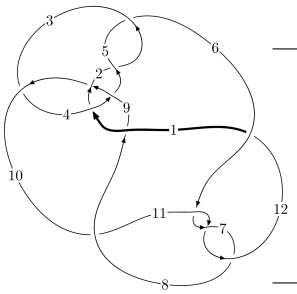
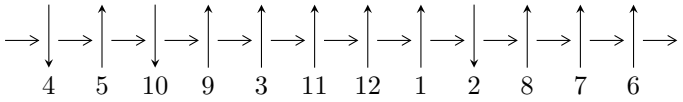
$12a_{0861}$ $(K12a_{0861})$



A knot diagram[1]

Linearized knot diagam



Solving Sequence

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

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

$$I_1^u = \langle -1.81318 \times 10^{32} u^{100} - 1.67567 \times 10^{32} u^{99} + \cdots + 8.39034 \times 10^{32} b + 8.52545 \times 10^{32},$$
$$-1.89290 \times 10^{31} u^{100} + 3.18867 \times 10^{32} u^{99} + \cdots + 4.19517 \times 10^{32} a + 4.50214 \times 10^{32},$$
$$u^{101} + 2u^{100} + \cdots - 5u - 1 \rangle$$
$$I_2^u = \langle b - 1,\ a + 1,\ u + 1 \rangle$$

* 2 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 102 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. $\boldsymbol{I_1^u = \langle -1.81 \times 10^{32} u^{100} - 1.68 \times 10^{32} u^{99} + \cdots + 8.39 \times 10^{32} b + 8.53 \times 10^{32},\ -1.89 \times 10^{31} u^{100} + 3.19 \times 10^{32} u^{99} + \cdots + 4.20 \times 10^{32} a + 4.50 \times 10^{32},\ u^{101} + 2u^{100} + \cdots - 5u - 1 \rangle}$

(i) Arc colorings

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

$$a_{11} = \begin{pmatrix} 0 \\ u \end{pmatrix}$$

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

$$a_{12} = \begin{pmatrix} u \\ -u^3 + u \end{pmatrix}$$

$$a_8 = \begin{pmatrix} -u^2 + 1 \\ u^4 - 2u^2 \end{pmatrix}$$

$$a_1 = \begin{pmatrix} -u^3 + 2u \\ -u^3 + u \end{pmatrix}$$

$$a_3 = \begin{pmatrix} 0.0451209u^{100} - 0.760082u^{99} + \cdots + 9.26245u - 1.07317 \\ 0.216103u^{100} + 0.199714u^{99} + \cdots - 0.0924635u - 1.01610 \end{pmatrix}$$

$$a_5 = \begin{pmatrix} -0.0356196u^{100} + 0.759959u^{99} + \cdots - 10.8577u + 1.72341 \\ -0.135588u^{100} - 0.201144u^{99} + \cdots - 0.369854u + 0.935588 \end{pmatrix}$$

$$a_2 = \begin{pmatrix} 0.197101u^{100} + 0.199959u^{99} + \cdots - 5.90190u - 0.316585 \\ 0.838970u^{100} + 0.00285885u^{99} + \cdots - 4.07536u - 0.838970 \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} -u^5 + 2u^3 - u \\ u^7 - 3u^5 + 2u^3 + u \end{pmatrix}$$

$$a_4 = \begin{pmatrix} 0.0393835u^{100} - 0.759997u^{99} + \cdots + 9.26178u - 1.07334 \\ -1.33209u^{100} - 1.40778u^{99} + \cdots + 8.49440u + 1.33209 \end{pmatrix}$$

