $b=-0.761997$	3.91618	0
$u=-1.080450+0.395669I$ $a=0.151530+1.044050I$ $b=-0.877507-0.498572I$	$0.58128-4.51844I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-1.080450-0.395669I$ $a=\ \ 0.151530-1.044050I$ $b=-0.877507+0.498572I$	$0.58128+4.51844I$	0
$u=\ \ 0.216903+1.144560I$ $a=\ \ 0.071825+0.135759I$ $b=\ \ 0.677532-0.614095I$	$1.14640+4.18416I$	0
$u=\ \ 0.216903-1.144560I$ $a=\ \ 0.071825-0.135759I$ $b=\ \ 0.677532+0.614095I$	$1.14640-4.18416I$	0
$u=-0.604422+0.510373I$ $a=\ \ 0.001363+0.303028I$ $b=-0.557423+0.021591I$	$-1.294600+0.266261I$	$-9.33366+0.I$
$u=-0.604422-0.510373I$ $a=\ \ 0.001363-0.303028I$ $b=-0.557423-0.021591I$	$-1.294600-0.266261I$	$-9.33366+0.I$
$u=\ \ 1.21149$ $a=\ \ 0.364379$ $b=-1.43398$	3.79413	0
$u=\ \ 0.186143+0.758490I$ $a=-0.041179+0.402886I$ $b=\ \ 1.023650+0.274246I$	$-2.75964+3.82456I$	$-7.69394-5.15963I$
$u=\ \ 0.186143-0.758490I$ $a=-0.041179-0.402886I$ $b=\ \ 1.023650-0.274246I$	$-2.75964-3.82456I$	$-7.69394+5.15963I$
$u=-1.175660+0.322718I$ $a=\ \ 0.13151+1.62525I$ $b=-0.95555-1.17209I$	$1.64381-4.37178I$	0
$u=-1.175660-0.322718I$ $a=\ \ 0.13151-1.62525I$ $b=-0.95555+1.17209I$	$1.64381+4.37178I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 1.199780 + 0.219409I$ $a = 0.34279 + 1.87081I$ $b = 0.09902 - 1.60939I$	$5.55471 - 0.56979I$	0
$u = 1.199780 - 0.219409I$ $a = 0.34279 - 1.87081I$ $b = 0.09902 + 1.60939I$	$5.55471 + 0.56979I$	0
$u = 1.162080 + 0.371487I$ $a = -0.31585 + 1.40380I$ $b = 1.14678 - 0.84513I$	$0.238755 + 0.320365I$	0
$u = 1.162080 - 0.371487I$ $a = -0.31585 - 1.40380I$ $b = 1.14678 + 0.84513I$	$0.238755 - 0.320365I$	0
$u = -1.197630 + 0.242815I$ $a = -0.24103 + 1.86816I$ $b = -0.33800 - 1.59119I$	$5.86921 - 4.87500I$	0
$u = -1.197630 - 0.242815I$ $a = -0.24103 - 1.86816I$ $b = -0.33800 + 1.59119I$	$5.86921 + 4.87500I$	0
$u = -1.222500 + 0.093211I$ $a = -0.618978 + 1.252910I$ $b = 1.22271 - 1.10340I$	$5.71349 - 1.89041I$	0
$u = -1.222500 - 0.093211I$ $a = -0.618978 - 1.252910I$ $b = 1.22271 + 1.10340I$	$5.71349 + 1.89041I$	0
$u = 1.227930 + 0.136503I$ $a = 0.65931 + 1.63245I$ $b = -0.89616 - 1.54631I$	$2.52130 + 3.67820I$	0
$u = 1.227930 - 0.136503I$ $a = 0.65931 - 1.63245I$ $b = -0.89616 + 1.54631I$	$2.52130 - 3.67820I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 1.202250 + 0.346653I$ $a = -0.34406 + 1.69024I$ $b = 1.26890 - 1.21120I$	$-2.45776 + 6.16809I$	0
$u = 1.202250 - 0.346653I$ $a = -0.34406 - 1.69024I$ $b = 1.26890 + 1.21120I$	$-2.45776 - 6.16809I$	0
$u = -1.255710 + 0.057159I$ $a = -1.016010 + 0.818544I$ $b = 1.87080 - 0.87723I$	$9.02776 - 1.33183I$	0
$u = -1.255710 - 0.057159I$ $a = -1.016010 - 0.818544I$ $b = 1.87080 + 0.87723I$	$9.02776 + 1.33183I$	0
$u = 1.258390 + 0.046924I$ $a = 1.058200 + 0.680510I$ $b = -1.96530 - 0.73898I$	$8.40796 - 4.25540I$	0
$u = 1.258390 - 0.046924I$ $a = 1.058200 - 0.680510I$ $b = -1.96530 + 0.73898I$	$8.40796 + 4.25540I$	0
$u = -1.217260 + 0.325928I$ $a = 0.27210 + 1.85122I$ $b = -1.21658 - 1.46883I$	$3.61544 - 6.31212I$	0
$u = -1.217260 - 0.325928I$ $a = 0.27210 - 1.85122I$ $b = -1.21658 + 1.46883I$	$3.61544 + 6.31212I$	0