$$a_9 = \begin{pmatrix} u^{10} - 5u^8 + 8u^6 - 3u^4 - 3u^2 + 1 \\ u^{10} - 4u^8 + 5u^6 - 3u^2 \end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= -2.45932u^{100} + 4.76034u^{99} + \cdots + 0.110956u + 1.41932$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{101} - 17u^{100} + \cdots + 2u + 2$
c_2, c_5	$u^{101} + 2u^{100} + \cdots - 13u + 1$
c_3	$u^{101} + 2u^{100} + \cdots - 365721u + 33833$
c_4	$u^{101} + 4u^{100} + \cdots + 8829u + 2851$
c_6, c_7, c_{11}	$u^{101} - 2u^{100} + \cdots - 5u + 1$
c_8	$u^{101} - 24u^{99} + \cdots - 140961u + 15661$
c_9	$u^{101} - 4u^{100} + \cdots - u + 1$
c_{10}, c_{12}	$u^{101} + 3u^{100} + \cdots - 133u^2 + 32$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{101} + 9y^{100} + \cdots - 56y - 4$
c_2, c_5	$y^{101} - 72y^{100} + \cdots - y - 1$
c_3	$y^{101} - 68y^{100} + \cdots - 23745298781y - 1144671889$
c_4	$y^{101} - 120y^{100} + \cdots + 659640771y - 8128201$
c_6, c_7, c_{11}	$y^{101} - 84y^{100} + \cdots - y - 1$
c_8	$y^{101} - 48y^{100} + \cdots - 5147347709y - 245266921$
c_9	$y^{101} + 16y^{100} + \cdots - y - 1$
c_{10}, c_{12}	$y^{101} + 57y^{100} + \cdots + 8512y - 1024$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-1.028940+0.386413I$ $a=\ 0.0973768+0.0686506I$ $b=\ 1.104430+0.134470I$	$3.30551+1.15808I$	0
$u=-1.028940-0.386413I$ $a=\ 0.0973768-0.0686506I$ $b=\ 1.104430-0.134470I$	$3.30551-1.15808I$	0
$u=\ 1.057030+0.349481I$ $a=\ 0.314048-0.736272I$ $b=\ 1.36678-0.53207I$	$4.49153-9.62146I$	0
$u=\ 1.057030-0.349481I$ $a=\ 0.314048+0.736272I$ $b=\ 1.36678+0.53207I$	$4.49153+9.62146I$	0
$u=\ 1.111270+0.222770I$ $a=-0.366060+0.901400I$ $b=-1.32169+0.64309I$	$4.72151-1.48890I$	0
$u=\ 1.111270-0.222770I$ $a=-0.366060-0.901400I$ $b=-1.32169-0.64309I$	$4.72151+1.48890I$	0
$u=\ 1.099330+0.300902I$ $a=-0.188576+1.200930I$ $b=-0.002327+1.136800I$	$0.17070-3.78814I$	0
$u=\ 1.099330-0.300902I$ $a=-0.188576-1.200930I$ $b=-0.002327-1.136800I$	$0.17070+3.78814I$	0
$u=-0.173926+0.812684I$ $a=\ 0.73131-1.40433I$ $b=\ 1.142840-0.188317I$	$0.67914-5.50977I$	$8.94619+9.47296I$
$u=-0.173926-0.812684I$ $a=\ 0.73131+1.40433I$ $b=\ 1.142840+0.188317I$	$0.67914+5.50977I$	$8.94619-9.47296I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-1.17114$ $a=-0.989252$ $b=\ \ 0.346774$	2.12529	0
$u=-0.025467+0.828000I$ $a=\ \ 1.60890-1.16076I$ $b=\ \ 1.063360-0.411521I$	$-3.81109-5.30422I$	$2.34656+6.94530I$
$u=-0.025467-0.828000I$ $a=\ \ 1.60890+1.16076I$ $b=\ \ 1.063360+0.411521I$	$-3.81109+5.30422I$	$2.34656-6.94530I$
$u=\ \ 0.158631+0.804073I$ $a=\ \ 0.80609+2.49041I$ $b=\ \ 1.38917+0.54718I$	$1.74695+13.85140I$	$6.00000-8.73084I$
$u=\ \ 0.158631-0.804073I$ $a=\ \ 0.80609-2.49041I$ $b=\ \ 1.38917-0.54718I$	$1.74695-13.85140I$	$6.00000+8.73084I$
$u=-1.149270+0.299595I$ $a=-0.542737-0.500847I$ $b=\ \ 0.057454-0.251125I$	$0.654538-0.558503I$	0
$u=-1.149270-0.299595I$ $a=-0.542737+0.500847I$ $b=\ \ 0.057454+0.251125I$	$0.654538+0.558503I$	0
$u=-1.165090+0.250717I$ $a=\ \ 1.93078-2.43537I$ $b=-1.031870-0.085936I$	$2.90707-0.81510I$	0