$u = -1.255260 + 0.117370I$ $a = -0.92722 + 1.52083I$ $b = 1.35471 - 1.65467I$	$8.36985 - 3.15222I$	0
$u = -1.255260 - 0.117370I$ $a = -0.92722 - 1.52083I$ $b = 1.35471 + 1.65467I$	$8.36985 + 3.15222I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 1.257520 + 0.125339I$ $a = 0.92754 + 1.60282I$ $b = -1.28893 - 1.76611I$	$7.54940 + 8.78410I$	0
$u = 1.257520 - 0.125339I$ $a = 0.92754 - 1.60282I$ $b = -1.28893 + 1.76611I$	$7.54940 - 8.78410I$	0
$u = 1.222260 + 0.332374I$ $a = -0.33002 + 1.86212I$ $b = 1.30750 - 1.46504I$	$2.59147 + 11.95360I$	0
$u = 1.222260 - 0.332374I$ $a = -0.33002 - 1.86212I$ $b = 1.30750 + 1.46504I$	$2.59147 - 11.95360I$	0
$u = 0.110022 + 0.709216I$ $a = -0.132806 + 0.485406I$ $b = 1.023330 + 0.544364I$	$-5.80400 - 2.26364I$	$-10.97921 + 2.02009I$
$u = 0.110022 - 0.709216I$ $a = -0.132806 - 0.485406I$ $b = 1.023330 - 0.544364I$	$-5.80400 + 2.26364I$	$-10.97921 - 2.02009I$
$u = 0.029234 + 1.290430I$ $a = 0.0082975 + 0.0595641I$ $b = 0.073881 - 0.793429I$	$7.30962 + 3.06464I$	0
$u = 0.029234 - 1.290430I$ $a = 0.0082975 - 0.0595641I$ $b = 0.073881 + 0.793429I$	$7.30962 - 3.06464I$	0
$u = 0.058274 + 0.684355I$ $a = -0.225911 + 0.552452I$ $b = 0.988094 + 0.748338I$	$-0.96466 - 8.18446I$	$-5.29812 + 6.41381I$
$u = 0.058274 - 0.684355I$ $a = -0.225911 - 0.552452I$ $b = 0.988094 - 0.748338I$	$-0.96466 + 8.18446I$	$-5.29812 - 6.41381I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.198391+0.656872I$ $a=\ \ 0.128951+0.351468I$ $b=-0.807130+0.376578I$	$-1.37508+0.69491I$	$-5.30659-1.43743I$
$u=-0.198391-0.656872I$ $a=\ \ 0.128951-0.351468I$ $b=-0.807130-0.376578I$	$-1.37508-0.69491I$	$-5.30659+1.43743I$
$u=-0.066609+0.664501I$ $a=\ \ 0.251170+0.510908I$ $b=-0.910547+0.727872I$	$0.10737+2.61763I$	$-3.53159-1.71174I$
$u=-0.066609-0.664501I$ $a=\ \ 0.251170-0.510908I$ $b=-0.910547-0.727872I$	$0.10737-2.61763I$	$-3.53159+1.71174I$
$u=\ \ 1.40362+0.48950I$ $a=\ \ 0.00883-1.60449I$ $b=-1.16869+1.20887I$	$7.3598+18.5471I$	0
$u=\ \ 1.40362-0.48950I$ $a=\ \ 0.00883+1.60449I$ $b=-1.16869-1.20887I$	$7.3598-18.5471I$	0
$u=-1.40671+0.49098I$ $a=\ \ 0.01328-1.57139I$ $b=\ \ 1.12578+1.21228I$	$8.4984-12.7188I$	0
$u=-1.40671-0.49098I$ $a=\ \ 0.01328+1.57139I$ $b=\ \ 1.12578-1.21228I$	$8.4984+12.7188I$	0
$u=\ \ 1.41075+0.48080I$ $a=\ \ 0.08806-1.51090I$ $b=-1.12260+1.08649I$	$1.82215+12.33280I$	0
$u=\ \ 1.41075-0.48080I$ $a=\ \ 0.08806+1.51090I$ $b=-1.12260-1.08649I$	$1.82215-12.33280I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-1.42223+0.48655I$ $a=-0.018088-1.406970I$ $b=\ \ 0.99133+1.09509I$	$6.23656-9.84835I$	0
$u=-1.42223-0.48655I$ $a=-0.018088+1.406970I$ $b=\ \ 0.99133-1.09509I$	$6.23656+9.84835I$	0
$u=\ \ 1.43045+0.47266I$ $a=\ \ 0.129535-1.323860I$ $b=-0.977552+0.952506I$	$3.94876+5.59214I$	0
$u=\ \ 1.43045-0.47266I$ $a=\ \ 0.129535+1.323860I$ $b=-0.977552-0.952506I$	$3.94876-5.59214I$	0
$u=-1.43719+0.51844I$ $a=\ \ 0.246826-1.221380I$ $b=\ \ 0.669947+1.223210I$	$12.1930-9.2857I$	0
$u=-1.43719-0.51844I$ $a=\ \ 0.246826+1.221380I$ $b=\ \ 0.669947-1.223210I$	$12.1930+9.2857I$	0
$u=\ \ 1.44374+0.52482I$ $a=-0.270248-1.146870I$ $b=-0.588875+1.196410I$	$12.12610+3.28595I$	0