$u=-1.165090-0.250717I$ $a=\ \ 1.93078+2.43537I$ $b=-1.031870+0.085936I$	$2.90707+0.81510I$	0
$u=-0.667105+0.437770I$ $a=\ \ 0.059804-0.895514I$ $b=\ \ 1.150220-0.000851I$	$4.39007-0.66689I$	$20.5536+2.2015I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.667105-0.437770I$ $a=0.059804+0.895514I$ $b=1.150220+0.000851I$	$4.39007+0.66689I$	$20.5536-2.2015I$
$u=0.138798+0.781657I$ $a=0.95689-2.16420I$ $b=-0.028732-1.197250I$	$-2.72320+7.79519I$	$3.29744-8.41863I$
$u=0.138798-0.781657I$ $a=0.95689+2.16420I$ $b=-0.028732+1.197250I$	$-2.72320-7.79519I$	$3.29744+8.41863I$
$u=-0.116871+0.774426I$ $a=-0.234715+0.892659I$ $b=-0.002107+0.327040I$	$-2.44866-3.37818I$	$2.29820+1.98806I$
$u=-0.116871-0.774426I$ $a=-0.234715-0.892659I$ $b=-0.002107-0.327040I$	$-2.44866+3.37818I$	$2.29820-1.98806I$
$u=0.022502+0.782527I$ $a=0.00177+2.09029I$ $b=0.377607+0.784247I$	$-5.93645-0.87720I$	$-1.80763+1.04585I$
$u=0.022502-0.782527I$ $a=0.00177-2.09029I$ $b=0.377607-0.784247I$	$-5.93645+0.87720I$	$-1.80763-1.04585I$
$u=1.209230+0.196168I$ $a=0.119207-0.751916I$ $b=-1.46666-0.24510I$	$5.39958+2.00182I$	0
$u=1.209230-0.196168I$ $a=0.119207+0.751916I$ $b=-1.46666+0.24510I$	$5.39958-2.00182I$	0
$u=0.144908+0.752921I$ $a=-0.80543-2.77881I$ $b=-1.41125-0.69668I$	$1.90392+5.20096I$	$9.90636-7.40698I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.144908 - 0.752921I$ $a = -0.80543 + 2.77881I$ $b = -1.41125 + 0.69668I$	$1.90392 - 5.20096I$	$9.90636 + 7.40698I$
$u = -0.122529 + 0.744900I$ $a = 1.28109 + 2.64200I$ $b = -1.076030 + 0.080017I$	$-0.16683 - 2.84840I$	$-10.9682 - 9.6416I$
$u = -0.122529 - 0.744900I$ $a = 1.28109 - 2.64200I$ $b = -1.076030 - 0.080017I$	$-0.16683 + 2.84840I$	$-10.9682 + 9.6416I$
$u = -1.215600 + 0.269888I$ $a = -1.22265 + 2.30397I$ $b = -0.753849 + 0.101521I$	$2.23401 - 1.72679I$	0
$u = -1.215600 - 0.269888I$ $a = -1.22265 - 2.30397I$ $b = -0.753849 - 0.101521I$	$2.23401 + 1.72679I$	0
$u = 0.663413 + 0.357602I$ $a = -0.39860 + 1.58817I$ $b = 1.36297 + 0.47360I$	$5.38362 + 9.52573I$	$10.14946 - 8.06140I$
$u = 0.663413 - 0.357602I$ $a = -0.39860 - 1.58817I$ $b = 1.36297 - 0.47360I$	$5.38362 - 9.52573I$	$10.14946 + 8.06140I$
$u = 0.142148 + 0.718668I$ $a = -1.70541 - 0.45845I$ $b = -1.55105 + 0.40005I$	$2.42332 + 1.28126I$	$11.19302 - 1.21201I$
$u = 0.142148 - 0.718668I$ $a = -1.70541 + 0.45845I$ $b = -1.55105 - 0.40005I$	$2.42332 - 1.28126I$	$11.19302 + 1.21201I$
$u = -0.086682 + 0.719986I$ $a = -1.87211 - 1.11449I$ $b = -0.607902 - 0.121137I$	$-1.19230 - 1.84846I$	$5.59881 + 5.60914I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.086682-0.719986I$ $a=-1.87211+1.11449I$ $b=-0.607902+0.121137I$	$-1.19230+1.84846I$	$5.59881-5.60914I$
$u=-0.328118+0.635795I$ $a=\ 0.587168-0.849188I$ $b=\ 1.180890-0.101731I$	$3.33957-3.21650I$	$13.9460+8.2744I$
$u=-0.328118-0.635795I$ $a=\ 0.587168+0.849188I$ $b=\ 1.180890+0.101731I$	$3.33957+3.21650I$	$13.9460-8.2744I$
$u=\ 1.241200+0.334119I$ $a=\ 0.360958-1.070060I$ $b=\ 0.328687-0.849373I$	$-2.17713+4.90687I$	0
$u=\ 1.241200-0.334119I$ $a=\ 0.360958+1.070060I$ $b=\ 0.328687+0.849373I$	$-2.17713-4.90687I$	0