$u=\ \ 1.44374-0.52482I$ $a=-0.270248+1.146870I$ $b=-0.588875-1.196410I$	$12.12610-3.28595I$	0
$u=\ \ 0.045808+0.458306I$ $a=\ \ 0.818270-0.034288I$ $b=-0.155246+0.850670I$	$2.32263+2.17537I$	$-1.25483-4.43451I$
$u=\ \ 0.045808-0.458306I$ $a=\ \ 0.818270+0.034288I$ $b=-0.155246-0.850670I$	$2.32263-2.17537I$	$-1.25483+4.43451I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.095860+0.444326I$ $a=-1.149790-0.090487I$ $b=\ \ 0.012329+0.925237I$	$1.86071+3.04955I$	$-2.34350-1.80734I$
$u=-0.095860-0.444326I$ $a=-1.149790+0.090487I$ $b=\ \ 0.012329-0.925237I$	$1.86071-3.04955I$	$-2.34350+1.80734I$
$u=-0.256720+0.364302I$ $a=-2.57277-0.09048I$ $b=-0.566482+0.850730I$	$3.11999-7.09682I$	$-1.22727+6.68806I$
$u=-0.256720-0.364302I$ $a=-2.57277+0.09048I$ $b=-0.566482-0.850730I$	$3.11999+7.09682I$	$-1.22727-6.68806I$
$u=\ \ 0.259161+0.341076I$ $a=\ \ 2.70653-0.22007I$ $b=\ \ 0.575046+0.774355I$	$3.95977+1.57224I$	$0.72765-1.22976I$
$u=\ \ 0.259161-0.341076I$ $a=\ \ 2.70653+0.22007I$ $b=\ \ 0.575046-0.774355I$	$3.95977-1.57224I$	$0.72765+1.22976I$
$u=-0.185439+0.373872I$ $a=-2.03610-0.36458I$ $b=-0.333036+0.850412I$	$-1.55602-1.86353I$	$-7.04309+3.50475I$
$u=-0.185439-0.373872I$ $a=-2.03610+0.36458I$ $b=-0.333036-0.850412I$	$-1.55602+1.86353I$	$-7.04309-3.50475I$
$u=-0.384548+0.144143I$ $a=-4.17541-0.15190I$ $b=-0.771056+0.219016I$	$3.79007+4.86557I$	$-3.91765-5.78099I$
$u=-0.384548-0.144143I$ $a=-4.17541+0.15190I$ $b=-0.771056-0.219016I$	$3.79007-4.86557I$	$-3.91765+5.78099I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-1.54081+0.44876I$ $a=-0.198025-0.762752I$ $b=\ \ 0.581214+0.586799I$	$3.16248-7.87070I$	0
$u=-1.54081-0.44876I$ $a=-0.198025+0.762752I$ $b=\ \ 0.581214-0.586799I$	$3.16248+7.87070I$	0
$u=\ \ 0.352843+0.170127I$ $a=\ \ 4.04123-0.28066I$ $b=\ \ 0.730822+0.288597I$	$4.48313+0.58245I$	$-1.56702+0.71193I$
$u=\ \ 0.352843-0.170127I$ $a=\ \ 4.04123+0.28066I$ $b=\ \ 0.730822-0.288597I$	$4.48313-0.58245I$	$-1.56702-0.71193I$
$u=-1.45640+0.72941I$ $a=\ \ 0.412409-0.298435I$ $b=-0.225627+0.675899I$	$6.15662+6.42755I$	0
$u=-1.45640-0.72941I$ $a=\ \ 0.412409+0.298435I$ $b=-0.225627-0.675899I$	$6.15662-6.42755I$	0
$u=\ \ 1.55729+0.52982I$ $a=-0.030593-0.671169I$ $b=-0.367899+0.684184I$	$5.35803+3.08361I$	0
$u=\ \ 1.55729-0.52982I$ $a=-0.030593+0.671169I$ $b=-0.367899-0.684184I$	$5.35803-3.08361I$	0
$u=\ \ 1.49683+0.69386I$ $a=-0.355902-0.391949I$ $b=\ \ 0.100044+0.709134I$	$7.37741-0.45511I$	0
$u=\ \ 1.49683-0.69386I$ $a=-0.355902+0.391949I$ $b=\ \ 0.100044-0.709134I$	$7.37741+0.45511I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.347632$ $a=-4.59360$ $b=-0.664125$	-0.447801	-12.5780
$u=\ 0.170027+0.238840I$ $a=\ 2.84527-1.60576I$ $b=\ 0.343400+0.495146I$	$1.76251+0.66899I$	$4.46975+0.53128I$
$u=\ 0.170027-0.238840I$ $a=\ 2.84527+1.60576I$ $b=\ 0.343400-0.495146I$	$1.76251-0.66899I$	$4.46975-0.53128I$
$u=-1.75988+0.61452I$ $a=-0.006746-0.326907I$ $b=\ 0.171742+0.388574I$	$0.283122-0.464056I$	0
$u=-1.75988-0.61452I$ $a=-0.006746+0.326907I$ $b=\ 0.171742-0.388574I$	$0.283122+0.464056I$	0