$u=\ 1.258760+0.261311I$ $a=-0.388419-1.268170I$ $b=-0.712654-0.731199I$	$2.95981+4.71416I$	0
$u=\ 1.258760-0.261311I$ $a=-0.388419+1.268170I$ $b=-0.712654+0.731199I$	$2.95981-4.71416I$	0
$u=-1.232030+0.377233I$ $a=\ 0.864114-0.126972I$ $b=\ 1.023920+0.365529I$	$-0.086339+0.972263I$	0
$u=-1.232030-0.377233I$ $a=\ 0.864114+0.126972I$ $b=\ 1.023920-0.365529I$	$-0.086339-0.972263I$	0
$u=\ 0.267208+0.647741I$ $a=\ 1.074640+0.156641I$ $b=\ 1.348860-0.415383I$	$4.04661-5.89569I$	$8.02593+2.38848I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.267208 - 0.647741I$ $a = 1.074640 - 0.156641I$ $b = 1.348860 + 0.415383I$	$4.04661 + 5.89569I$	$8.02593 - 2.38848I$
$u = -1.277780 + 0.336776I$ $a = -0.96889 - 1.44778I$ $b = 0.432231 - 0.726486I$	$-1.89447 - 3.15775I$	0
$u = -1.277780 - 0.336776I$ $a = -0.96889 + 1.44778I$ $b = 0.432231 + 0.726486I$	$-1.89447 + 3.15775I$	0
$u = 1.276690 + 0.370859I$ $a = 0.24342 + 1.58444I$ $b = 1.101580 + 0.445043I$	$0.23553 + 9.61140I$	0
$u = 1.276690 - 0.370859I$ $a = 0.24342 - 1.58444I$ $b = 1.101580 - 0.445043I$	$0.23553 - 9.61140I$	0
$u = 0.655925 + 0.092614I$ $a = 0.605869 - 0.934639I$ $b = -1.41714 - 0.52149I$	$4.79133 + 1.83073I$	$15.9174 - 4.3853I$
$u = 0.655925 - 0.092614I$ $a = 0.605869 + 0.934639I$ $b = -1.41714 + 0.52149I$	$4.79133 - 1.83073I$	$15.9174 + 4.3853I$
$u = 0.083312 + 0.638423I$ $a = -1.52776 + 1.29828I$ $b = -0.393511 + 0.804360I$	$-0.78660 - 1.45210I$	$4.75717 + 3.49284I$
$u = 0.083312 - 0.638423I$ $a = -1.52776 - 1.29828I$ $b = -0.393511 - 0.804360I$	$-0.78660 + 1.45210I$	$4.75717 - 3.49284I$
$u = 1.327260 + 0.305233I$ $a = -0.999324 + 0.544062I$ $b = -0.544745 + 0.207352I$	$3.26237 + 5.56922I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 1.327260 - 0.305233I$ $a = -0.999324 - 0.544062I$ $b = -0.544745 - 0.207352I$	$3.26237 - 5.56922I$	0
$u = -1.333400 + 0.285277I$ $a = -1.308200 + 0.029554I$ $b = -0.417099 - 1.003450I$	$3.72956 - 1.98995I$	0
$u = -1.333400 - 0.285277I$ $a = -1.308200 - 0.029554I$ $b = -0.417099 + 1.003450I$	$3.72956 + 1.98995I$	0
$u = 0.584196 + 0.241797I$ $a = 0.514031 - 0.720592I$ $b = -0.111711 - 1.036120I$	$0.79560 + 4.22285I$	$8.17162 - 8.18777I$
$u = 0.584196 - 0.241797I$ $a = 0.514031 + 0.720592I$ $b = -0.111711 + 1.036120I$	$0.79560 - 4.22285I$	$8.17162 + 8.18777I$
$u = 1.373580 + 0.023066I$ $a = -0.371764 - 0.485397I$ $b = -0.245715 - 0.271745I$	$6.80271 + 0.87572I$	0
$u = 1.373580 - 0.023066I$ $a = -0.371764 + 0.485397I$ $b = -0.245715 + 0.271745I$	$6.80271 - 0.87572I$	0
$u = 1.341270 + 0.317191I$ $a = 2.53148 - 2.64892I$ $b = -1.099120 - 0.079524I$	$4.44329 + 6.70063I$	0
$u = 1.341270 - 0.317191I$ $a = 2.53148 + 2.64892I$ $b = -1.099120 + 0.079524I$	$4.44329 - 6.70063I$	0
$u = 1.340190 + 0.331849I$ $a = -0.007094 - 0.596349I$ $b = -0.035880 - 0.370722I$	$2.13625 + 7.37812I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 1.340190 - 0.331849I$ $a = -0.007094 + 0.596349I$ $b = -0.035880 + 0.370722I$	$2.13625 - 7.37812I$	0
$u = 1.38147$ $a = 4.13434$ $b = -1.10712$	8.57526	0
$u = -1.347990 + 0.305884I$ $a = 0.05456 + 1.56249I$ $b = -1.60063 - 0.43183I$	$7.12028 - 5.01369I$	0
$u = -1.347990 - 0.305884I$ $a = 0.05456 - 1.56249I$ $b = -1.60063 + 0.43183I$	$7.12028 + 5.01369I$	0
$u = -1.351550 + 0.319734I$ $a = 1.18973 + 2.47107I$ $b = -1.44983 + 0.71711I$	$6.62110 - 9.09012I$	0
$u = -1.351550 - 0.319734I$ $a = 1.18973 - 2.47107I$ $b = -1.44983 - 0.71711I$	$6.62110 + 9.09012I$	0
$u = -1.351170 + 0.333884I$ $a = 1.53027 + 0.79665I$ $b = -0.046975 + 1.229100I$	$1.97105 - 11.82780I$	0
$u = -1.351170 - 0.333884I$ $a = 1.53027 - 0.79665I$ $b = -0.046975 - 1.229100I$	$1.97105 + 11.82780I$	0
$u = -1.391490 + 0.034086I$ $a = 0.403840 - 0.401540I$ $b = -0.192149 + 1.152040I$	$6.87246 - 4.91775I$	0
$u = -1.391490 - 0.034086I$ $a = 0.403840 + 0.401540I$ $b = -0.192149 - 1.152040I$	$6.87246 + 4.91775I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-1.395780+0.009794I$ $a=\ \ 1.88400+0.12574I$ $b=-1.53124+0.58610I$	$10.97350-2.04434I$	0
$u=-1.395780-0.009794I$ $a=\ \ 1.88400-0.12574I$ $b=-1.53124-0.58610I$	$10.97350+2.04434I$	0
$u=-1.375500+0.257636I$ $a=-0.577498-0.904908I$ $b=\ \ 1.38751+0.38451I$	$9.21390+2.61600I$	0
$u=-1.375500-0.257636I$ $a=-0.577498+0.904908I$ $b=\ \ 1.38751-0.38451I$	$9.21390-2.61600I$	0
$u=\ \ 1.385100+0.240167I$ $a=-0.892088+0.865446I$ $b=\ \ 1.269340+0.115116I$	$8.72575+6.33979I$	0
$u=\ \ 1.385100-0.240167I$ $a=-0.892088-0.865446I$ $b=\ \ 1.269340-0.115116I$	$8.72575-6.33979I$	0
$u=-1.363820+0.343210I$ $a=-0.96059-2.44773I$ $b=\ \ 1.40458-0.55203I$	$6.5501-17.9931I$	0
$u=-1.363820-0.343210I$ $a=-0.96059+2.44773I$ $b=\ \ 1.40458+0.55203I$	$6.5501+17.9931I$	0
$u=\ \ 1.37172+0.34509I$ $a=-0.59183+1.70310I$ $b=\ \ 1.176520+0.206396I$	$5.55962+9.68623I$	0
$u=\ \ 1.37172-0.34509I$ $a=-0.59183-1.70310I$ $b=\ \ 1.176520-0.206396I$	$5.55962-9.68623I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-1.41956+0.05099I$ $a=-1.75164-0.69250I$ $b=\ \ 1.41571-0.48127I$	$11.9152-10.5591I$	0
$u=-1.41956-0.05099I$ $a=-1.75164+0.69250I$ $b=\ \ 1.41571+0.48127I$	$11.9152+10.5591I$	0
$u=\ \ 1.43215+0.05960I$ $a=-1.32086+0.61437I$ $b=\ \ 1.235320+0.064101I$	$11.10480+1.95086I$	0
$u=\ \ 1.43215-0.05960I$ $a=-1.32086-0.61437I$ $b=\ \ 1.235320-0.064101I$	$11.10480-1.95086I$	0
$u=-0.529460$ $a=\ \ 5.43079$ $b=-1.04789$	2.71431	-33.7440
$u=-0.489365+0.146062I$ $a=-0.815002+0.533358I$ $b=-0.142802+0.093983I$	$1.078260-0.417929I$	$9.48826+1.46499I$
$u=-0.489365-0.146062I$ $a=-0.815002-0.533358I$ $b=-0.142802-0.093983I$	$1.078260+0.417929I$	$9.48826-1.46499I$
$u=\ \ 0.048585+0.473544I$ $a=-1.37828+1.14364I$ $b=-0.166104+0.613776I$	$-0.74370-1.50769I$	$2.11666+3.36463I$
$u=\ \ 0.048585-0.473544I$ $a=-1.37828-1.14364I$ $b=-0.166104-0.613776I$	$-0.74370+1.50769I$	$2.11666-3.36463I$
$u=-0.165803+0.190467I$ $a=-3.84378+0.94593I$ $b=-1.055080+0.135675I$	$1.93313-0.63427I$	$4.64132-2.06211I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.165803-0.190467I$		
$a=-3.84378-0.94593I$	$1.93313+0.63427I$	$4.64132+2.06211I$
$b=-1.055080-0.135675I$		