II. $I_2^u = \langle b,\ a+1,\ u+1 \rangle$

(i) Arc colorings

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

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= -6$

(iv) u-Polynomials at the component

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

(v) Riley Polynomials at the component

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

(vi) Complex Volumes and Cusp Shapes

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = -1.00000$		
$a = -1.00000$	-1.64493	-6.00000
$b = 0$		

III. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1, c_7	$(u+1)(u^{105}+34u^{104}+\cdots-6u+1)$
c_2, c_6	$(u+1)(u^{105}-2u^{104}+\cdots+2u-1)$
c_3	$(u+1)(u^{105}+4u^{104}+\cdots-317390u-19141)$
c_4, c_9	$(u+1)(u^{105}-2u^{104}+\cdots+3u^2+1)$
c_5	$31(u+1)(31u^{105}+196u^{104}+\cdots+3.96866\times10^7u+4806371)$
c_8	$31(u-1)(31u^{105}-196u^{104}+\cdots-554872u-22063)$
c_{10}, c_{12}	$u(u^{105}+3u^{104}+\cdots+1098u-81)$
c_{11}	$u(u^{105}+3u^{104}+\cdots+1440u+279)$

IV. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1, c_7	$(y-1)(y^{105}+74y^{104}+\cdots+18y-1)$
c_2, c_6	$(y-1)(y^{105}-34y^{104}+\cdots-6y-1)$
c_3	$(y-1)(y^{105}-22y^{104}+\cdots+1.63403\times10^{10}y-3.66378\times10^{8})$
c_4, c_9	$(y-1)(y^{105}-78y^{104}+\cdots-6y-1)$
c_5	$961(y-1)$ $\cdot(961y^{105}+107098y^{104}+\cdots-351460639183822y-23101202189641)$
c_8	$961(y-1)$ $\cdot(961y^{105}+31830y^{104}+\cdots+25832765582y-486775969)$
c_{10}, c_{12}	$y(y^{105}-75y^{104}+\cdots+599886y-6561)$
c_{11}	$y(y^{105}+9y^{104}+\cdots-4365162y-77841)$