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

(i) Arc colorings

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

(ii) Obstruction class $= 1$

(iii) Cusp Shapes $= 12$

(iv) u-Polynomials at the component

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

(v) Riley Polynomials at the component

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

(vi) Complex Volumes and Cusp Shapes

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-1.00000$ $a=-1.00000$ $b=\ \ 1.00000$	3.28987	12.0000

III. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1	$u(u^{101} - 17u^{100} + \cdots + 2u + 2)$
c_2	$(u+1)(u^{101} + 2u^{100} + \cdots - 13u + 1)$
c_3	$(u-1)(u^{101} + 2u^{100} + \cdots - 365721u + 33833)$
c_4	$(u-1)(u^{101} + 4u^{100} + \cdots + 8829u + 2851)$
c_5	$(u-1)(u^{101} + 2u^{100} + \cdots - 13u + 1)$
c_6, c_7	$(u+1)(u^{101} - 2u^{100} + \cdots - 5u + 1)$
c_8	$(u+1)(u^{101} - 24u^{99} + \cdots - 140961u + 15661)$
c_9	$(u+1)(u^{101} - 4u^{100} + \cdots - u + 1)$
c_{10}, c_{12}	$u(u^{101} + 3u^{100} + \cdots - 133u^2 + 32)$
c_{11}	$(u-1)(u^{101} - 2u^{100} + \cdots - 5u + 1)$

IV. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1	$y(y^{101}+9y^{100}+\cdots-56y-4)$
c_2, c_5	$(y-1)(y^{101}-72y^{100}+\cdots-y-1)$
c_3	$(y-1)(y^{101}-68y^{100}+\cdots-2.37453\times10^{10}y-1.14467\times10^{9})$
c_4	$(y-1)(y^{101}-120y^{100}+\cdots+6.59641\times10^{8}y-8128201)$
c_6, c_7, c_{11}	$(y-1)(y^{101}-84y^{100}+\cdots-y-1)$
c_8	$(y-1)(y^{101}-48y^{100}+\cdots-5.14735\times10^{9}y-2.45267\times10^{8})$
c_9	$(y-1)(y^{101}+16y^{100}+\cdots-y-1)$
c_{10}, c_{12}	$y(y^{101}+57y^{100}+\cdots+8512y-1024)$